

**Appendix L1**  
Air Quality Emission Calculations

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### Comparison of Emissions

**Table L1-1. Maximum Daily Unmitigated Emissions**

Alternative	Description	ROG, lbs/day	NOx, lbs/day	CO, lbs/day	SO2, lbs/day	PM10, lbs/day	PM2.5, lbs/day
1	East Side Small Gated Notch	51	667	261	2	467	58
2	Central Small Gated Notch	63	921	432	3	602	80
3	West Side Small Gated Notch	61	1,097	469	3	603	80
4	Managed Flow	95	1,543	689	5	922	137
5	Multiple Gates	144	1,516	850	4	1,038	157
6	Large Gated Notch	88	1,609	687	5	695	109
Yolo-Solano AQMD Significance Thresholds		n/a	n/a	n/a	n/a	80	n/a
Feather River AQMD Significance Thresholds		n/a	n/a	n/a	n/a	80	n/a

**Table L1-2. Annual Unmitigated Emissions**

Alternative	Description	ROG, tpy	NOx, tpy	CO, tpy	SO2, tpy	PM10, tpy	PM2.5, tpy	Emissions, MTCO2e/project
1	East Side Small Gated Notch	1.2	15.8	8.8	0.0	6.0	1.1	4,866
2	Central Small Gated Notch	2.4	29.8	17.3	0.1	8.2	1.6	9,924
3	West Side Small Gated Notch	2.1	30.5	15.6	0.1	10.7	2.0	9,008
4	Managed Flow	3.7	57.2	26.8	0.2	15.6	3.3	18,034
5	Multiple Gates	6.5	74.2	45.8	0.2	13.5	3.9	21,179
6	Large Gated Notch	3.8	60.0	28.4	0.2	19.5	3.6	17,669
Yolo-Solano AQMD Significance Thresholds		10	10	n/a	n/a	n/a	n/a	1,100
Feather River AQMD Significance Thresholds		2.5	2.5	n/a	n/a	n/a	n/a	1,100
Feather River AQMD Significance Thresholds (Alt 5)		3.6	3.6	n/a	n/a	n/a	n/a	1,100
General Conformity De Minimis Thresholds		25	25	100	100	100	100	n/a

Note: Emissions include construction of downstream reach.

Construction occurs over two dry seasons for Alternative 5 only.

Feather River AQMD NOx and ROG significance threshold equal to 25 lbs/day multiplied by project length, not to exceed 4.5 tons per year.

Only certain portions (certain urban areas) are designated maintenance for PM10 and CO; therefore, only the portion of emissions that occur in those areas are subject to general co

Construction Duration

- 200 days
- 6.7 months

Legend

- Exceeds CEQA significance threshold
- Exceeds general conformity de minimis

Construction Duration (Alternative 5)

- 284 days
- 9.5 months

Construction Season

	Year 1	Year 2
Start	15-Apr	15-Apr
End	1-Nov	8-Jul

**Table L1-3. ROG Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.66	26.47	26.65	25.82	8.99	9.41	14.56	12.19	14.11	13.68	8.80	9.05	10.46	12.38	15.11	13.54	9.09	10.65	0.65
	Construction Worker Commuting	0.10	0.08	0.18	0.07	0.07	0.06	0.13	0.12	0.12	0.11	0.09	0.14	0.18	0.19	0.24	0.23	0.14	0.19	0.07
	Haul Trucks	0.34	0.25	0.39	--	--	--	0.12	0.02	--	--	--	2.09	5.17	4.73	5.05	5.05	3.16	5.24	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.09</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>9.06</b>	<b>9.47</b>	<b>14.81</b>	<b>12.33</b>	<b>14.23</b>	<b>13.79</b>	<b>8.89</b>	<b>11.29</b>	<b>15.81</b>	<b>17.30</b>	<b>20.40</b>	<b>18.82</b>	<b>12.38</b>	<b>16.07</b>	<b>0.91</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.22</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	11.22	11.22	11.22	3.94	5.09	5.09	4.12	6.04	6.04	6.04	4.09	7.82	7.82	7.82	7.82	7.82	3.91
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.62</b>	<b>11.36</b>	<b>11.36</b>	<b>11.24</b>	<b>11.24</b>	<b>3.98</b>	<b>5.13</b>	<b>5.13</b>	<b>4.21</b>	<b>6.09</b>	<b>6.09</b>	<b>6.09</b>	<b>5.80</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>5.57</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>GRAND TOTAL</b>		<b>2.62</b>	<b>50.60</b>	<b>42.89</b>	<b>48.76</b>	<b>25.46</b>	<b>17.63</b>	<b>30.43</b>	<b>20.45</b>	<b>19.30</b>	<b>20.62</b>	<b>19.87</b>	<b>19.42</b>	<b>23.77</b>	<b>30.15</b>	<b>32.61</b>	<b>32.00</b>	<b>24.43</b>	<b>30.01</b>	<b>7.53</b>
Yolo County Total		2.29	49.48	42.55	37.40	20.56	13.65	20.21	20.18	18.70	20.18	19.43	18.60	22.52	29.36	32.35	31.80	24.24	29.82	7.33
Sutter County Total		0.34	1.12	0.34	11.36	4.90	3.98	10.22	0.27	0.60	0.44	0.44	0.82	1.24	0.80	0.26	0.20	0.19	0.19	0.20

**Table L1-3. ROG Detailed Summary (Alternative 1) - U**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.47	0.65	2.03	2.03	2.03	1.85	1.07	1.44	0.18	0.66
	Construction Worker Commuting	0.01	0.01	0.06	0.06	0.06	0.06	0.05	0.12	0.01	0.01
	Haul Trucks	--	0.00	--	--	--	--	--	0.61	0.03	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.48</b>	<b>0.66</b>	<b>2.09</b>	<b>2.09</b>	<b>2.09</b>	<b>1.91</b>	<b>1.11</b>	<b>2.17</b>	<b>0.22</b>	<b>0.74</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	0.03
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.26	0.26	0.18	1.07	0.18	--	--	--	--	0.35
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.27</b>	<b>0.27</b>	<b>0.31</b>	<b>1.57</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	0.04
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>1.56</b>	<b>0.93</b>	<b>3.92</b>	<b>3.86</b>	<b>2.29</b>	<b>1.91</b>	<b>1.11</b>	<b>3.74</b>	<b>0.44</b>	<b>1.23</b>
<b>Yolo County Total</b>		<b>1.56</b>	<b>0.93</b>	<b>3.92</b>	<b>3.86</b>	<b>2.29</b>	<b>1.91</b>	<b>1.11</b>	<b>2.17</b>	<b>0.22</b>	<b>1.20</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.03</b>

**Table L1-4. ROG Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.66	26.47	26.65	25.82	18.76	18.03	28.27	25.72	25.72	25.29	10.63	10.58	20.57	18.28	16.91	19.02	16.83	16.91	15.17
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.18	0.18	0.16	0.11	0.15	0.32	0.29	0.28	0.30	0.25	0.25	0.25
	Haul Trucks	0.39	0.26	0.39	--	0.11	--	0.06	--	--	--	--	3.22	7.39	7.39	7.38	7.32	7.16	7.06	5.42
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.19</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>18.97</b>	<b>18.12</b>	<b>28.53</b>	<b>25.90</b>	<b>25.90</b>	<b>25.46</b>	<b>10.75</b>	<b>13.94</b>	<b>28.28</b>	<b>25.96</b>	<b>24.56</b>	<b>26.63</b>	<b>24.25</b>	<b>24.22</b>	<b>20.84</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.22</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	11.22	11.22	11.22	3.94	5.09	5.09	4.12	6.04	6.04	6.04	4.09	7.82	7.82	7.82	7.82	7.82	3.91
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.62</b>	<b>11.36</b>	<b>11.36</b>	<b>11.24</b>	<b>11.24</b>	<b>3.98</b>	<b>5.13</b>	<b>5.13</b>	<b>4.21</b>	<b>6.09</b>	<b>6.09</b>	<b>6.09</b>	<b>5.80</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>5.57</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	0.04	0.06	0.07	0.11	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	1.23	12.62	6.09	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06
	Construction Worker Commuting	--	--	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.08	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	6.54	--	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27
<b>River Grading Site Subtotal</b>		<b>7.85</b>	<b>12.65</b>	<b>9.39</b>	<b>7.37</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>
<b>GRAND TOTAL</b>		<b>10.57</b>	<b>63.26</b>	<b>52.28</b>	<b>56.13</b>	<b>42.74</b>	<b>33.64</b>	<b>51.51</b>	<b>41.38</b>	<b>38.33</b>	<b>39.65</b>	<b>29.10</b>	<b>29.44</b>	<b>43.60</b>	<b>46.18</b>	<b>44.14</b>	<b>47.18</b>	<b>43.66</b>	<b>45.52</b>	<b>34.82</b>
<b>Yolo County Total</b>		<b>10.23</b>	<b>62.13</b>	<b>51.94</b>	<b>44.77</b>	<b>37.84</b>	<b>29.66</b>	<b>41.29</b>	<b>41.11</b>	<b>37.73</b>	<b>39.20</b>	<b>28.66</b>	<b>28.62</b>	<b>42.36</b>	<b>45.38</b>	<b>43.88</b>	<b>46.98</b>	<b>43.47</b>	<b>45.33</b>	<b>34.63</b>
<b>Sutter County Total</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.22</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>

**Table L1-4. ROG Detailed Summary (Alternative 2) - U**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	8.47	0.84	0.99	2.03	2.03	1.85	1.85	1.44	0.18	1.07
	Construction Worker Commuting	0.13	0.12	0.04	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	3.91	0.31	--	--	--	--	--	0.63	0.03	0.15
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>12.51</b>	<b>1.27</b>	<b>1.03</b>	<b>2.09</b>	<b>2.09</b>	<b>1.91</b>	<b>1.91</b>	<b>2.19</b>	<b>0.22</b>	<b>1.23</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	0.03
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.26	0.26	0.18	1.07	0.18	--	--	--	--	0.35
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.27</b>	<b>0.27</b>	<b>0.31</b>	<b>1.57</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	0.04
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	4.06	6.19	0.10	0.10	--	1.23	--	--	--	0.11
	Construction Worker Commuting	0.03	0.09	0.06	0.07	0.01	--	--	--	--	0.00
	Haul Trucks	--	1.59	1.59	1.59	--	0.08	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	3.27	3.27	--	--	--	--	--	--	--	0.53
<b>River Grading Site Subtotal</b>		<b>7.36</b>	<b>11.13</b>	<b>1.75</b>	<b>1.76</b>	<b>0.01</b>	<b>1.31</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.65</b>
<b>GRAND TOTAL</b>		<b>20.95</b>	<b>12.67</b>	<b>4.60</b>	<b>5.61</b>	<b>2.30</b>	<b>3.22</b>	<b>1.91</b>	<b>3.76</b>	<b>0.44</b>	<b>2.37</b>
<b>Yolo County Total</b>		<b>20.95</b>	<b>12.67</b>	<b>4.60</b>	<b>5.61</b>	<b>2.30</b>	<b>3.22</b>	<b>1.91</b>	<b>2.19</b>	<b>0.22</b>	<b>2.34</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.03</b>

**Table L1-5. ROG Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.66	26.47	26.65	25.82	18.76	18.03	28.27	26.87	26.87	26.44	26.44	33.11	35.28	40.81	16.91	19.02	16.83	16.91	22.99
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.19	0.19	0.17	0.17	0.28	0.33	0.42	0.28	0.30	0.25	0.25	0.36
	Haul Trucks	0.39	0.25	0.39	--	0.11	--	0.06	--	--	--	--	3.23	3.55	6.74	6.73	6.68	6.52	6.42	8.21
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.19</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>18.97</b>	<b>18.12</b>	<b>28.53</b>	<b>27.05</b>	<b>27.05</b>	<b>26.61</b>	<b>26.61</b>	<b>36.62</b>	<b>39.17</b>	<b>47.98</b>	<b>23.92</b>	<b>25.99</b>	<b>23.60</b>	<b>23.58</b>	<b>31.56</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.17</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	11.22	11.22	11.22	3.94	5.09	5.09	4.12	6.04	6.04	6.04	4.09	7.82	7.82	7.82	7.82	7.82	3.91
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.62</b>	<b>11.36</b>	<b>11.36</b>	<b>11.24</b>	<b>11.24</b>	<b>3.98</b>	<b>5.13</b>	<b>5.13</b>	<b>4.21</b>	<b>6.09</b>	<b>6.09</b>	<b>6.09</b>	<b>5.80</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>5.57</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>GRAND TOTAL</b>		<b>2.72</b>	<b>50.61</b>	<b>42.90</b>	<b>48.76</b>	<b>35.38</b>	<b>26.28</b>	<b>44.09</b>	<b>35.17</b>	<b>32.12</b>	<b>33.44</b>	<b>37.60</b>	<b>44.76</b>	<b>47.13</b>	<b>60.83</b>	<b>36.13</b>	<b>39.17</b>	<b>35.65</b>	<b>37.52</b>	<b>38.18</b>
<b>Yolo County Total</b>		<b>2.72</b>	<b>50.61</b>	<b>42.90</b>	<b>48.76</b>	<b>35.38</b>	<b>26.28</b>	<b>44.09</b>	<b>35.17</b>	<b>32.12</b>	<b>33.44</b>	<b>37.60</b>	<b>44.76</b>	<b>47.13</b>	<b>60.83</b>	<b>36.13</b>	<b>39.17</b>	<b>35.65</b>	<b>37.52</b>	<b>38.18</b>
<b>Sutter County Total</b>		<b>1.19</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>18.97</b>	<b>18.12</b>	<b>28.53</b>	<b>27.05</b>	<b>27.05</b>	<b>26.61</b>	<b>26.61</b>	<b>36.62</b>	<b>39.17</b>	<b>47.98</b>	<b>23.92</b>	<b>25.99</b>	<b>23.60</b>	<b>23.58</b>	<b>31.56</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.



**Table L1-5. ROG Detailed Summary (Alternative 3) - U**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	16.48	8.47	8.81	2.03	2.03	1.85	1.85	1.44	0.18	1.46
	Construction Worker Commuting	0.35	0.12	0.15	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	6.77	3.21	3.19	--	--	--	--	0.63	0.03	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.61</b>	<b>11.80</b>	<b>12.15</b>	<b>2.09</b>	<b>2.09</b>	<b>1.91</b>	<b>1.91</b>	<b>2.19</b>	<b>0.22</b>	<b>1.66</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	0.03
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.26	0.26	0.18	1.07	0.18	--	--	--	--	0.35
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.27</b>	<b>0.27</b>	<b>0.31</b>	<b>1.57</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	0.04
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>24.69</b>	<b>12.07</b>	<b>13.98</b>	<b>3.86</b>	<b>2.29</b>	<b>1.91</b>	<b>1.91</b>	<b>3.76</b>	<b>0.44</b>	<b>2.15</b>
<b>Yolo County Total</b>		<b>24.69</b>	<b>12.07</b>	<b>13.98</b>	<b>3.86</b>	<b>2.29</b>	<b>1.91</b>	<b>1.91</b>	<b>3.76</b>	<b>0.44</b>	<b>2.15</b>
<b>Sutter County Total</b>		<b>23.61</b>	<b>11.80</b>	<b>12.15</b>	<b>2.09</b>	<b>2.09</b>	<b>1.91</b>	<b>1.91</b>	<b>2.19</b>	<b>0.22</b>	<b>1.66</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-6. ROG Detailed Summary (Alternative 4) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.66	26.47	26.65	25.82	18.76	18.03	28.27	26.87	26.87	26.44	26.44	33.11	35.28	40.81	16.91	19.02	16.83	16.91	22.99
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.19	0.19	0.17	0.17	0.28	0.33	0.42	0.28	0.30	0.25	0.25	0.36
	Haul Trucks	0.39	0.25	0.39	--	0.11	--	0.06	--	--	--	--	3.23	3.55	6.74	6.73	6.68	6.52	6.42	8.21
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.19</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>18.97</b>	<b>18.12</b>	<b>28.53</b>	<b>27.05</b>	<b>27.05</b>	<b>26.61</b>	<b>26.61</b>	<b>36.62</b>	<b>39.17</b>	<b>47.98</b>	<b>23.92</b>	<b>25.99</b>	<b>23.60</b>	<b>23.58</b>	<b>31.56</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.17</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	11.22	11.22	11.22	3.94	5.09	5.09	4.12	6.04	6.04	6.04	4.09	7.82	7.82	7.82	7.82	7.82	3.91
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.62</b>	<b>11.36</b>	<b>11.36</b>	<b>11.24</b>	<b>11.24</b>	<b>3.98</b>	<b>5.13</b>	<b>5.13</b>	<b>4.21</b>	<b>6.09</b>	<b>6.09</b>	<b>6.09</b>	<b>5.80</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>5.57</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	0.04	0.06	0.07	0.11	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.66	14.17	14.41	10.14	11.04	14.07	10.33	6.64	6.68	10.61	1.39	0.96	1.24	0.78	1.26	1.44	1.44	0.36	0.18
	Construction Worker Commuting	0.05	0.04	0.05	0.05	0.09	0.09	0.13	0.09	0.08	0.12	0.04	0.05	0.02	0.02	0.02	0.02	0.03	0.03	0.01
	Haul Trucks	0.15	0.09	0.12	3.53	3.68	3.53	3.59	3.53	3.53	4.59	0.03	0.18	--	0.13	--	0.01	--	0.07	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.86</b>	<b>14.30</b>	<b>14.57</b>	<b>13.72</b>	<b>14.81</b>	<b>17.69</b>	<b>14.05</b>	<b>10.25</b>	<b>10.29</b>	<b>15.32</b>	<b>1.46</b>	<b>1.19</b>	<b>1.26</b>	<b>0.93</b>	<b>1.27</b>	<b>1.47</b>	<b>1.46</b>	<b>0.46</b>	<b>0.19</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.68	25.39	25.63	27.69	11.04	14.07	19.13	15.43	15.48	19.41	15.90	10.90	11.36	10.90	11.38	11.56	11.56	10.48	10.30
	Construction Worker Commuting	0.06	0.06	0.07	0.07	0.09	0.09	0.21	0.16	0.15	0.19	0.17	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.14
	Haul Trucks	0.18	0.23	0.26	4.93	5.08	4.93	5.00	4.93	4.93	8.40	8.40	8.51	8.40	8.53	8.40	8.41	8.40	8.48	8.40
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.93</b>	<b>25.68</b>	<b>25.95</b>	<b>32.70</b>	<b>16.21</b>	<b>19.10</b>	<b>24.33</b>	<b>20.53</b>	<b>20.56</b>	<b>28.01</b>	<b>24.47</b>	<b>19.55</b>	<b>19.91</b>	<b>19.58</b>	<b>19.93</b>	<b>20.13</b>	<b>20.12</b>	<b>19.12</b>	<b>18.84</b>
<b>GRAND TOTAL</b>		<b>4.51</b>	<b>90.59</b>	<b>83.42</b>	<b>95.17</b>	<b>66.40</b>	<b>63.07</b>	<b>82.47</b>	<b>65.95</b>	<b>62.97</b>	<b>76.78</b>	<b>63.53</b>	<b>65.50</b>	<b>68.31</b>	<b>81.34</b>	<b>57.33</b>	<b>60.77</b>	<b>57.23</b>	<b>57.10</b>	<b>57.21</b>
<b>Yolo County Total</b>		<b>4.51</b>	<b>90.59</b>	<b>83.42</b>	<b>95.17</b>	<b>66.40</b>	<b>63.07</b>	<b>82.47</b>	<b>65.95</b>	<b>62.97</b>	<b>76.78</b>	<b>63.53</b>	<b>65.50</b>	<b>68.31</b>	<b>81.34</b>	<b>57.33</b>	<b>60.77</b>	<b>57.23</b>	<b>57.10</b>	<b>57.21</b>
<b>Sutter County Total</b>		<b>1.19</b>	<b>26.80</b>	<b>27.22</b>	<b>25.89</b>	<b>18.97</b>	<b>18.12</b>	<b>28.53</b>	<b>27.05</b>	<b>27.05</b>	<b>26.61</b>	<b>26.61</b>	<b>36.62</b>	<b>39.17</b>	<b>47.98</b>	<b>23.92</b>	<b>25.99</b>	<b>23.60</b>	<b>23.58</b>	<b>31.56</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-6. ROG Detailed Summary (Alternative 4) - U**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	16.48	8.47	8.81	1.85	1.85	1.67	1.67	1.44	0.18	1.46
	Construction Worker Commuting	0.35	0.12	0.15	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	6.77	3.21	3.19	--	--	--	--	0.63	0.03	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.61</b>	<b>11.80</b>	<b>12.15</b>	<b>1.91</b>	<b>1.91</b>	<b>1.72</b>	<b>1.72</b>	<b>2.19</b>	<b>0.22</b>	<b>1.65</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	0.03
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.26	0.26	0.18	1.07	0.18	--	--	--	--	0.35
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.27</b>	<b>0.27</b>	<b>0.31</b>	<b>1.57</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	0.04
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.26	0.26	1.26	0.18	--	--	--	--	--	0.32
	Construction Worker Commuting	0.02	0.02	0.02	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.57	0.01	--	--	--	--	--	0.10
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.28</b>	<b>0.28</b>	<b>1.84</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	2.82	2.74	1.49	0.21	--	--	--	--	--	0.78
	Construction Worker Commuting	0.04	0.07	0.03	0.00	--	--	--	--	--	0.01
	Haul Trucks	4.93	5.05	0.62	0.01	--	--	--	--	--	0.36
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>7.79</b>	<b>7.85</b>	<b>2.14</b>	<b>0.22</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.15</b>
<b>GRAND TOTAL</b>		<b>32.75</b>	<b>20.20</b>	<b>17.97</b>	<b>4.10</b>	<b>2.10</b>	<b>1.72</b>	<b>1.72</b>	<b>3.76</b>	<b>0.44</b>	<b>3.72</b>
<b>Yolo County Total</b>		<b>32.75</b>	<b>20.20</b>	<b>17.97</b>	<b>4.10</b>	<b>2.10</b>	<b>1.72</b>	<b>1.72</b>	<b>3.76</b>	<b>0.44</b>	<b>3.72</b>
<b>Sutter County Total</b>		<b>23.61</b>	<b>11.80</b>	<b>12.15</b>	<b>1.91</b>	<b>1.91</b>	<b>1.72</b>	<b>1.72</b>	<b>2.19</b>	<b>0.22</b>	<b>1.65</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-7. ROG Detailed Summary (Alternative 5) - Unmitigated**

#	Activity																			Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	3.88	118.39	55.22	72.39	84.77	80.84	70.16	81.89	36.20	32.08	31.06	24.61	36.02	32.08	30.81	28.27	28.27	16.73	3.02
	Construction Worker Commuting	0.30	0.27	0.37	0.25	0.41	0.37	0.24	0.42	0.53	0.47	0.44	0.37	0.51	0.47	0.43	0.46	0.46	0.30	0.04
	Haul Trucks	0.96	0.35	0.34	--	0.11	0.11	0.11	5.79	11.40	11.33	11.33	11.33	11.33	11.33	11.33	12.00	12.00	6.37	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>5.15</b>	<b>119.01</b>	<b>55.93</b>	<b>72.63</b>	<b>85.30</b>	<b>81.32</b>	<b>70.51</b>	<b>88.10</b>	<b>48.13</b>	<b>43.89</b>	<b>42.84</b>	<b>36.32</b>	<b>47.87</b>	<b>43.89</b>	<b>42.57</b>	<b>40.73</b>	<b>40.73</b>	<b>23.39</b>	<b>3.06</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.22</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	1.23	12.62	6.09	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06	4.06
	Construction Worker Commuting	--	--	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.08	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	6.54	--	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27
<b>River Grading Site Subtotal</b>		<b>7.85</b>	<b>12.65</b>	<b>9.39</b>	<b>7.37</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>	<b>7.36</b>
<b>GRAND TOTAL</b>		<b>13.90</b>	<b>144.11</b>	<b>69.64</b>	<b>91.63</b>	<b>97.83</b>	<b>92.86</b>	<b>88.35</b>	<b>98.45</b>	<b>56.35</b>	<b>51.99</b>	<b>55.09</b>	<b>45.72</b>	<b>57.39</b>	<b>52.97</b>	<b>51.01</b>	<b>50.14</b>	<b>49.01</b>	<b>33.56</b>	<b>11.48</b>
Yolo County Total		13.57	142.98	69.29	80.27	92.93	88.89	78.14	98.18	55.75	51.55	54.65	44.90	56.15	52.17	50.75	49.94	48.82	33.37	11.28
Sutter County Total		0.34	1.12	0.34	11.36	4.90	3.98	10.22	0.27	0.60	0.44	0.44	0.82	1.24	0.80	0.26	0.20	0.19	0.19	0.20

Table L1-7. ROG Detailed Summary (Alternative 5) - U

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	1.19	1.27	1.27	5.18	4.81	0.18	1.26	0.00	0.00	0.37	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.26
	Construction Worker Commuting	0.02	0.02	0.02	0.32	0.12	0.21	0.03	0.00	0.00	0.01	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
	Haul Trucks	0.06	--	--	1.47	0.66	0.25	0.54	--	--	0.27	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.27</b>	<b>1.29</b>	<b>1.29</b>	<b>6.97</b>	<b>5.59</b>	<b>0.65</b>	<b>1.82</b>	<b>--</b>	<b>--</b>	<b>0.64</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.36</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	4.06	6.19	0.10	0.10	--	1.23	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.03	0.09	0.06	0.07	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	1.59	1.59	1.59	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	3.27	3.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>7.36</b>	<b>11.13</b>	<b>1.75</b>	<b>1.76</b>	<b>0.01</b>	<b>1.31</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>9.45</b>	<b>12.42</b>	<b>4.55</b>	<b>8.93</b>	<b>5.60</b>	<b>1.96</b>	<b>1.82</b>	<b>1.57</b>	<b>0.22</b>	<b>0.64</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.27</b>	<b>4.36</b>
Yolo County Total		9.45	12.42	4.55	8.93	5.60	1.96	1.82	--	--	0.64	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.36
Sutter County Total		--	--	--	--	--	--	--	1.57	0.22	--	--	--	--	--	--	--	--	--	--

**Table L1-7. ROG Detailed Summary (Alternative 5) - U**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	1.07	0.37	0.00	5.42	5.31	0.11
	Construction Worker Commuting	0.05	0.01	0.00	0.02	0.02	0.00
	Haul Trucks	--	0.27	--	0.29	0.29	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.11</b>	<b>0.64</b>	<b>--</b>	<b>5.74</b>	<b>5.62</b>	<b>0.12</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.03	0.03	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>	<b>0.03</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.04	0.04	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>	<b>0.04</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.11	0.11	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	--	--	--	0.53	0.53	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.65</b>	<b>0.65</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>1.11</b>	<b>0.64</b>	<b>--</b>	<b>6.47</b>	<b>6.35</b>	<b>0.12</b>
Yolo County Total		1.11	0.64	--	6.43	6.32	0.12
Sutter County Total		--	--	--	0.03	0.03	--

**Table L1-8. ROG Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.66	38.95	39.62	37.47	27.62	26.90	28.65	27.32	26.89	29.06	61.36	61.36	59.99	62.10	60.53	59.99	62.16	61.55	59.37
	Construction Worker Commuting	0.20	0.27	0.15	0.10	0.15	0.13	0.19	0.17	0.15	0.21	0.65	0.65	0.64	0.66	0.65	0.61	0.67	0.66	0.60
	Haul Trucks	0.53	0.60	0.39	0.34	0.11	--	0.06	--	--	0.33	11.65	11.65	11.63	11.57	11.66	11.32	11.65	11.71	11.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.39</b>	<b>39.83</b>	<b>40.15</b>	<b>37.91</b>	<b>27.89</b>	<b>27.03</b>	<b>28.90</b>	<b>27.48</b>	<b>27.04</b>	<b>29.60</b>	<b>73.67</b>	<b>73.67</b>	<b>72.25</b>	<b>74.32</b>	<b>72.84</b>	<b>71.92</b>	<b>74.48</b>	<b>73.91</b>	<b>71.31</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.29	1.07	0.18	11.22	4.89	3.94	7.82	0.26	0.37	0.43	0.43	0.72	1.09	0.79	0.18	0.18	0.18	0.18	0.18
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.34</b>	<b>1.12</b>	<b>0.34</b>	<b>11.36</b>	<b>4.90</b>	<b>3.98</b>	<b>10.17</b>	<b>0.27</b>	<b>0.60</b>	<b>0.44</b>	<b>0.44</b>	<b>0.82</b>	<b>1.24</b>	<b>0.80</b>	<b>0.26</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.47	11.22	11.22	11.22	11.22	3.94	5.09	5.09	4.12	6.04	6.04	6.04	4.09	7.82	7.82	7.82	7.82	7.82	3.91
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.62</b>	<b>11.36</b>	<b>11.36</b>	<b>11.24</b>	<b>11.24</b>	<b>3.98</b>	<b>5.13</b>	<b>5.13</b>	<b>4.21</b>	<b>6.09</b>	<b>6.09</b>	<b>6.09</b>	<b>5.80</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>11.14</b>	<b>5.57</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.47	11.22	3.94	0.26	0.26	0.18	0.24	1.15	0.24	0.18	4.41	1.19	0.90	0.90	0.79	1.77	0.65	2.48	0.72
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.57</b>	<b>11.33</b>	<b>3.98</b>	<b>0.27</b>	<b>0.27</b>	<b>0.20</b>	<b>0.26</b>	<b>2.72</b>	<b>0.26</b>	<b>0.29</b>	<b>4.45</b>	<b>1.22</b>	<b>0.92</b>	<b>0.92</b>	<b>0.82</b>	<b>1.85</b>	<b>0.73</b>	<b>2.61</b>	<b>0.85</b>
<b>GRAND TOTAL</b>		<b>2.92</b>	<b>63.63</b>	<b>55.83</b>	<b>60.77</b>	<b>44.30</b>	<b>35.19</b>	<b>44.46</b>	<b>35.60</b>	<b>32.11</b>	<b>36.43</b>	<b>84.65</b>	<b>81.80</b>	<b>80.21</b>	<b>87.18</b>	<b>85.05</b>	<b>85.10</b>	<b>86.53</b>	<b>87.85</b>	<b>77.93</b>
<b>Yolo County Total</b>		<b>2.92</b>	<b>63.63</b>	<b>55.83</b>	<b>60.77</b>	<b>44.30</b>	<b>35.19</b>	<b>44.46</b>	<b>35.60</b>	<b>32.11</b>	<b>36.43</b>	<b>84.65</b>	<b>81.80</b>	<b>80.21</b>	<b>87.18</b>	<b>85.05</b>	<b>85.10</b>	<b>86.53</b>	<b>87.85</b>	<b>77.93</b>
<b>Sutter County Total</b>		<b>1.39</b>	<b>39.83</b>	<b>40.15</b>	<b>37.91</b>	<b>27.89</b>	<b>27.03</b>	<b>28.90</b>	<b>27.48</b>	<b>27.04</b>	<b>29.60</b>	<b>73.67</b>	<b>73.67</b>	<b>72.25</b>	<b>74.32</b>	<b>72.84</b>	<b>71.92</b>	<b>74.48</b>	<b>73.91</b>	<b>71.31</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-8. ROG Detailed Summary (Alternative 6) - U**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	63.62	44.07	16.63	18.46	3.00	2.64	2.64	2.06	0.55	2.88
	Construction Worker Commuting	0.69	0.62	0.27	0.30	0.23	0.07	0.07	0.06	0.18	0.03
	Haul Trucks	12.87	12.87	6.46	6.46	0.42	--	--	0.48	0.27	0.44
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>77.18</b>	<b>57.57</b>	<b>23.36</b>	<b>25.22</b>	<b>3.65</b>	<b>2.71</b>	<b>2.71</b>	<b>2.59</b>	<b>1.00</b>	<b>3.35</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	1.07	0.18	0.03
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.57</b>	<b>0.22</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.26	0.26	0.18	1.07	0.18	--	--	--	--	0.35
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.27</b>	<b>0.27</b>	<b>0.31</b>	<b>1.57</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.80	--	1.26	0.18	--	--	--	--	--	0.04
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.81</b>	<b>--</b>	<b>1.52</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>78.26</b>	<b>57.83</b>	<b>25.19</b>	<b>26.99</b>	<b>3.85</b>	<b>2.71</b>	<b>2.71</b>	<b>4.16</b>	<b>1.22</b>	<b>3.84</b>
<b>Yolo County Total</b>		<b>78.26</b>	<b>57.83</b>	<b>25.19</b>	<b>26.99</b>	<b>3.85</b>	<b>2.71</b>	<b>2.71</b>	<b>4.16</b>	<b>1.22</b>	<b>3.84</b>
<b>Sutter County Total</b>		<b>77.18</b>	<b>57.57</b>	<b>23.36</b>	<b>25.22</b>	<b>3.65</b>	<b>2.71</b>	<b>2.71</b>	<b>2.59</b>	<b>1.00</b>	<b>3.35</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-9. NOx Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	10.21	71.19	74.14	63.11	113.17	121.03	199.49	159.07	179.46	174.95	109.20	107.87	173.38	232.71	261.69	242.17	164.92	176.33	6.34
	Construction Worker Commuting	0.49	0.39	0.90	0.36	0.35	0.30	0.65	0.59	0.60	0.53	0.45	0.71	0.88	0.94	1.18	1.14	0.67	0.93	0.35
	Haul Trucks	9.78	7.34	11.25	--	--	--	3.59	0.56	--	--	--	61.03	150.75	137.95	147.40	147.40	92.12	152.92	5.38
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>20.48</b>	<b>78.92</b>	<b>86.29</b>	<b>63.46</b>	<b>113.52</b>	<b>121.32</b>	<b>203.73</b>	<b>160.22</b>	<b>180.07</b>	<b>175.48</b>	<b>109.65</b>	<b>169.62</b>	<b>325.01</b>	<b>371.60</b>	<b>410.27</b>	<b>390.72</b>	<b>257.71</b>	<b>330.17</b>	<b>12.07</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.31	12.60	2.95	11.02	65.75	56.59	150.92	2.00	5.90	4.51	4.51	6.36	13.77	10.74	2.95	2.95	1.71	1.71	2.95
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>218.09</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	7.26	11.02	11.02	11.02	11.02	56.59	70.81	70.81	59.54	79.94	79.94	79.94	78.41	150.92	150.92	150.92	150.92	150.92	75.46
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>10.70</b>	<b>14.53</b>	<b>14.53</b>	<b>11.11</b>	<b>11.11</b>	<b>56.80</b>	<b>71.05</b>	<b>71.05</b>	<b>60.79</b>	<b>80.22</b>	<b>80.22</b>	<b>80.22</b>	<b>126.44</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>122.48</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	7.26	11.02	56.59	2.00	2.00	2.95	3.01	14.21	3.01	2.95	59.98	9.75	8.18	8.18	7.46	17.83	6.34	28.82	6.36
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>9.37</b>	<b>13.68</b>	<b>56.80</b>	<b>2.05</b>	<b>2.05</b>	<b>3.05</b>	<b>3.53</b>	<b>59.68</b>	<b>3.53</b>	<b>5.25</b>	<b>60.22</b>	<b>9.87</b>	<b>8.27</b>	<b>8.27</b>	<b>7.59</b>	<b>19.13</b>	<b>8.05</b>	<b>31.26</b>	<b>9.71</b>
<b>GRAND TOTAL</b>		<b>45.75</b>	<b>120.64</b>	<b>164.33</b>	<b>91.15</b>	<b>192.51</b>	<b>237.97</b>	<b>496.40</b>	<b>293.00</b>	<b>255.38</b>	<b>265.55</b>	<b>254.67</b>	<b>268.52</b>	<b>477.16</b>	<b>635.59</b>	<b>667.05</b>	<b>658.07</b>	<b>512.43</b>	<b>608.10</b>	<b>147.55</b>
<b>Yolo County Total</b>		<b>40.55</b>	<b>107.12</b>	<b>157.61</b>	<b>76.62</b>	<b>126.68</b>	<b>181.17</b>	<b>278.30</b>	<b>290.95</b>	<b>244.39</b>	<b>260.96</b>	<b>250.09</b>	<b>259.71</b>	<b>459.72</b>	<b>624.79</b>	<b>662.78</b>	<b>654.77</b>	<b>510.68</b>	<b>606.35</b>	<b>144.25</b>
<b>Sutter County Total</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>218.09</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>

**Table L1-9. NOx Detailed Summary (Alternative 1) - Ur**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	3.39	6.34	19.72	19.72	19.72	17.81	7.07	26.89	2.95	7.09
	Construction Worker Commuting	0.03	0.05	0.30	0.30	0.30	0.30	0.23	0.61	0.05	0.03
	Haul Trucks	--	0.03	--	--	--	--	--	17.87	0.82	2.12
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.42</b>	<b>6.42</b>	<b>20.02</b>	<b>20.02</b>	<b>20.02</b>	<b>18.10</b>	<b>7.30</b>	<b>45.37</b>	<b>3.82</b>	<b>9.24</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	0.33
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.06</b>	<b>3.82</b>	<b>0.42</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	2.00	2.00	2.95	20.99	2.95	--	--	--	--	4.09
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>2.05</b>	<b>2.05</b>	<b>6.02</b>	<b>35.06</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.71</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	0.33
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>GRAND TOTAL</b>		<b>16.15</b>	<b>8.47</b>	<b>56.98</b>	<b>58.38</b>	<b>23.31</b>	<b>18.10</b>	<b>7.30</b>	<b>80.44</b>	<b>7.63</b>	<b>15.79</b>
<b>Yolo County Total</b>		<b>16.15</b>	<b>8.47</b>	<b>56.98</b>	<b>58.38</b>	<b>23.31</b>	<b>18.10</b>	<b>7.30</b>	<b>45.37</b>	<b>3.82</b>	<b>15.37</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.06</b>	<b>3.82</b>	<b>0.42</b>

**Table L1-10. NOx Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	10.21	71.19	74.14	63.11	244.68	238.32	387.58	344.21	344.21	339.70	142.44	180.18	350.17	324.29	314.22	337.15	311.58	315.84	259.45
	Construction Worker Commuting	0.71	0.39	0.90	0.36	0.51	0.42	1.02	0.89	0.89	0.82	0.57	0.73	1.58	1.45	1.39	1.47	1.26	1.24	1.23
	Haul Trucks	11.25	7.48	11.39	--	3.19	--	1.79	--	--	--	--	93.80	215.57	215.57	215.17	213.54	208.81	206.09	158.15
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.17</b>	<b>79.06</b>	<b>86.43</b>	<b>63.46</b>	<b>248.37</b>	<b>238.74</b>	<b>390.40</b>	<b>345.10</b>	<b>345.10</b>	<b>340.52</b>	<b>143.02</b>	<b>274.71</b>	<b>567.32</b>	<b>541.32</b>	<b>530.78</b>	<b>552.15</b>	<b>521.66</b>	<b>523.18</b>	<b>418.84</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.31	12.60	2.95	11.02	65.75	56.59	150.92	2.00	5.90	4.51	4.51	6.36	13.77	10.74	2.95	2.95	1.71	1.71	2.95
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>218.09</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	7.26	11.02	11.02	11.02	11.02	56.59	70.81	70.81	59.54	79.94	79.94	79.94	78.41	150.92	150.92	150.92	150.92	150.92	75.46
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>10.70</b>	<b>14.53</b>	<b>14.53</b>	<b>11.11</b>	<b>11.11</b>	<b>56.80</b>	<b>71.05</b>	<b>71.05</b>	<b>60.79</b>	<b>80.22</b>	<b>80.22</b>	<b>80.22</b>	<b>126.44</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>122.48</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	7.26	11.02	56.59	2.00	2.00	2.95	3.01	14.21	3.01	2.95	59.98	9.75	8.18	8.18	7.46	17.83	6.34	28.82	6.36
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>9.37</b>	<b>13.68</b>	<b>56.80</b>	<b>2.05</b>	<b>2.05</b>	<b>3.05</b>	<b>3.53</b>	<b>59.68</b>	<b>3.53</b>	<b>5.25</b>	<b>60.22</b>	<b>9.87</b>	<b>8.27</b>	<b>8.27</b>	<b>7.59</b>	<b>19.13</b>	<b>8.05</b>	<b>31.26</b>	<b>9.71</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	14.04	29.51	105.17	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35
	Construction Worker Commuting	--	--	0.15	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Haul Trucks	2.45	0.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	48.89	--	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45
<b>River Grading Site Subtotal</b>		<b>65.38</b>	<b>30.36</b>	<b>129.77</b>	<b>101.99</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>
<b>GRAND TOTAL</b>		<b>112.82</b>	<b>151.15</b>	<b>294.25</b>	<b>193.14</b>	<b>429.31</b>	<b>457.32</b>	<b>785.01</b>	<b>579.82</b>	<b>522.36</b>	<b>532.53</b>	<b>389.98</b>	<b>475.55</b>	<b>821.42</b>	<b>907.25</b>	<b>889.51</b>	<b>921.45</b>	<b>878.32</b>	<b>903.05</b>	<b>656.27</b>
<b>Yolo County Total</b>		<b>107.61</b>	<b>137.63</b>	<b>287.53</b>	<b>178.61</b>	<b>363.48</b>	<b>400.53</b>	<b>566.92</b>	<b>577.78</b>	<b>511.37</b>	<b>527.94</b>	<b>385.40</b>	<b>466.75</b>	<b>803.98</b>	<b>896.45</b>	<b>885.23</b>	<b>918.15</b>	<b>876.57</b>	<b>901.30</b>	<b>652.97</b>
<b>Sutter County Total</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>218.09</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>

**Table L1-10. NOx Detailed Summary (Alternative 2) - L**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	157.25	9.29	6.98	19.72	19.72	17.81	17.81	26.89	2.95	13.28
	Construction Worker Commuting	0.65	0.59	0.19	0.30	0.30	0.30	0.30	0.61	0.05	0.05
	Haul Trucks	113.93	9.13	--	--	--	--	--	18.33	0.82	4.31
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>271.84</b>	<b>19.01</b>	<b>7.17</b>	<b>20.02</b>	<b>20.02</b>	<b>18.10</b>	<b>18.10</b>	<b>45.83</b>	<b>3.82</b>	<b>17.63</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	0.33
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.06</b>	<b>3.82</b>	<b>0.42</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	2.00	2.00	2.95	20.99	2.95	--	--	--	--	4.09
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>2.05</b>	<b>2.05</b>	<b>6.02</b>	<b>35.06</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.71</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	0.33
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	77.35	105.29	0.12	0.12	--	14.04	--	--	--	1.22
	Construction Worker Commuting	0.15	0.44	0.29	0.33	0.04	--	--	--	--	0.01
	Haul Trucks	--	46.28	46.28	46.28	--	2.45	--	--	--	0.42
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	24.45	24.45	--	--	--	--	--	--	--	3.98
<b>River Grading Site Subtotal</b>		<b>101.94</b>	<b>176.46</b>	<b>46.68</b>	<b>46.72</b>	<b>0.04</b>	<b>16.49</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.64</b>
<b>GRAND TOTAL</b>		<b>386.52</b>	<b>197.51</b>	<b>90.82</b>	<b>105.10</b>	<b>23.36</b>	<b>34.59</b>	<b>18.10</b>	<b>80.89</b>	<b>7.63</b>	<b>29.82</b>
<b>Yolo County Total</b>		<b>386.52</b>	<b>197.51</b>	<b>90.82</b>	<b>105.10</b>	<b>23.36</b>	<b>34.59</b>	<b>18.10</b>	<b>45.83</b>	<b>3.82</b>	<b>29.40</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.06</b>	<b>3.82</b>	<b>0.42</b>

**Table L1-11. NOx Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	10.21	71.19	74.14	63.11	244.68	238.32	387.58	358.43	358.43	353.91	353.91	490.62	509.69	634.73	314.22	337.15	311.58	315.84	410.37
	Construction Worker Commuting	0.71	0.39	0.90	0.36	0.51	0.42	1.02	0.93	0.93	0.86	0.86	1.39	1.66	2.10	1.39	1.47	1.26	1.24	1.81
	Haul Trucks	11.25	7.39	11.30	--	3.26	--	1.79	--	--	--	--	94.31	103.61	196.67	196.44	194.81	190.09	187.37	239.45
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.17</b>	<b>78.97</b>	<b>86.34</b>	<b>63.46</b>	<b>248.45</b>	<b>238.74</b>	<b>390.40</b>	<b>359.35</b>	<b>359.35</b>	<b>354.77</b>	<b>354.77</b>	<b>586.31</b>	<b>614.96</b>	<b>833.50</b>	<b>512.05</b>	<b>533.43</b>	<b>502.93</b>	<b>504.45</b>	<b>651.62</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	4.31	12.60	2.95	11.02	65.75	56.59	150.92	2.00	5.90	4.51	4.51	6.36	13.77	10.74	2.95	2.95	1.71	1.71	2.95
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	65.07	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>216.55</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	7.26	11.02	11.02	11.02	11.02	56.59	70.81	70.81	59.54	79.94	79.94	79.94	78.41	150.92	150.92	150.92	150.92	150.92	75.46
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>10.70</b>	<b>14.53</b>	<b>14.53</b>	<b>11.11</b>	<b>11.11</b>	<b>56.80</b>	<b>71.05</b>	<b>71.05</b>	<b>60.79</b>	<b>80.22</b>	<b>80.22</b>	<b>80.22</b>	<b>126.44</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>122.48</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	7.26	11.02	56.59	2.00	2.00	2.95	3.01	14.21	3.01	2.95	59.98	9.75	8.18	8.18	7.46	17.83	6.34	28.82	6.36
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>9.37</b>	<b>13.68</b>	<b>56.80</b>	<b>2.05</b>	<b>2.05</b>	<b>3.05</b>	<b>3.53</b>	<b>59.68</b>	<b>3.53</b>	<b>5.25</b>	<b>60.22</b>	<b>9.87</b>	<b>8.27</b>	<b>8.27</b>	<b>7.59</b>	<b>19.13</b>	<b>8.05</b>	<b>31.26</b>	<b>9.71</b>
<b>GRAND TOTAL</b>		<b>47.44</b>	<b>120.69</b>	<b>164.38</b>	<b>91.15</b>	<b>327.44</b>	<b>355.38</b>	<b>681.53</b>	<b>492.13</b>	<b>434.67</b>	<b>444.84</b>	<b>499.79</b>	<b>685.21</b>	<b>767.11</b>	<b>1097.49</b>	<b>768.83</b>	<b>800.78</b>	<b>757.65</b>	<b>782.38</b>	<b>787.10</b>
<b>Yolo County Total</b>		<b>47.44</b>	<b>120.69</b>	<b>164.38</b>	<b>91.15</b>	<b>327.44</b>	<b>355.38</b>	<b>681.53</b>	<b>492.13</b>	<b>434.67</b>	<b>444.84</b>	<b>499.79</b>	<b>685.21</b>	<b>767.11</b>	<b>1097.49</b>	<b>768.83</b>	<b>800.78</b>	<b>757.65</b>	<b>782.38</b>	<b>787.10</b>
<b>Sutter County Total</b>		<b>22.17</b>	<b>78.97</b>	<b>86.34</b>	<b>63.46</b>	<b>248.45</b>	<b>238.74</b>	<b>390.40</b>	<b>359.35</b>	<b>359.35</b>	<b>354.77</b>	<b>354.77</b>	<b>586.31</b>	<b>614.96</b>	<b>833.50</b>	<b>512.05</b>	<b>533.43</b>	<b>502.93</b>	<b>504.45</b>	<b>651.62</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-11. NOx Detailed Summary (Alternative 3) - L**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	311.12	157.25	157.90	19.72	19.72	17.81	17.81	26.89	2.95	18.56
	Construction Worker Commuting	1.76	0.62	0.77	0.30	0.30	0.30	0.30	0.61	0.05	0.07
	Haul Trucks	197.64	93.55	93.06	--	--	--	--	18.40	0.82	5.25
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>510.52</b>	<b>251.43</b>	<b>251.72</b>	<b>20.02</b>	<b>20.02</b>	<b>18.10</b>	<b>18.10</b>	<b>45.90</b>	<b>3.82</b>	<b>23.87</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	0.39
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.00</b>	<b>3.82</b>	<b>0.51</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	2.00	2.00	2.95	20.99	2.95	--	--	--	--	4.09
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>2.05</b>	<b>2.05</b>	<b>6.02</b>	<b>35.06</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.71</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	0.33
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>GRAND TOTAL</b>		<b>523.26</b>	<b>253.47</b>	<b>288.69</b>	<b>58.38</b>	<b>23.31</b>	<b>18.10</b>	<b>18.10</b>	<b>80.89</b>	<b>7.63</b>	<b>30.51</b>
<b>Yolo County Total</b>		<b>523.26</b>	<b>253.47</b>	<b>288.69</b>	<b>58.38</b>	<b>23.31</b>	<b>18.10</b>	<b>18.10</b>	<b>80.89</b>	<b>7.63</b>	<b>30.51</b>
<b>Sutter County Total</b>		<b>510.52</b>	<b>251.43</b>	<b>251.72</b>	<b>20.02</b>	<b>20.02</b>	<b>18.10</b>	<b>18.10</b>	<b>45.90</b>	<b>3.82</b>	<b>23.87</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-12. NOx Detailed Summary (Alternative 4) - L**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	311.12	157.25	157.90	17.10	17.10	15.18	15.18	26.89	2.95	18.52
	Construction Worker Commuting	1.76	0.62	0.77	0.30	0.30	0.30	0.30	0.61	0.05	0.07
	Haul Trucks	197.64	93.55	93.06	--	--	--	--	18.40	0.82	5.25
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>510.52</b>	<b>251.43</b>	<b>251.72</b>	<b>17.39</b>	<b>17.39</b>	<b>15.48</b>	<b>15.48</b>	<b>45.90</b>	<b>3.82</b>	<b>23.84</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	0.39
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.00</b>	<b>3.82</b>	<b>0.51</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	2.00	2.00	2.95	20.99	2.95	--	--	--	--	4.09
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>2.05</b>	<b>2.05</b>	<b>6.02</b>	<b>35.06</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.71</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	0.33
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	1.80	1.80	23.94	2.95	--	--	--	--	--	3.77
	Construction Worker Commuting	0.08	0.08	0.10	0.02	--	--	--	--	--	0.01
	Haul Trucks	--	--	16.61	0.33	--	--	--	--	--	2.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>1.88</b>	<b>1.88</b>	<b>40.65</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>6.64</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	32.23	33.17	26.95	2.98	--	--	--	--	--	9.47
	Construction Worker Commuting	0.20	0.33	0.15	0.02	--	--	--	--	--	0.04
	Haul Trucks	143.94	147.20	18.16	0.33	--	--	--	--	--	10.61
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>176.37</b>	<b>180.70</b>	<b>45.26</b>	<b>3.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>20.11</b>
<b>GRAND TOTAL</b>		<b>701.51</b>	<b>436.05</b>	<b>374.60</b>	<b>62.38</b>	<b>20.69</b>	<b>15.48</b>	<b>15.48</b>	<b>80.89</b>	<b>7.63</b>	<b>57.24</b>
<b>Yolo County Total</b>		<b>701.51</b>	<b>436.05</b>	<b>374.60</b>	<b>62.38</b>	<b>20.69</b>	<b>15.48</b>	<b>15.48</b>	<b>80.89</b>	<b>7.63</b>	<b>57.24</b>
<b>Sutter County Total</b>		<b>510.52</b>	<b>251.43</b>	<b>251.72</b>	<b>17.39</b>	<b>17.39</b>	<b>15.48</b>	<b>15.48</b>	<b>45.90</b>	<b>3.82</b>	<b>23.84</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-13. NOx Detailed Summary (Alternative 5) - Unmitigated**

#	Activity	Ma																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	48.00	184.56	734.81	984.93	1,134.52	1,077.93	954.73	1,181.11	606.83	547.29	535.76	462.65	603.88	547.29	533.75	494.28	494.28	270.86	31.27
	Construction Worker Commuting	1.51	1.33	1.87	1.22	2.06	1.86	1.21	2.07	2.65	2.36	2.18	1.86	2.56	2.36	2.14	2.30	2.30	1.48	0.20
	Haul Trucks	28.06	10.29	9.80	--	3.19	3.19	3.19	169.04	332.45	330.65	330.65	330.65	330.65	330.65	330.65	350.01	350.01	185.78	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>77.57</b>	<b>196.18</b>	<b>746.48</b>	<b>986.15</b>	<b>1139.77</b>	<b>1082.97</b>	<b>959.14</b>	<b>1352.22</b>	<b>941.93</b>	<b>880.30</b>	<b>868.60</b>	<b>795.16</b>	<b>937.10</b>	<b>880.30</b>	<b>866.55</b>	<b>846.58</b>	<b>846.58</b>	<b>458.12</b>	<b>31.47</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.31	12.60	2.95	11.02	65.75	56.59	150.92	2.00	5.90	4.51	4.51	6.36	13.77	10.74	2.95	2.95	1.71	1.71	2.95
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>218.09</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	7.26	11.02	56.59	2.00	2.00	2.95	3.01	14.21	3.01	2.95	59.98	9.75	8.18	8.18	7.46	17.83	6.34	28.82	6.36
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>9.37</b>	<b>13.68</b>	<b>56.80</b>	<b>2.05</b>	<b>2.05</b>	<b>3.05</b>	<b>3.53</b>	<b>59.68</b>	<b>3.53</b>	<b>5.25</b>	<b>60.22</b>	<b>9.87</b>	<b>8.27</b>	<b>8.27</b>	<b>7.59</b>	<b>19.13</b>	<b>8.05</b>	<b>31.26</b>	<b>9.71</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	14.04	29.51	105.17	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35	77.35
	Construction Worker Commuting	--	--	0.15	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Haul Trucks	2.45	0.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	48.89	--	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45
<b>River Grading Site Subtotal</b>		<b>65.38</b>	<b>30.36</b>	<b>129.77</b>	<b>101.99</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>	<b>101.94</b>
<b>GRAND TOTAL</b>		<b>157.52</b>	<b>253.74</b>	<b>939.77</b>	<b>1104.71</b>	<b>1309.59</b>	<b>1244.76</b>	<b>1282.70</b>	<b>1515.89</b>	<b>1058.40</b>	<b>992.09</b>	<b>1035.34</b>	<b>915.78</b>	<b>1064.76</b>	<b>1001.32</b>	<b>980.36</b>	<b>970.96</b>	<b>958.33</b>	<b>593.07</b>	<b>146.42</b>
Yolo County Total		152.31	240.22	933.05	1090.18	1243.76	1187.97	1064.61	1513.85	1047.40	987.50	1030.76	906.98	1047.32	990.52	976.08	967.66	956.58	591.32	143.12
Sutter County Total		5.20	13.52	6.72	14.53	65.83	56.80	218.09	2.05	10.99	4.59	4.58	8.80	17.44	10.80	4.27	3.30	1.75	1.75	3.30

Table L1-13. NOx Detailed Summary (Alternative 5) - L

#	Activity	Maximum Daily Emissions, lbs/day																			
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	
<b>Intake Channel, Headworks, and Outlet Channel</b>																					
1	Offroad Construction Equipment Exhaust	9.75	14.01	14.01	47.43	41.53	2.95	23.94	0.00	0.00	5.90	49.45	49.45	49.45	49.45	49.45	49.45	49.45	49.45	49.54	
	Construction Worker Commuting	0.12	0.10	0.10	1.59	0.58	1.05	0.13	0.00	0.00	0.04	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.48	
	Haul Trucks	1.63	--	--	42.99	19.35	7.34	15.72	--	--	7.82	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.50</b>	<b>14.11</b>	<b>14.11</b>	<b>92.01</b>	<b>61.47</b>	<b>11.34</b>	<b>39.79</b>	<b>--</b>	<b>--</b>	<b>13.76</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>50.02</b>	
<b>Supplemental Fish Passage West</b>																					
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	--	--	--	--	--	--	--	--	--	--	
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	--	--	--	--	--	--	--	--	--	--	
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	--	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.06</b>	<b>3.82</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>Agricultural Crossing 1</b>																					
3	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>River Grading Site</b>																					
4	Offroad Construction Equipment Exhaust	77.35	105.29	0.12	0.12	--	14.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Construction Worker Commuting	0.15	0.44	0.29	0.33	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Haul Trucks	--	46.28	46.28	46.28	--	2.45	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Marine Equipment Exhaust	24.45	24.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>River Grading Site Subtotal</b>		<b>101.94</b>	<b>176.46</b>	<b>46.68</b>	<b>46.72</b>	<b>0.04</b>	<b>16.49</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>		<b>124.13</b>	<b>190.57</b>	<b>91.74</b>	<b>142.03</b>	<b>61.51</b>	<b>27.82</b>	<b>39.79</b>	<b>35.06</b>	<b>3.82</b>	<b>13.76</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>49.89</b>	<b>50.02</b>	
Yolo County Total		124.13	190.57	91.74	142.03	61.51	27.82	39.79	--	--	13.76	49.89	49.89	49.89	49.89	49.89	49.89	49.89	49.89	50.02	
Sutter County Total		--	--	--	--	--	--	--	35.06	3.82	--	--	--	--	--	--	--	--	--	--	

**Table L1-13. NOx Detailed Summary (Alternative 5) - L**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	7.07	5.90	0.00	59.04	57.70	1.34
	Construction Worker Commuting	0.23	0.04	0.00	0.11	0.10	0.01
	Haul Trucks	--	7.82	--	8.53	8.53	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>7.30</b>	<b>13.76</b>	<b>--</b>	<b>67.68</b>	<b>66.33</b>	<b>1.35</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.33	0.33	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.08	0.08	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>	<b>0.42</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.33	0.33	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.08	0.08	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>	<b>0.42</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	1.22	1.22	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.42	0.42	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	--	--	--	3.98	3.98	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>5.64</b>	<b>5.64</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>7.30</b>	<b>13.76</b>	<b>--</b>	<b>74.16</b>	<b>72.81</b>	<b>1.35</b>
Yolo County Total		7.30	13.76	--	73.74	72.39	1.35
Sutter County Total		--	--	--	0.42	0.42	--

**Table L1-14. NOx Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	10.21	97.76	103.84	78.64	365.90	359.54	365.69	348.53	344.01	363.09	983.45	983.45	973.38	996.30	976.79	974.99	994.06	986.40	967.32
	Construction Worker Commuting	0.98	1.37	0.72	0.52	0.75	0.66	0.96	0.83	0.75	1.03	3.24	3.24	3.18	3.26	3.22	3.04	3.32	3.29	2.99
	Haul Trucks	15.49	17.48	11.45	9.80	3.26	--	1.79	--	--	9.74	339.87	339.87	339.15	337.52	340.24	330.14	339.87	341.50	330.62
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>26.67</b>	<b>116.61</b>	<b>116.01</b>	<b>88.96</b>	<b>369.91</b>	<b>360.20</b>	<b>368.44</b>	<b>349.35</b>	<b>344.77</b>	<b>373.85</b>	<b>1326.56</b>	<b>1326.56</b>	<b>1315.71</b>	<b>1337.08</b>	<b>1320.24</b>	<b>1308.17</b>	<b>1337.25</b>	<b>1331.20</b>	<b>1300.94</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	4.31	12.60	2.95	11.02	65.75	56.59	150.92	2.00	5.90	4.51	4.51	6.36	13.77	10.74	2.95	2.95	1.71	1.71	2.95
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	65.07	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>5.20</b>	<b>13.52</b>	<b>6.72</b>	<b>14.53</b>	<b>65.83</b>	<b>56.80</b>	<b>216.55</b>	<b>2.05</b>	<b>10.99</b>	<b>4.59</b>	<b>4.58</b>	<b>8.80</b>	<b>17.44</b>	<b>10.80</b>	<b>4.27</b>	<b>3.30</b>	<b>1.75</b>	<b>1.75</b>	<b>3.30</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	7.26	11.02	11.02	11.02	11.02	56.59	70.81	70.81	59.54	79.94	79.94	79.94	78.41	150.92	150.92	150.92	150.92	150.92	75.46
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>10.70</b>	<b>14.53</b>	<b>14.53</b>	<b>11.11</b>	<b>11.11</b>	<b>56.80</b>	<b>71.05</b>	<b>71.05</b>	<b>60.79</b>	<b>80.22</b>	<b>80.22</b>	<b>80.22</b>	<b>126.44</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>244.92</b>	<b>122.48</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	7.26	11.02	56.59	2.00	2.00	2.95	3.01	14.21	3.01	2.95	59.98	9.75	8.18	8.18	7.46	17.83	6.34	28.82	6.36
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>9.37</b>	<b>13.68</b>	<b>56.80</b>	<b>2.05</b>	<b>2.05</b>	<b>3.05</b>	<b>3.53</b>	<b>59.68</b>	<b>3.53</b>	<b>5.25</b>	<b>60.22</b>	<b>9.87</b>	<b>8.27</b>	<b>8.27</b>	<b>7.59</b>	<b>19.13</b>	<b>8.05</b>	<b>31.26</b>	<b>9.71</b>
<b>GRAND TOTAL</b>		<b>51.95</b>	<b>158.33</b>	<b>194.05</b>	<b>116.65</b>	<b>448.90</b>	<b>476.84</b>	<b>659.57</b>	<b>482.13</b>	<b>420.08</b>	<b>463.92</b>	<b>1471.59</b>	<b>1425.46</b>	<b>1467.87</b>	<b>1601.08</b>	<b>1577.03</b>	<b>1575.52</b>	<b>1591.97</b>	<b>1609.12</b>	<b>1436.42</b>
<b>Yolo County Total</b>		<b>51.95</b>	<b>158.33</b>	<b>194.05</b>	<b>116.65</b>	<b>448.90</b>	<b>476.84</b>	<b>659.57</b>	<b>482.13</b>	<b>420.08</b>	<b>463.92</b>	<b>1471.59</b>	<b>1425.46</b>	<b>1467.87</b>	<b>1601.08</b>	<b>1577.03</b>	<b>1575.52</b>	<b>1591.97</b>	<b>1609.12</b>	<b>1436.42</b>
<b>Sutter County Total</b>		<b>26.67</b>	<b>116.61</b>	<b>116.01</b>	<b>88.96</b>	<b>369.91</b>	<b>360.20</b>	<b>368.44</b>	<b>349.35</b>	<b>344.77</b>	<b>373.85</b>	<b>1326.56</b>	<b>1326.56</b>	<b>1315.71</b>	<b>1337.08</b>	<b>1320.24</b>	<b>1308.17</b>	<b>1337.25</b>	<b>1331.20</b>	<b>1300.94</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-14. NOx Detailed Summary (Alternative 6) - L**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1043.42	780.42	308.81	332.29	33.41	28.54	28.54	27.97	8.85	40.49
	Construction Worker Commuting	3.42	3.09	1.34	1.50	1.13	0.36	0.36	0.28	0.89	0.14
	Haul Trucks	375.48	375.48	188.53	188.53	12.39	--	--	13.99	7.82	12.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1422.32</b>	<b>1158.99</b>	<b>498.68</b>	<b>522.32</b>	<b>46.93</b>	<b>28.90</b>	<b>28.90</b>	<b>42.24</b>	<b>17.56</b>	<b>53.35</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	20.99	2.95	0.39
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>35.00</b>	<b>3.82</b>	<b>0.51</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	2.00	2.00	2.95	20.99	2.95	--	--	--	--	4.09
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>2.05</b>	<b>2.05</b>	<b>6.02</b>	<b>35.06</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.71</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	10.62	--	23.94	2.95	--	--	--	--	--	0.33
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>--</b>	<b>30.95</b>	<b>3.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.42</b>
<b>GRAND TOTAL</b>		<b>1435.05</b>	<b>1161.03</b>	<b>535.64</b>	<b>560.68</b>	<b>50.23</b>	<b>28.90</b>	<b>28.90</b>	<b>77.23</b>	<b>21.38</b>	<b>60.00</b>
<b>Yolo County Total</b>		<b>1435.05</b>	<b>1161.03</b>	<b>535.64</b>	<b>560.68</b>	<b>50.23</b>	<b>28.90</b>	<b>28.90</b>	<b>77.23</b>	<b>21.38</b>	<b>60.00</b>
<b>Sutter County Total</b>		<b>1422.32</b>	<b>1158.99</b>	<b>498.68</b>	<b>522.32</b>	<b>46.93</b>	<b>28.90</b>	<b>28.90</b>	<b>42.24</b>	<b>17.56</b>	<b>53.35</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-15. CO Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	13.92	108.98	113.40	98.70	83.65	89.46	128.72	110.03	124.96	120.36	80.39	83.37	73.79	86.02	108.14	91.57	61.47	78.21	8.84
	Construction Worker Commuting	4.92	3.90	9.03	3.59	3.49	2.97	6.57	5.95	6.05	5.33	4.51	7.18	8.82	9.44	11.90	11.49	6.77	9.34	3.49
	Haul Trucks	2.06	1.55	2.37	--	--	--	0.76	0.12	--	--	--	12.87	31.78	29.08	31.08	31.08	19.42	32.24	1.13
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>20.91</b>	<b>114.43</b>	<b>124.80</b>	<b>102.29</b>	<b>87.14</b>	<b>92.44</b>	<b>136.05</b>	<b>116.09</b>	<b>131.02</b>	<b>125.70</b>	<b>84.91</b>	<b>103.41</b>	<b>114.39</b>	<b>124.54</b>	<b>151.12</b>	<b>134.13</b>	<b>87.66</b>	<b>119.78</b>	<b>13.47</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>71.24</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	30.50	30.50	30.50	34.06	45.84	45.84	38.48	53.42	53.42	53.42	30.14	51.45	51.45	51.45	51.45	51.45	25.72
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>12.04</b>	<b>32.14</b>	<b>32.14</b>	<b>31.42</b>	<b>31.42</b>	<b>36.12</b>	<b>48.31</b>	<b>48.31</b>	<b>41.46</b>	<b>56.29</b>	<b>56.29</b>	<b>56.29</b>	<b>43.79</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>38.45</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>GRAND TOTAL</b>		<b>50.48</b>	<b>194.61</b>	<b>200.08</b>	<b>170.68</b>	<b>164.18</b>	<b>170.11</b>	<b>260.87</b>	<b>190.99</b>	<b>191.28</b>	<b>194.12</b>	<b>187.37</b>	<b>178.72</b>	<b>177.69</b>	<b>217.38</b>	<b>242.17</b>	<b>232.48</b>	<b>179.63</b>	<b>232.33</b>	<b>64.19</b>
<b>Yolo County Total</b>		<b>44.40</b>	<b>178.53</b>	<b>193.05</b>	<b>138.54</b>	<b>123.39</b>	<b>134.00</b>	<b>189.63</b>	<b>186.17</b>	<b>177.76</b>	<b>188.70</b>	<b>182.05</b>	<b>171.33</b>	<b>167.96</b>	<b>211.21</b>	<b>235.67</b>	<b>227.79</b>	<b>174.56</b>	<b>227.26</b>	<b>59.50</b>
<b>Sutter County Total</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>71.24</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>

**Table L1-15. CO Detailed Summary (Alternative 1) - Ur**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	4.43	8.84	25.07	25.07	25.07	21.34	15.79	14.76	4.42	4.69
	Construction Worker Commuting	0.31	0.51	2.97	2.97	2.97	2.97	2.36	6.16	0.51	0.34
	Haul Trucks	--	0.01	--	--	--	--	--	3.77	0.17	0.45
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.73</b>	<b>9.36</b>	<b>28.05</b>	<b>28.05</b>	<b>28.05</b>	<b>24.31</b>	<b>18.15</b>	<b>24.68</b>	<b>5.10</b>	<b>5.47</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42	0.22
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.10
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.69</b>	<b>5.10</b>	<b>0.34</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.42	4.42	4.42	5.92	4.42	--	--	--	--	2.14
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.83</b>	<b>4.83</b>	<b>6.37</b>	<b>9.69</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.64</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--	0.31
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>
<b>GRAND TOTAL</b>		<b>15.87</b>	<b>14.19</b>	<b>47.54</b>	<b>42.43</b>	<b>32.74</b>	<b>24.31</b>	<b>18.15</b>	<b>34.37</b>	<b>10.21</b>	<b>8.80</b>
<b>Yolo County Total</b>		<b>15.87</b>	<b>14.19</b>	<b>47.54</b>	<b>42.43</b>	<b>32.74</b>	<b>24.31</b>	<b>18.15</b>	<b>24.68</b>	<b>5.10</b>	<b>8.46</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.69</b>	<b>5.10</b>	<b>0.34</b>

**Table L1-16. CO Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	13.92	108.98	113.40	98.70	163.60	157.63	242.73	219.62	219.62	215.02	95.10	78.42	147.78	125.24	115.74	133.87	113.30	112.92	105.11
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	8.92	8.92	8.21	5.74	7.39	15.90	14.57	13.95	14.77	12.72	12.52	12.41
	Haul Trucks	2.37	1.58	2.40	--	0.67	--	0.38	--	--	--	--	19.77	45.45	45.45	45.36	45.02	44.02	43.45	33.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.47</b>	<b>114.46</b>	<b>124.83</b>	<b>102.29</b>	<b>169.40</b>	<b>161.83</b>	<b>253.37</b>	<b>228.54</b>	<b>228.54</b>	<b>223.22</b>	<b>100.84</b>	<b>105.58</b>	<b>209.13</b>	<b>185.25</b>	<b>175.06</b>	<b>193.66</b>	<b>170.04</b>	<b>168.88</b>	<b>150.86</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>71.24</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	30.50	30.50	30.50	34.06	45.84	45.84	38.48	53.42	53.42	53.42	30.14	51.45	51.45	51.45	51.45	51.45	25.72
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>12.04</b>	<b>32.14</b>	<b>32.14</b>	<b>31.42</b>	<b>31.42</b>	<b>36.12</b>	<b>48.31</b>	<b>48.31</b>	<b>41.46</b>	<b>56.29</b>	<b>56.29</b>	<b>56.29</b>	<b>43.79</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>38.45</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	0.23	0.34	0.45	0.69	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	17.67	39.41	51.33	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23
	Construction Worker Commuting	--	--	1.54	1.95	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
	Haul Trucks	0.52	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	46.74	--	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
<b>River Grading Site Subtotal</b>		<b>64.92</b>	<b>39.59</b>	<b>76.24</b>	<b>54.55</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>
<b>GRAND TOTAL</b>		<b>117.97</b>	<b>234.23</b>	<b>276.35</b>	<b>225.23</b>	<b>300.58</b>	<b>293.65</b>	<b>432.34</b>	<b>357.58</b>	<b>342.95</b>	<b>345.79</b>	<b>257.45</b>	<b>235.03</b>	<b>326.57</b>	<b>332.24</b>	<b>320.25</b>	<b>346.15</b>	<b>316.15</b>	<b>335.58</b>	<b>255.73</b>
<b>Yolo County Total</b>		<b>111.89</b>	<b>218.14</b>	<b>269.33</b>	<b>193.09</b>	<b>259.79</b>	<b>257.54</b>	<b>361.10</b>	<b>352.76</b>	<b>329.43</b>	<b>340.37</b>	<b>252.13</b>	<b>227.64</b>	<b>316.84</b>	<b>326.07</b>	<b>313.75</b>	<b>341.46</b>	<b>311.08</b>	<b>330.51</b>	<b>251.04</b>
<b>Sutter County Total</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>71.24</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>



Table L1-16. CO Detailed Summary (Alternative 2) - Ur

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	60.29	13.26	15.11	25.07	25.07	21.34	21.34	14.76	4.42	7.61
	Construction Worker Commuting	6.57	5.95	1.95	2.97	2.97	2.97	2.97	6.16	0.51	0.52
	Haul Trucks	24.02	1.92	--	--	--	--	--	3.86	0.17	0.91
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>90.88</b>	<b>21.14</b>	<b>17.05</b>	<b>28.05</b>	<b>28.05</b>	<b>24.31</b>	<b>24.31</b>	<b>24.78</b>	<b>5.10</b>	<b>9.03</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42	0.22
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.10
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.69</b>	<b>5.10</b>	<b>0.34</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.42	4.42	4.42	5.92	4.42	--	--	--	--	2.14
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.83</b>	<b>4.83</b>	<b>6.37</b>	<b>9.69</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.64</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--	0.31
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	29.23	52.24	0.91	0.91	--	17.67	--	--	--	0.86
	Construction Worker Commuting	1.54	4.41	2.87	3.28	0.41	--	--	--	--	0.11
	Haul Trucks	--	9.76	9.76	9.76	--	0.52	--	--	--	0.09
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	23.37	23.37	--	--	--	--	--	--	--	3.83
<b>River Grading Site Subtotal</b>		<b>54.14</b>	<b>89.78</b>	<b>13.54</b>	<b>13.95</b>	<b>0.41</b>	<b>18.18</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.89</b>
<b>GRAND TOTAL</b>		<b>156.16</b>	<b>115.74</b>	<b>50.09</b>	<b>56.38</b>	<b>33.15</b>	<b>42.50</b>	<b>24.31</b>	<b>34.47</b>	<b>10.21</b>	<b>17.25</b>
<b>Yolo County Total</b>		<b>156.16</b>	<b>115.74</b>	<b>50.09</b>	<b>56.38</b>	<b>33.15</b>	<b>42.50</b>	<b>24.31</b>	<b>24.78</b>	<b>5.10</b>	<b>16.91</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.69</b>	<b>5.10</b>	<b>0.34</b>

**Table L1-17. CO Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	13.92	108.98	113.40	98.70	163.60	157.63	242.73	231.40	231.40	226.80	226.80	266.47	284.38	313.28	115.74	133.87	113.30	112.92	156.56
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	9.34	9.34	8.62	8.62	13.95	16.72	21.13	13.95	14.77	12.72	12.52	18.16
	Haul Trucks	2.37	1.56	2.38	--	0.69	--	0.38	--	--	--	--	19.88	21.84	41.46	41.42	41.07	40.07	39.50	50.48
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.47</b>	<b>114.44</b>	<b>124.81</b>	<b>102.29</b>	<b>169.41</b>	<b>161.83</b>	<b>253.37</b>	<b>240.73</b>	<b>240.73</b>	<b>235.41</b>	<b>235.41</b>	<b>300.30</b>	<b>322.94</b>	<b>375.88</b>	<b>171.11</b>	<b>189.71</b>	<b>166.09</b>	<b>164.94</b>	<b>225.20</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>70.91</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	30.50	30.50	30.50	34.06	45.84	45.84	38.48	53.42	53.42	53.42	30.14	51.45	51.45	51.45	51.45	51.45	25.72
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>12.04</b>	<b>32.14</b>	<b>32.14</b>	<b>31.42</b>	<b>31.42</b>	<b>36.12</b>	<b>48.31</b>	<b>48.31</b>	<b>41.46</b>	<b>56.29</b>	<b>56.29</b>	<b>56.29</b>	<b>43.79</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>38.45</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>GRAND TOTAL</b>		<b>53.04</b>	<b>194.62</b>	<b>200.09</b>	<b>170.68</b>	<b>246.45</b>	<b>239.51</b>	<b>377.87</b>	<b>315.63</b>	<b>301.00</b>	<b>303.84</b>	<b>337.87</b>	<b>375.61</b>	<b>386.24</b>	<b>468.72</b>	<b>262.16</b>	<b>288.06</b>	<b>258.06</b>	<b>277.49</b>	<b>275.92</b>
<b>Yolo County Total</b>		<b>53.04</b>	<b>194.62</b>	<b>200.09</b>	<b>170.68</b>	<b>246.45</b>	<b>239.51</b>	<b>377.87</b>	<b>315.63</b>	<b>301.00</b>	<b>303.84</b>	<b>337.87</b>	<b>375.61</b>	<b>386.24</b>	<b>468.72</b>	<b>262.16</b>	<b>288.06</b>	<b>258.06</b>	<b>277.49</b>	<b>275.92</b>
<b>Sutter County Total</b>		<b>23.47</b>	<b>114.44</b>	<b>124.81</b>	<b>102.29</b>	<b>169.41</b>	<b>161.83</b>	<b>253.37</b>	<b>240.73</b>	<b>240.73</b>	<b>235.41</b>	<b>235.41</b>	<b>300.30</b>	<b>322.94</b>	<b>375.88</b>	<b>171.11</b>	<b>189.71</b>	<b>166.09</b>	<b>164.94</b>	<b>225.20</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-17. CO Detailed Summary (Alternative 3) - Ur**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	116.16	60.29	66.55	25.07	25.07	21.34	21.34	14.76	4.42	10.39
	Construction Worker Commuting	17.75	6.26	7.69	2.97	2.97	2.97	2.97	6.16	0.51	0.66
	Haul Trucks	41.67	19.72	19.62	--	--	--	--	3.88	0.17	1.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>175.58</b>	<b>86.27</b>	<b>93.87</b>	<b>28.05</b>	<b>28.05</b>	<b>24.31</b>	<b>24.31</b>	<b>24.79</b>	<b>5.10</b>	<b>12.16</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42	0.28
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.68</b>	<b>5.10</b>	<b>0.43</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.42	4.42	4.42	5.92	4.42	--	--	--	--	2.14
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.83</b>	<b>4.83</b>	<b>6.37</b>	<b>9.69</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.64</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--	0.31
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>
<b>GRAND TOTAL</b>		<b>186.72</b>	<b>91.10</b>	<b>113.36</b>	<b>42.43</b>	<b>32.74</b>	<b>24.31</b>	<b>24.31</b>	<b>34.47</b>	<b>10.21</b>	<b>15.59</b>
<b>Yolo County Total</b>		<b>186.72</b>	<b>91.10</b>	<b>113.36</b>	<b>42.43</b>	<b>32.74</b>	<b>24.31</b>	<b>24.31</b>	<b>34.47</b>	<b>10.21</b>	<b>15.59</b>
<b>Sutter County Total</b>		<b>175.58</b>	<b>86.27</b>	<b>93.87</b>	<b>28.05</b>	<b>28.05</b>	<b>24.31</b>	<b>24.31</b>	<b>24.79</b>	<b>5.10</b>	<b>12.16</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-18. CO Detailed Summary (Alternative 4) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	13.92	108.98	113.40	98.70	163.60	157.63	242.73	231.40	231.40	226.80	226.80	266.47	284.38	313.28	115.74	133.87	113.30	112.92	156.56
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	9.34	9.34	8.62	8.62	13.95	16.72	21.13	13.95	14.77	12.72	12.52	18.16
	Haul Trucks	2.37	1.56	2.38	--	0.69	--	0.38	--	--	--	--	19.88	21.84	41.46	41.42	41.07	40.07	39.50	50.48
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.47</b>	<b>114.44</b>	<b>124.81</b>	<b>102.29</b>	<b>169.41</b>	<b>161.83</b>	<b>253.37</b>	<b>240.73</b>	<b>240.73</b>	<b>235.41</b>	<b>235.41</b>	<b>300.30</b>	<b>322.94</b>	<b>375.88</b>	<b>171.11</b>	<b>189.71</b>	<b>166.09</b>	<b>164.94</b>	<b>225.20</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>70.91</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	30.50	30.50	30.50	34.06	45.84	45.84	38.48	53.42	53.42	53.42	30.14	51.45	51.45	51.45	51.45	51.45	25.72
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>12.04</b>	<b>32.14</b>	<b>32.14</b>	<b>31.42</b>	<b>31.42</b>	<b>36.12</b>	<b>48.31</b>	<b>48.31</b>	<b>41.46</b>	<b>56.29</b>	<b>56.29</b>	<b>56.29</b>	<b>43.79</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>38.45</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	0.23	0.34	0.45	0.69	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	13.92	63.61	68.48	96.64	107.03	130.70	87.77	53.88	53.71	87.77	18.31	10.84	9.79	6.42	9.98	14.40	14.64	9.08	4.66
	Construction Worker Commuting	2.67	1.95	2.46	2.67	4.51	4.72	6.67	4.41	4.00	6.05	1.95	2.36	0.92	1.13	0.92	1.13	1.33	1.33	0.41
	Haul Trucks	0.93	0.56	0.73	21.70	22.61	21.70	22.08	21.70	21.70	28.23	0.17	1.11	--	0.80	--	0.07	--	0.45	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>17.52</b>	<b>66.11</b>	<b>71.67</b>	<b>121.01</b>	<b>134.15</b>	<b>157.13</b>	<b>116.51</b>	<b>80.00</b>	<b>79.41</b>	<b>122.05</b>	<b>20.44</b>	<b>14.31</b>	<b>10.72</b>	<b>8.35</b>	<b>10.90</b>	<b>15.59</b>	<b>15.97</b>	<b>10.86</b>	<b>5.07</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	14.15	94.10	98.97	117.66	107.03	130.70	153.46	119.58	119.41	153.47	124.01	81.43	84.80	81.43	84.99	89.40	89.65	84.08	79.67
	Construction Worker Commuting	3.08	2.87	3.39	3.69	4.51	4.72	10.36	8.10	7.69	9.75	8.41	7.69	7.49	7.69	7.49	7.69	7.90	7.90	6.98
	Haul Trucks	1.13	1.42	1.59	30.35	31.25	30.35	30.72	30.35	30.35	51.68	51.68	52.31	51.68	52.48	51.68	51.75	51.68	52.13	51.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>18.36</b>	<b>98.39</b>	<b>103.95</b>	<b>151.70</b>	<b>142.79</b>	<b>165.77</b>	<b>194.55</b>	<b>158.03</b>	<b>157.45</b>	<b>214.90</b>	<b>184.10</b>	<b>141.44</b>	<b>143.97</b>	<b>141.61</b>	<b>144.16</b>	<b>148.85</b>	<b>149.23</b>	<b>144.11</b>	<b>138.32</b>
<b>GRAND TOTAL</b>		<b>88.92</b>	<b>359.12</b>	<b>375.70</b>	<b>443.38</b>	<b>523.40</b>	<b>562.41</b>	<b>688.93</b>	<b>553.66</b>	<b>537.86</b>	<b>640.79</b>	<b>542.41</b>	<b>531.36</b>	<b>540.93</b>	<b>618.68</b>	<b>417.22</b>	<b>452.50</b>	<b>423.26</b>	<b>432.46</b>	<b>419.31</b>
<b>Yolo County Total</b>		<b>88.92</b>	<b>359.12</b>	<b>375.70</b>	<b>443.38</b>	<b>523.40</b>	<b>562.41</b>	<b>688.93</b>	<b>553.66</b>	<b>537.86</b>	<b>640.79</b>	<b>542.41</b>	<b>531.36</b>	<b>540.93</b>	<b>618.68</b>	<b>417.22</b>	<b>452.50</b>	<b>423.26</b>	<b>432.46</b>	<b>419.31</b>
<b>Sutter County Total</b>		<b>23.47</b>	<b>114.44</b>	<b>124.81</b>	<b>102.29</b>	<b>169.41</b>	<b>161.83</b>	<b>253.37</b>	<b>240.73</b>	<b>240.73</b>	<b>235.41</b>	<b>235.41</b>	<b>300.30</b>	<b>322.94</b>	<b>375.88</b>	<b>171.11</b>	<b>189.71</b>	<b>166.09</b>	<b>164.94</b>	<b>225.20</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-18. CO Detailed Summary (Alternative 4) - Ur**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	116.16	60.29	66.55	23.73	23.73	19.99	19.99	14.76	4.42	10.38
	Construction Worker Commuting	17.75	6.26	7.69	2.97	2.97	2.97	2.97	6.16	0.51	0.66
	Haul Trucks	41.67	19.72	19.62	--	--	--	--	3.88	0.17	1.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>175.58</b>	<b>86.27</b>	<b>93.87</b>	<b>26.70</b>	<b>26.70</b>	<b>22.97</b>	<b>22.97</b>	<b>24.79</b>	<b>5.10</b>	<b>12.14</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42	0.28
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.68</b>	<b>5.10</b>	<b>0.43</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.42	4.42	4.42	5.92	4.42	--	--	--	--	2.14
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.83</b>	<b>4.83</b>	<b>6.37</b>	<b>9.69</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.64</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--	0.31
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	5.34	5.34	10.34	4.42	--	--	--	--	--	2.55
	Construction Worker Commuting	0.82	0.82	1.03	0.21	--	--	--	--	--	0.14
	Haul Trucks	--	--	3.50	0.07	--	--	--	--	--	0.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>6.16</b>	<b>6.16</b>	<b>14.87</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.29</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	33.31	33.32	15.21	4.65	--	--	--	--	--	5.37
	Construction Worker Commuting	2.05	3.28	1.54	0.21	--	--	--	--	--	0.37
	Haul Trucks	30.35	31.03	3.83	0.07	--	--	--	--	--	2.24
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>65.71</b>	<b>67.63</b>	<b>20.58</b>	<b>4.92</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.98</b>
<b>GRAND TOTAL</b>		<b>258.59</b>	<b>164.89</b>	<b>148.81</b>	<b>50.70</b>	<b>31.40</b>	<b>22.97</b>	<b>22.97</b>	<b>34.47</b>	<b>10.21</b>	<b>26.84</b>
<b>Yolo County Total</b>		<b>258.59</b>	<b>164.89</b>	<b>148.81</b>	<b>50.70</b>	<b>31.40</b>	<b>22.97</b>	<b>22.97</b>	<b>34.47</b>	<b>10.21</b>	<b>26.84</b>
<b>Sutter County Total</b>		<b>175.58</b>	<b>86.27</b>	<b>93.87</b>	<b>26.70</b>	<b>26.70</b>	<b>22.97</b>	<b>22.97</b>	<b>24.79</b>	<b>5.10</b>	<b>12.14</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-19. CO Detailed Summary (Alternative 5) - Unmitigated**

#	Activity	Ma																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	58.57	382.71	481.90	612.18	729.05	694.99	585.04	662.22	278.70	240.21	230.83	167.79	274.28	240.21	226.41	194.60	194.60	121.84	31.39
	Construction Worker Commuting	15.18	13.34	18.77	12.31	20.72	18.67	12.21	20.82	26.67	23.70	21.95	18.67	25.75	23.70	21.54	23.08	23.08	14.87	2.05
	Haul Trucks	5.92	2.17	2.07	--	0.67	0.67	0.67	35.64	70.09	69.71	69.71	69.71	69.71	69.71	69.71	73.79	73.79	39.17	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>79.67</b>	<b>398.22</b>	<b>502.74</b>	<b>624.49</b>	<b>750.45</b>	<b>714.33</b>	<b>597.92</b>	<b>718.68</b>	<b>375.46</b>	<b>333.62</b>	<b>322.49</b>	<b>256.17</b>	<b>369.74</b>	<b>333.62</b>	<b>317.67</b>	<b>291.47</b>	<b>291.47</b>	<b>175.88</b>	<b>33.44</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>71.24</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	17.67	39.41	51.33	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23	29.23
	Construction Worker Commuting	--	--	1.54	1.95	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
	Haul Trucks	0.52	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	46.74	--	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
<b>River Grading Site Subtotal</b>		<b>64.92</b>	<b>39.59</b>	<b>76.24</b>	<b>54.55</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>	<b>54.14</b>
<b>GRAND TOTAL</b>		<b>162.12</b>	<b>485.84</b>	<b>622.12</b>	<b>716.01</b>	<b>850.21</b>	<b>810.04</b>	<b>728.58</b>	<b>799.41</b>	<b>448.41</b>	<b>399.90</b>	<b>422.80</b>	<b>329.33</b>	<b>443.39</b>	<b>403.71</b>	<b>385.97</b>	<b>367.07</b>	<b>360.69</b>	<b>265.69</b>	<b>99.86</b>
Yolo County Total		156.04	469.76	615.10	683.87	809.42	773.92	657.35	794.59	434.88	394.48	417.48	321.94	433.66	397.55	379.47	362.37	355.62	260.62	95.16
Sutter County Total		6.08	16.08	7.02	32.14	40.79	36.12	71.24	4.83	13.53	5.42	5.32	7.39	9.73	6.17	6.51	4.69	5.07	5.07	4.69

Table L1-19. CO Detailed Summary (Alternative 5) - Ur

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	10.40	10.02	10.02	49.09	40.25	4.42	10.34	0.00	0.00										
	Construction Worker Commuting	1.23	1.03	1.03	16.00	5.85	10.57	1.33	0.00	0.00										
	Haul Trucks	0.34	--	--	9.06	4.08	1.55	3.31	--	--										
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.97</b>	<b>11.05</b>	<b>11.05</b>	<b>74.15</b>	<b>50.18</b>	<b>16.53</b>	<b>14.99</b>	--	--	<b>10.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>42.99</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42										
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51										
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17										
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.69</b>	<b>5.10</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--										
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--										
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--										
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	29.23	52.24	0.91	0.91	--	17.67	--	--	--										
	Construction Worker Commuting	1.54	4.41	2.87	3.28	0.41	--	--	--	--										
	Haul Trucks	--	9.76	9.76	9.76	--	0.52	--	--	--										
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	23.37	23.37	--	--	--	--	--	--	--										
<b>River Grading Site Subtotal</b>		<b>54.14</b>	<b>89.78</b>	<b>13.54</b>	<b>13.95</b>	<b>0.41</b>	<b>18.18</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>72.43</b>	<b>100.83</b>	<b>37.71</b>	<b>92.79</b>	<b>50.59</b>	<b>34.71</b>	<b>14.99</b>	<b>9.69</b>	<b>5.10</b>	<b>10.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>41.90</b>	<b>42.99</b>
Yolo County Total		72.43	100.83	37.71	92.79	50.59	34.71	14.99	--	--	10.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	42.99
Sutter County Total		--	--	--	--	--	--	--	9.69	5.10	--	--	--	--	--	--	--	--	--	--

**Table L1-19. CO Detailed Summary (Alternative 5) - Ur**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	15.79	8.84	0.00	37.28	36.24	1.04
	Construction Worker Commuting	2.36	0.41	0.00	1.11	0.99	0.13
	Haul Trucks	--	1.65	--	1.80	1.80	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>18.15</b>	<b>10.90</b>	<b>--</b>	<b>40.20</b>	<b>39.03</b>	<b>1.17</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.22	0.22	--
	Construction Worker Commuting	--	--	--	0.10	0.10	--
	Haul Trucks	--	--	--	0.02	0.02	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.34</b>	<b>0.34</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.31	0.31	--
	Construction Worker Commuting	--	--	--	0.02	0.02	--
	Haul Trucks	--	--	--	0.02	0.02	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>	<b>0.35</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.86	0.86	--
	Construction Worker Commuting	--	--	--	0.11	0.11	--
	Haul Trucks	--	--	--	0.09	0.09	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	--	--	--	3.83	3.83	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>4.89</b>	<b>4.89</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>18.15</b>	<b>10.90</b>	<b>--</b>	<b>45.77</b>	<b>44.61</b>	<b>1.17</b>
Yolo County Total		18.15	10.90	--	45.44	44.27	1.17
Sutter County Total		--	--	--	0.34	0.34	--



**Table L1-20. CO Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	13.92	158.78	163.56	133.80	237.46	231.49	252.75	236.55	231.95	249.86	464.49	464.49	455.00	473.12	456.55	452.18	470.09	468.91	451.00
	Construction Worker Commuting	9.85	13.75	7.28	5.23	7.59	6.67	9.64	8.31	7.59	10.36	32.62	32.62	32.01	32.83	32.42	30.57	33.34	33.14	30.06
	Haul Trucks	3.26	3.69	2.41	2.07	0.69	--	0.38	--	--	2.05	71.65	71.65	71.50	71.16	71.73	69.60	71.65	72.00	69.70
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>27.04</b>	<b>176.21</b>	<b>173.26</b>	<b>141.09</b>	<b>245.74</b>	<b>238.16</b>	<b>262.77</b>	<b>244.86</b>	<b>239.54</b>	<b>262.28</b>	<b>568.77</b>	<b>568.77</b>	<b>558.50</b>	<b>577.11</b>	<b>560.70</b>	<b>552.35</b>	<b>575.08</b>	<b>574.04</b>	<b>550.76</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	5.09	14.88	4.42	30.50	39.97	34.06	51.45	4.42	8.84	4.60	4.60	5.97	7.55	5.55	4.42	4.42	4.66	4.66	4.42
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>6.08</b>	<b>16.08</b>	<b>7.02</b>	<b>32.14</b>	<b>40.79</b>	<b>36.12</b>	<b>70.91</b>	<b>4.83</b>	<b>13.53</b>	<b>5.42</b>	<b>5.32</b>	<b>7.39</b>	<b>9.73</b>	<b>6.17</b>	<b>6.51</b>	<b>4.69</b>	<b>5.07</b>	<b>5.07</b>	<b>4.69</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	9.50	30.50	30.50	30.50	30.50	34.06	45.84	45.84	38.48	53.42	53.42	53.42	30.14	51.45	51.45	51.45	51.45	51.45	25.72
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>12.04</b>	<b>32.14</b>	<b>32.14</b>	<b>31.42</b>	<b>31.42</b>	<b>36.12</b>	<b>48.31</b>	<b>48.31</b>	<b>41.46</b>	<b>56.29</b>	<b>56.29</b>	<b>56.29</b>	<b>43.79</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>76.89</b>	<b>38.45</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	9.50	30.50	34.06	4.42	4.42	4.42	4.87	11.78	4.87	4.42	38.49	10.40	8.86	8.86	6.43	14.38	8.84	26.96	5.97
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	0.23	0.34	0.45	0.69	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>11.45</b>	<b>31.96</b>	<b>36.12</b>	<b>4.83</b>	<b>4.83</b>	<b>5.44</b>	<b>5.28</b>	<b>21.77</b>	<b>5.28</b>	<b>6.71</b>	<b>40.85</b>	<b>11.63</b>	<b>9.78</b>	<b>9.78</b>	<b>7.66</b>	<b>16.76</b>	<b>10.01</b>	<b>30.59</b>	<b>7.58</b>
<b>GRAND TOTAL</b>		<b>56.61</b>	<b>256.39</b>	<b>248.53</b>	<b>209.48</b>	<b>322.78</b>	<b>315.83</b>	<b>387.27</b>	<b>319.76</b>	<b>299.81</b>	<b>330.70</b>	<b>671.23</b>	<b>644.08</b>	<b>621.80</b>	<b>669.95</b>	<b>651.75</b>	<b>650.69</b>	<b>667.05</b>	<b>686.60</b>	<b>601.48</b>
<b>Yolo County Total</b>		<b>56.61</b>	<b>256.39</b>	<b>248.53</b>	<b>209.48</b>	<b>322.78</b>	<b>315.83</b>	<b>387.27</b>	<b>319.76</b>	<b>299.81</b>	<b>330.70</b>	<b>671.23</b>	<b>644.08</b>	<b>621.80</b>	<b>669.95</b>	<b>651.75</b>	<b>650.69</b>	<b>667.05</b>	<b>686.60</b>	<b>601.48</b>
<b>Sutter County Total</b>		<b>27.04</b>	<b>176.21</b>	<b>173.26</b>	<b>141.09</b>	<b>245.74</b>	<b>238.16</b>	<b>262.77</b>	<b>244.86</b>	<b>239.54</b>	<b>262.28</b>	<b>568.77</b>	<b>568.77</b>	<b>558.50</b>	<b>577.11</b>	<b>560.70</b>	<b>552.35</b>	<b>575.08</b>	<b>574.04</b>	<b>550.76</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-20. CO Detailed Summary (Alternative 6) - Ur**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	482.99	323.10	118.00	133.53	35.05	26.89	26.89	21.03	13.25	20.94
	Construction Worker Commuting	34.37	31.08	13.44	15.08	11.39	3.59	3.59	2.77	8.92	1.38
	Haul Trucks	79.16	79.16	39.75	39.75	2.61	--	--	2.95	1.65	2.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>596.51</b>	<b>433.34</b>	<b>171.19</b>	<b>188.35</b>	<b>49.05</b>	<b>30.48</b>	<b>30.48</b>	<b>26.75</b>	<b>23.83</b>	<b>25.00</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.92	4.42	0.28
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.68</b>	<b>5.10</b>	<b>0.43</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.42	4.42	4.42	5.92	4.42	--	--	--	--	2.14
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.83</b>	<b>4.83</b>	<b>6.37</b>	<b>9.69</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.64</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	5.59	--	10.34	4.42	--	--	--	--	--	0.31
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>6.31</b>	<b>--</b>	<b>13.12</b>	<b>4.69</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.35</b>
<b>GRAND TOTAL</b>		<b>607.65</b>	<b>438.17</b>	<b>190.68</b>	<b>202.74</b>	<b>53.74</b>	<b>30.48</b>	<b>30.48</b>	<b>36.43</b>	<b>28.93</b>	<b>28.43</b>
<b>Yolo County Total</b>		<b>607.65</b>	<b>438.17</b>	<b>190.68</b>	<b>202.74</b>	<b>53.74</b>	<b>30.48</b>	<b>30.48</b>	<b>36.43</b>	<b>28.93</b>	<b>28.43</b>
<b>Sutter County Total</b>		<b>596.51</b>	<b>433.34</b>	<b>171.19</b>	<b>188.35</b>	<b>49.05</b>	<b>30.48</b>	<b>30.48</b>	<b>26.75</b>	<b>23.83</b>	<b>25.00</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-21. SO2 Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.29	0.31	0.45	0.42	0.48	0.45	0.30	0.30	0.36	0.45	0.56	0.49	0.33	0.37	0.02
	Construction Worker Commuting	0.02	0.02	0.04	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.04	0.03	0.04	0.01
	Haul Trucks	0.04	0.03	0.05	--	--	--	0.02	0.00	--	--	--	0.26	0.65	0.60	0.64	0.64	0.40	0.66	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.10</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.31</b>	<b>0.32</b>	<b>0.49</b>	<b>0.44</b>	<b>0.50</b>	<b>0.47</b>	<b>0.32</b>	<b>0.59</b>	<b>1.04</b>	<b>1.09</b>	<b>1.25</b>	<b>1.17</b>	<b>0.75</b>	<b>1.07</b>	<b>0.06</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.60</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.13	0.19	0.19	0.19	0.16	0.29	0.29	0.29	0.29	0.29	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.38</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.36</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.21</b>	<b>0.39</b>	<b>0.50</b>	<b>0.28</b>	<b>0.51</b>	<b>0.59</b>	<b>1.27</b>	<b>0.85</b>	<b>0.72</b>	<b>0.74</b>	<b>0.69</b>	<b>0.86</b>	<b>1.50</b>	<b>1.86</b>	<b>2.01</b>	<b>1.96</b>	<b>1.51</b>	<b>1.92</b>	<b>0.47</b>
<b>Yolo County Total</b>		<b>0.19</b>	<b>0.34</b>	<b>0.47</b>	<b>0.23</b>	<b>0.35</b>	<b>0.46</b>	<b>0.67</b>	<b>0.84</b>	<b>0.67</b>	<b>0.71</b>	<b>0.66</b>	<b>0.83</b>	<b>1.45</b>	<b>1.83</b>	<b>1.99</b>	<b>1.94</b>	<b>1.50</b>	<b>1.91</b>	<b>0.45</b>
<b>Sutter County Total</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.60</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>

Table L1-21. SO2 Detailed Summary (Alternative 1) - U

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.01	0.02	0.07	0.07	0.07	0.06	0.04	0.06	0.01	0.02
	Construction Worker Commuting	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	--	0.00	--	--	--	--	--	0.08	0.00	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.01</b>	<b>0.02</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.05</b>	<b>0.16</b>	<b>0.02</b>	<b>0.03</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>0.05</b>	<b>0.03</b>	<b>0.19</b>	<b>0.20</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>0.26</b>	<b>0.03</b>	<b>0.05</b>
<b>Yolo County Total</b>		<b>0.05</b>	<b>0.03</b>	<b>0.19</b>	<b>0.20</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>0.16</b>	<b>0.02</b>	<b>0.04</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>

**Table L1-22. SO2 Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.84	0.84	0.81	0.35	0.39	0.74	0.65	0.62	0.71	0.61	0.62	0.53
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.03	0.03	0.03	0.02	0.03	0.06	0.06	0.05	0.06	0.05	0.05	0.05
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.93	0.93	0.93	0.92	0.90	0.89	0.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.93</b>	<b>0.87</b>	<b>0.87</b>	<b>0.84</b>	<b>0.37</b>	<b>0.83</b>	<b>1.74</b>	<b>1.64</b>	<b>1.61</b>	<b>1.69</b>	<b>1.56</b>	<b>1.56</b>	<b>1.26</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.60</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.13	0.19	0.19	0.19	0.16	0.29	0.29	0.29	0.29	0.29	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.38</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.36</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.05	0.07	0.23	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Haul Trucks	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.13	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>River Grading Site Subtotal</b>		<b>0.20</b>	<b>0.08</b>	<b>0.31</b>	<b>0.23</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>0.42</b>	<b>0.47</b>	<b>0.81</b>	<b>0.51</b>	<b>1.06</b>	<b>1.10</b>	<b>1.93</b>	<b>1.50</b>	<b>1.32</b>	<b>1.33</b>	<b>0.97</b>	<b>1.33</b>	<b>2.42</b>	<b>2.63</b>	<b>2.60</b>	<b>2.70</b>	<b>2.54</b>	<b>2.64</b>	<b>1.90</b>
<b>Yolo County Total</b>		<b>0.40</b>	<b>0.41</b>	<b>0.78</b>	<b>0.46</b>	<b>0.90</b>	<b>0.97</b>	<b>1.33</b>	<b>1.49</b>	<b>1.26</b>	<b>1.30</b>	<b>0.94</b>	<b>1.29</b>	<b>2.36</b>	<b>2.60</b>	<b>2.57</b>	<b>2.69</b>	<b>2.53</b>	<b>2.62</b>	<b>1.88</b>
<b>Sutter County Total</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.60</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>

Table L1-22. SO2 Detailed Summary (Alternative 2) - U

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.31	0.03	0.03	0.07	0.07	0.06	0.06	0.06	0.01	0.03
	Construction Worker Commuting	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.49	0.04	--	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.83</b>	<b>0.09</b>	<b>0.04</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.05</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	0.15	0.24	0.00	0.00	--	0.05	--	--	--	0.00
	Construction Worker Commuting	0.01	0.02	0.01	0.01	0.00	--	--	--	--	0.00
	Haul Trucks	--	0.20	0.20	0.20	--	0.01	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.07	0.07	--	--	--	--	--	--	--	0.01
<b>River Grading Site Subtotal</b>		<b>0.22</b>	<b>0.52</b>	<b>0.21</b>	<b>0.22</b>	<b>0.00</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>1.09</b>	<b>0.63</b>	<b>0.37</b>	<b>0.41</b>	<b>0.10</b>	<b>0.14</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Yolo County Total</b>		<b>1.09</b>	<b>0.63</b>	<b>0.37</b>	<b>0.41</b>	<b>0.10</b>	<b>0.14</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.08</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>

**Table L1-23. SO2 Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.10	1.16	1.35	0.62	0.71	0.61	0.62	0.82
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.04	0.04	0.03	0.03	0.05	0.07	0.08	0.05	0.06	0.05	0.05	0.07
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.45	0.85	0.85	0.84	0.82	0.81	1.04
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.93</b>	<b>0.91</b>	<b>0.91</b>	<b>0.88</b>	<b>0.88</b>	<b>1.56</b>	<b>1.67</b>	<b>2.28</b>	<b>1.53</b>	<b>1.61</b>	<b>1.48</b>	<b>1.48</b>	<b>1.93</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.13	0.19	0.19	0.19	0.16	0.29	0.29	0.29	0.29	0.29	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.38</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.36</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.23</b>	<b>0.39</b>	<b>0.50</b>	<b>0.28</b>	<b>0.84</b>	<b>0.87</b>	<b>1.70</b>	<b>1.31</b>	<b>1.13</b>	<b>1.14</b>	<b>1.25</b>	<b>1.83</b>	<b>2.13</b>	<b>3.05</b>	<b>2.29</b>	<b>2.40</b>	<b>2.24</b>	<b>2.33</b>	<b>2.33</b>
<b>Yolo County Total</b>		<b>0.23</b>	<b>0.39</b>	<b>0.50</b>	<b>0.28</b>	<b>0.84</b>	<b>0.87</b>	<b>1.70</b>	<b>1.31</b>	<b>1.13</b>	<b>1.14</b>	<b>1.25</b>	<b>1.83</b>	<b>2.13</b>	<b>3.05</b>	<b>2.29</b>	<b>2.40</b>	<b>2.24</b>	<b>2.33</b>	<b>2.33</b>
<b>Sutter County Total</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.93</b>	<b>0.91</b>	<b>0.91</b>	<b>0.88</b>	<b>0.88</b>	<b>1.56</b>	<b>1.67</b>	<b>2.28</b>	<b>1.53</b>	<b>1.61</b>	<b>1.48</b>	<b>1.48</b>	<b>1.93</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-23. SO2 Detailed Summary (Alternative 3) - U**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.61	0.31	0.32	0.07	0.07	0.06	0.06	0.06	0.01	0.04
	Construction Worker Commuting	0.07	0.02	0.03	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.85	0.40	0.40	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.53</b>	<b>0.74</b>	<b>0.76</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>1.58</b>	<b>0.75</b>	<b>0.87</b>	<b>0.20</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Yolo County Total</b>		<b>1.58</b>	<b>0.75</b>	<b>0.87</b>	<b>0.20</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Sutter County Total</b>		<b>1.53</b>	<b>0.74</b>	<b>0.76</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-24. SO2 Detailed Summary (Alternative 4) - Unmitigated**

		Maximum Daily Emissions, lbs/day																		
#	Activity	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.10	1.16	1.35	0.62	0.71	0.61	0.62	0.82
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.04	0.04	0.03	0.03	0.05	0.07	0.08	0.05	0.06	0.05	0.05	0.07
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.45	0.85	0.85	0.84	0.82	0.81	1.04
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.93</b>	<b>0.91</b>	<b>0.91</b>	<b>0.88</b>	<b>0.88</b>	<b>1.56</b>	<b>1.67</b>	<b>2.28</b>	<b>1.53</b>	<b>1.61</b>	<b>1.48</b>	<b>1.48</b>	<b>1.93</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.13	0.19	0.19	0.19	0.16	0.29	0.29	0.29	0.29	0.29	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.38</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.36</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.04	0.12	0.13	0.31	0.34	0.43	0.34	0.24	0.22	0.34	0.06	0.03	0.04	0.02	0.04	0.05	0.05	0.02	0.01
	Construction Worker Commuting	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
	Haul Trucks	0.02	0.01	0.01	0.44	0.46	0.44	0.45	0.44	0.44	0.58	0.00	0.02	--	0.02	--	0.00	--	0.01	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.07</b>	<b>0.14</b>	<b>0.16</b>	<b>0.77</b>	<b>0.82</b>	<b>0.90</b>	<b>0.82</b>	<b>0.70</b>	<b>0.68</b>	<b>0.94</b>	<b>0.07</b>	<b>0.06</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.01</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.04	0.15	0.16	0.22	0.34	0.43	0.64	0.54	0.52	0.64	0.55	0.38	0.39	0.38	0.39	0.40	0.40	0.38	0.36
	Construction Worker Commuting	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.02	0.03	0.03	0.62	0.64	0.62	0.63	0.62	0.62	1.06	1.06	1.07	1.06	1.08	1.06	1.06	1.06	1.07	1.06
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.07</b>	<b>0.19</b>	<b>0.21</b>	<b>0.85</b>	<b>1.00</b>	<b>1.07</b>	<b>1.31</b>	<b>1.19</b>	<b>1.17</b>	<b>1.74</b>	<b>1.64</b>	<b>1.48</b>	<b>1.48</b>	<b>1.48</b>	<b>1.48</b>	<b>1.49</b>	<b>1.49</b>	<b>1.47</b>	<b>1.45</b>
<b>GRAND TOTAL</b>		<b>0.37</b>	<b>0.72</b>	<b>0.87</b>	<b>1.90</b>	<b>2.66</b>	<b>2.84</b>	<b>3.83</b>	<b>3.20</b>	<b>2.98</b>	<b>3.82</b>	<b>2.96</b>	<b>3.38</b>	<b>3.66</b>	<b>4.58</b>	<b>3.81</b>	<b>3.94</b>	<b>3.78</b>	<b>3.84</b>	<b>3.80</b>
<b>Yolo County Total</b>		<b>0.37</b>	<b>0.72</b>	<b>0.87</b>	<b>1.90</b>	<b>2.66</b>	<b>2.84</b>	<b>3.83</b>	<b>3.20</b>	<b>2.98</b>	<b>3.82</b>	<b>2.96</b>	<b>3.38</b>	<b>3.66</b>	<b>4.58</b>	<b>3.81</b>	<b>3.94</b>	<b>3.78</b>	<b>3.84</b>	<b>3.80</b>
<b>Sutter County Total</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.93</b>	<b>0.91</b>	<b>0.91</b>	<b>0.88</b>	<b>0.88</b>	<b>1.56</b>	<b>1.67</b>	<b>2.28</b>	<b>1.53</b>	<b>1.61</b>	<b>1.48</b>	<b>1.48</b>	<b>1.93</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-24. SO2 Detailed Summary (Alternative 4) - U**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.61	0.31	0.32	0.06	0.06	0.06	0.06	0.06	0.01	0.04
	Construction Worker Commuting	0.07	0.02	0.03	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.85	0.40	0.40	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.53</b>	<b>0.74</b>	<b>0.76</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.01	0.01	0.05	0.01	--	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.00	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.07	0.00	--	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.02</b>	<b>0.02</b>	<b>0.12</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	0.09	0.09	0.06	0.01	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	0.01	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	0.62	0.64	0.08	0.00	--	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.72</b>	<b>0.74</b>	<b>0.14</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.07</b>
<b>GRAND TOTAL</b>		<b>2.31</b>	<b>1.50</b>	<b>1.13</b>	<b>0.22</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.18</b>
<b>Yolo County Total</b>		<b>2.31</b>	<b>1.50</b>	<b>1.13</b>	<b>0.22</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.18</b>
<b>Sutter County Total</b>		<b>1.53</b>	<b>0.74</b>	<b>0.76</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-25. SO2 Detailed Summary (Alternative 5) - Unmitigated**

#	Activity	Ma																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.18	0.53	1.79	2.28	2.76	2.64	2.21	2.64	1.38	1.24	1.17	0.91	1.37	1.24	1.16	0.99	0.99	0.57	0.12
	Construction Worker Commuting	0.06	0.05	0.07	0.05	0.08	0.07	0.05	0.08	0.10	0.09	0.09	0.07	0.10	0.09	0.08	0.09	0.09	0.06	0.01
	Haul Trucks	0.12	0.04	0.04	--	0.01	0.01	0.01	0.73	1.44	1.43	1.43	1.43	1.43	1.43	1.43	1.51	1.51	0.80	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.36</b>	<b>0.62</b>	<b>1.91</b>	<b>2.33</b>	<b>2.85</b>	<b>2.73</b>	<b>2.27</b>	<b>3.45</b>	<b>2.92</b>	<b>2.77</b>	<b>2.69</b>	<b>2.41</b>	<b>2.89</b>	<b>2.77</b>	<b>2.68</b>	<b>2.60</b>	<b>2.60</b>	<b>1.43</b>	<b>0.12</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.60</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.05	0.07	0.23	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Haul Trucks	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.13	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>River Grading Site Subtotal</b>		<b>0.20</b>	<b>0.08</b>	<b>0.31</b>	<b>0.23</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>0.63</b>	<b>0.80</b>	<b>2.38</b>	<b>2.61</b>	<b>3.25</b>	<b>3.09</b>	<b>3.11</b>	<b>3.92</b>	<b>3.21</b>	<b>3.05</b>	<b>3.08</b>	<b>2.71</b>	<b>3.20</b>	<b>3.04</b>	<b>2.95</b>	<b>2.90</b>	<b>2.86</b>	<b>1.80</b>	<b>0.40</b>
Yolo County Total		0.60	0.74	2.34	2.56	3.09	2.96	2.51	3.91	3.16	3.02	3.05	2.67	3.15	3.02	2.93	2.88	2.85	1.79	0.38
Sutter County Total		0.02	0.06	0.03	0.05	0.16	0.13	0.60	0.01	0.06	0.03	0.03	0.03	0.06	0.03	0.02	0.01	0.01	0.01	0.01

Table L1-25. SO2 Detailed Summary (Alternative 5) - U

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.03	0.04	0.04	0.15	0.13	0.01	0.05	0.00	0.00	0.02	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	0.00	0.00	0.00	0.06	0.02	0.04	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Haul Trucks	0.01	--	--	0.19	0.08	0.03	0.07	--	--	0.03	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.40</b>	<b>0.23</b>	<b>0.08</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>0.06</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.15	0.24	0.00	0.00	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.01	0.02	0.01	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	0.20	0.20	0.20	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>0.22</b>	<b>0.52</b>	<b>0.21</b>	<b>0.22</b>	<b>0.00</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.30</b>	<b>0.56</b>	<b>0.34</b>	<b>0.63</b>	<b>0.24</b>	<b>0.15</b>	<b>0.12</b>	<b>0.10</b>	<b>0.02</b>	<b>0.06</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
Yolo County Total		0.30	0.56	0.34	0.63	0.24	0.15	0.12	--	--	0.06	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Sutter County Total		--	--	--	--	--	--	--	0.10	0.02	--	--	--	--	--	--	--	--	--	--

**Table L1-25. SO2 Detailed Summary (Alternative 5) - U**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.04	0.02	0.00	0.14	0.13	0.00
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.00
	Haul Trucks	--	0.03	--	0.04	0.04	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.05</b>	<b>0.06</b>	<b>--</b>	<b>0.18</b>	<b>0.17</b>	<b>0.00</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>	<b>0.00</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>	<b>0.00</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	--	--	--	0.01	0.01	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>	<b>0.02</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.05</b>	<b>0.06</b>	<b>--</b>	<b>0.20</b>	<b>0.19</b>	<b>0.00</b>
Yolo County Total		0.05	0.06	--	0.20	0.19	0.00
Sutter County Total		--	--	--	0.00	0.00	--

**Table L1-26. SO2 Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.29	0.33	0.23	0.86	0.84	0.99	0.94	0.92	0.97	2.06	2.06	2.04	2.12	2.04	2.03	2.09	2.07	2.01
	Construction Worker Commuting	0.04	0.05	0.03	0.02	0.03	0.03	0.04	0.03	0.03	0.04	0.13	0.13	0.12	0.13	0.13	0.12	0.13	0.13	0.12
	Haul Trucks	0.07	0.08	0.05	0.04	0.01	--	0.01	--	--	0.04	1.47	1.47	1.47	1.46	1.47	1.43	1.47	1.48	1.43
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.14</b>	<b>0.42</b>	<b>0.41</b>	<b>0.29</b>	<b>0.90</b>	<b>0.87</b>	<b>1.03</b>	<b>0.97</b>	<b>0.95</b>	<b>1.06</b>	<b>3.66</b>	<b>3.66</b>	<b>3.63</b>	<b>3.71</b>	<b>3.64</b>	<b>3.58</b>	<b>3.69</b>	<b>3.68</b>	<b>3.56</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.29	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.13	0.19	0.19	0.19	0.16	0.29	0.29	0.29	0.29	0.29	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.38</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.36</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.03	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.25</b>	<b>0.56</b>	<b>0.62</b>	<b>0.39</b>	<b>1.11</b>	<b>1.14</b>	<b>1.80</b>	<b>1.38</b>	<b>1.16</b>	<b>1.32</b>	<b>4.03</b>	<b>3.93</b>	<b>4.09</b>	<b>4.48</b>	<b>4.41</b>	<b>4.37</b>	<b>4.45</b>	<b>4.53</b>	<b>3.97</b>
<b>Yolo County Total</b>		<b>0.25</b>	<b>0.56</b>	<b>0.62</b>	<b>0.39</b>	<b>1.11</b>	<b>1.14</b>	<b>1.80</b>	<b>1.38</b>	<b>1.16</b>	<b>1.32</b>	<b>4.03</b>	<b>3.93</b>	<b>4.09</b>	<b>4.48</b>	<b>4.41</b>	<b>4.37</b>	<b>4.45</b>	<b>4.53</b>	<b>3.97</b>
<b>Sutter County Total</b>		<b>0.14</b>	<b>0.42</b>	<b>0.41</b>	<b>0.29</b>	<b>0.90</b>	<b>0.87</b>	<b>1.03</b>	<b>0.97</b>	<b>0.95</b>	<b>1.06</b>	<b>3.66</b>	<b>3.66</b>	<b>3.63</b>	<b>3.71</b>	<b>3.64</b>	<b>3.58</b>	<b>3.69</b>	<b>3.68</b>	<b>3.56</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-26. SO2 Detailed Summary (Alternative 6) - U**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	2.17	1.55	0.61	0.67	0.11	0.09	0.09	0.07	0.03	0.09
	Construction Worker Commuting	0.13	0.12	0.05	0.06	0.04	0.01	0.01	0.01	0.03	0.01
	Haul Trucks	1.62	1.62	0.81	0.81	0.05	--	--	0.06	0.03	0.06
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.93</b>	<b>3.30</b>	<b>1.48</b>	<b>1.55</b>	<b>0.21</b>	<b>0.10</b>	<b>0.10</b>	<b>0.14</b>	<b>0.10</b>	<b>0.15</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>3.97</b>	<b>3.31</b>	<b>1.59</b>	<b>1.66</b>	<b>0.22</b>	<b>0.10</b>	<b>0.10</b>	<b>0.24</b>	<b>0.12</b>	<b>0.17</b>
<b>Yolo County Total</b>		<b>3.97</b>	<b>3.31</b>	<b>1.59</b>	<b>1.66</b>	<b>0.22</b>	<b>0.10</b>	<b>0.10</b>	<b>0.24</b>	<b>0.12</b>	<b>0.17</b>
<b>Sutter County Total</b>		<b>3.93</b>	<b>3.30</b>	<b>1.48</b>	<b>1.55</b>	<b>0.21</b>	<b>0.10</b>	<b>0.10</b>	<b>0.14</b>	<b>0.10</b>	<b>0.15</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-27. PM10 Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.44	3.61	3.73	3.27	5.02	5.30	7.44	6.28	7.16	6.93	4.25	4.55	3.99	4.23	5.64	4.88	3.30	4.11	0.35
	Construction Worker Commuting	2.20	1.74	4.03	1.60	1.56	1.33	2.93	2.66	2.70	2.38	2.02	3.21	3.94	4.22	5.32	5.13	3.03	4.17	1.56
	Haul Trucks	1.15	0.86	1.32	--	--	--	0.42	0.07	--	--	--	7.18	17.74	16.23	17.35	17.35	10.84	18.00	0.63
	Fugitive Dust	--	3.72	3.72	3.59	8.22	10.78	232.91	117.70	120.25	120.25	115.21	112.65	1.65	3.30	3.30	3.30	3.30	3.30	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.79</b>	<b>9.94</b>	<b>12.81</b>	<b>8.47</b>	<b>14.80</b>	<b>17.41</b>	<b>243.70</b>	<b>126.70</b>	<b>130.12</b>	<b>129.57</b>	<b>121.48</b>	<b>127.59</b>	<b>27.32</b>	<b>27.98</b>	<b>31.60</b>	<b>30.65</b>	<b>20.46</b>	<b>29.57</b>	<b>2.55</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	223.49	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.53</b>	<b>2.78</b>	<b>16.29</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.32	0.66	0.66	0.66	0.66	1.86	2.54	2.54	1.99	2.87	2.87	2.87	1.41	2.59	2.59	2.59	2.59	2.59	1.29
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	112.65	115.71	115.71	112.65	115.53	115.53	115.53	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.53</b>	<b>2.01</b>	<b>2.01</b>	<b>1.61</b>	<b>1.61</b>	<b>115.43</b>	<b>119.35</b>	<b>119.35</b>	<b>115.99</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>10.28</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>9.72</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>
<b>GRAND TOTAL</b>		<b>7.21</b>	<b>14.78</b>	<b>131.62</b>	<b>12.44</b>	<b>243.29</b>	<b>136.20</b>	<b>379.68</b>	<b>255.35</b>	<b>248.91</b>	<b>466.55</b>	<b>357.51</b>	<b>249.52</b>	<b>40.18</b>	<b>49.04</b>	<b>53.13</b>	<b>52.35</b>	<b>41.11</b>	<b>52.26</b>	<b>13.71</b>
Yolo County Total		6.55	13.53	130.25	10.43	16.76	133.42	363.39	254.99	246.46	250.45	356.96	248.44	38.53	48.35	52.05	52.10	40.82	51.97	13.46
Sutter County Total		0.66	1.25	1.37	2.01	226.53	2.78	16.29	0.36	2.45	216.10	0.55	1.08	1.66	0.69	1.08	0.25	0.29	0.29	0.25



**Table L1-27. PM10 Detailed Summary (Alternative 1) -**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.23	0.35	1.12	1.12	1.12	1.00	0.59	0.66	0.12	0.24
	Construction Worker Commuting	0.14	0.23	1.33	1.33	1.33	1.33	1.05	2.75	0.23	0.15
	Haul Trucks	--	0.00	--	--	--	--	--	2.10	0.10	0.25
	Fugitive Dust	--	--	--	--	--	--	--	0.21	--	2.28
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.37</b>	<b>0.59</b>	<b>2.45</b>	<b>2.45</b>	<b>2.45</b>	<b>2.33</b>	<b>1.64</b>	<b>5.72</b>	<b>0.45</b>	<b>2.92</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.04
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.09
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.96</b>	<b>0.45</b>	<b>0.16</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.17	0.17	0.12	0.41	0.12	--	--	--	--	0.10
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	2.36
<b>Downstream Channel Subtotal</b>		<b>0.36</b>	<b>0.36</b>	<b>1.06</b>	<b>2.96</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.72</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	0.02
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.17
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>
<b>GRAND TOTAL</b>		<b>1.53</b>	<b>0.94</b>	<b>5.66</b>	<b>5.66</b>	<b>2.70</b>	<b>2.33</b>	<b>1.64</b>	<b>8.67</b>	<b>0.89</b>	<b>6.01</b>
<b>Yolo County Total</b>		<b>1.53</b>	<b>0.94</b>	<b>5.66</b>	<b>5.66</b>	<b>2.70</b>	<b>2.33</b>	<b>1.64</b>	<b>5.72</b>	<b>0.45</b>	<b>5.85</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.96</b>	<b>0.45</b>	<b>0.16</b>

Table L1-28. PM10 Detailed Summary (Alternative 2) - Unmitigated

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.44	3.61	3.73	3.27	10.37	9.98	14.66	13.38	13.38	13.15	5.12	3.97	7.73	6.57	5.90	6.94	5.79	5.88	5.76
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	3.99	3.99	3.67	2.57	3.30	7.10	6.51	6.23	6.60	5.68	5.59	5.55
	Haul Trucks	1.32	0.88	1.34	--	0.38	--	0.21	--	--	--	--	11.04	25.37	25.37	25.32	25.13	24.57	24.25	18.61
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	360.96	245.25	245.25	245.25	220.41	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.97</b>	<b>11.90</b>	<b>14.77</b>	<b>10.41</b>	<b>42.35</b>	<b>41.17</b>	<b>380.41</b>	<b>262.61</b>	<b>262.61</b>	<b>262.07</b>	<b>228.09</b>	<b>21.61</b>	<b>46.80</b>	<b>45.05</b>	<b>44.05</b>	<b>45.26</b>	<b>42.64</b>	<b>42.32</b>	<b>34.86</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	223.49	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.53</b>	<b>2.78</b>	<b>16.29</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.32	0.66	0.66	0.66	0.66	1.86	2.54	2.54	1.99	2.87	2.87	2.87	1.41	2.59	2.59	2.59	2.59	2.59	1.29
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	112.65	115.71	115.71	112.65	115.53	115.53	115.53	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.53</b>	<b>2.01</b>	<b>2.01</b>	<b>1.61</b>	<b>1.61</b>	<b>115.43</b>	<b>119.35</b>	<b>119.35</b>	<b>115.99</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>10.28</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>9.72</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.73	1.30	2.28	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
	Construction Worker Commuting	--	--	0.69	0.87	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	Haul Trucks	0.29	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.53	6.29	6.29	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	Marine Equipment Exhaust	1.01	--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
<b>River Grading Site Subtotal</b>		<b>2.56</b>	<b>7.69</b>	<b>9.76</b>	<b>3.31</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>
<b>GRAND TOTAL</b>		<b>10.95</b>	<b>24.43</b>	<b>143.34</b>	<b>17.69</b>	<b>273.97</b>	<b>163.09</b>	<b>519.52</b>	<b>394.39</b>	<b>384.53</b>	<b>602.17</b>	<b>467.25</b>	<b>146.67</b>	<b>62.79</b>	<b>69.23</b>	<b>68.71</b>	<b>70.09</b>	<b>66.42</b>	<b>68.14</b>	<b>49.16</b>
Yolo County Total		10.30	23.18	141.97	15.68	47.44	160.31	503.23	394.03	382.08	386.07	466.70	145.59	61.13	68.55	67.63	69.84	66.13	67.84	48.90
Sutter County Total		0.66	1.25	1.37	2.01	226.53	2.78	16.29	0.36	2.45	216.10	0.55	1.08	1.66	0.69	1.08	0.25	0.29	0.29	0.25

Table L1-28. PM10 Detailed Summary (Alternative 2) -

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	2.94	0.48	0.54	1.12	1.12	1.00	1.00	0.66	0.12	0.41
	Construction Worker Commuting	2.93	2.66	0.87	1.33	1.33	1.33	1.33	2.75	0.23	0.23
	Haul Trucks	13.41	1.07	--	--	--	--	--	2.16	0.10	0.51
	Fugitive Dust	3.30	--	--	--	--	--	--	0.53	--	3.73
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.58</b>	<b>4.21</b>	<b>1.41</b>	<b>2.45</b>	<b>2.45</b>	<b>2.33</b>	<b>2.33</b>	<b>6.09</b>	<b>0.45</b>	<b>4.88</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.04
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.09
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.96</b>	<b>0.45</b>	<b>0.16</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.17	0.17	0.12	0.41	0.12	--	--	--	--	0.10
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	2.36
<b>Downstream Channel Subtotal</b>		<b>0.36</b>	<b>0.36</b>	<b>1.06</b>	<b>2.96</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.72</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	0.02
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.17
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	1.40	2.34	0.06	0.06	--	0.73	--	--	--	0.04
	Construction Worker Commuting	0.69	1.97	1.28	1.47	0.18	--	--	--	--	0.05
	Haul Trucks	--	5.45	5.45	5.45	--	0.29	--	--	--	0.05
	Fugitive Dust	0.53	6.29	--	--	--	0.53	--	--	--	0.01
	Marine Equipment Exhaust	0.51	0.51	--	--	--	--	--	--	--	0.08
<b>River Grading Site Subtotal</b>		<b>3.13</b>	<b>16.55</b>	<b>6.79</b>	<b>6.97</b>	<b>0.18</b>	<b>1.55</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.23</b>
<b>GRAND TOTAL</b>		<b>26.86</b>	<b>21.11</b>	<b>11.41</b>	<b>12.64</b>	<b>2.89</b>	<b>3.88</b>	<b>2.33</b>	<b>9.05</b>	<b>0.89</b>	<b>8.20</b>
<b>Yolo County Total</b>		<b>26.86</b>	<b>21.11</b>	<b>11.41</b>	<b>12.64</b>	<b>2.89</b>	<b>3.88</b>	<b>2.33</b>	<b>6.09</b>	<b>0.45</b>	<b>8.04</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.96</b>	<b>0.45</b>	<b>0.16</b>

**Table L1-29. PM10 Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.44	3.61	3.73	3.27	10.37	9.98	14.66	14.06	14.06	13.83	13.83	15.74	16.91	18.34	5.90	6.94	5.79	5.88	8.35
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	4.17	4.17	3.85	3.85	6.23	7.47	9.44	6.23	6.60	5.68	5.59	8.11
	Haul Trucks	1.32	0.87	1.33	--	0.38	--	0.21	--	--	--	--	11.10	12.19	23.14	23.12	22.93	22.37	22.05	28.18
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	360.96	248.30	248.30	248.30	248.30	248.54	248.54	251.84	6.60	6.60	6.60	6.60	8.24
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.97</b>	<b>11.89</b>	<b>14.76</b>	<b>10.41</b>	<b>42.36</b>	<b>41.17</b>	<b>380.41</b>	<b>266.53</b>	<b>266.53</b>	<b>265.98</b>	<b>265.98</b>	<b>281.61</b>	<b>285.12</b>	<b>302.76</b>	<b>41.85</b>	<b>43.06</b>	<b>40.44</b>	<b>40.12</b>	<b>52.88</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	223.53	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.58</b>	<b>2.78</b>	<b>16.11</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.32	0.66	0.66	0.66	0.66	1.86	2.54	2.54	1.99	2.87	2.87	2.87	1.41	2.59	2.59	2.59	2.59	2.59	1.29
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	112.65	115.71	115.71	112.65	115.53	115.53	115.53	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.53</b>	<b>2.01</b>	<b>2.01</b>	<b>1.61</b>	<b>1.61</b>	<b>115.43</b>	<b>119.35</b>	<b>119.35</b>	<b>115.99</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>10.28</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>9.72</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>
<b>GRAND TOTAL</b>		<b>8.39</b>	<b>16.73</b>	<b>133.57</b>	<b>14.38</b>	<b>270.90</b>	<b>159.97</b>	<b>516.21</b>	<b>395.18</b>	<b>385.32</b>	<b>602.96</b>	<b>502.01</b>	<b>403.55</b>	<b>297.98</b>	<b>323.83</b>	<b>63.38</b>	<b>64.76</b>	<b>61.09</b>	<b>62.81</b>	<b>64.04</b>
<b>Yolo County Total</b>		<b>8.39</b>	<b>16.73</b>	<b>133.57</b>	<b>14.38</b>	<b>270.90</b>	<b>159.97</b>	<b>516.21</b>	<b>395.18</b>	<b>385.32</b>	<b>602.96</b>	<b>502.01</b>	<b>403.55</b>	<b>297.98</b>	<b>323.83</b>	<b>63.38</b>	<b>64.76</b>	<b>61.09</b>	<b>62.81</b>	<b>64.04</b>
<b>Sutter County Total</b>		<b>4.97</b>	<b>11.89</b>	<b>14.76</b>	<b>10.41</b>	<b>42.36</b>	<b>41.17</b>	<b>380.41</b>	<b>266.53</b>	<b>266.53</b>	<b>265.98</b>	<b>265.98</b>	<b>281.61</b>	<b>285.12</b>	<b>302.76</b>	<b>41.85</b>	<b>43.06</b>	<b>40.44</b>	<b>40.12</b>	<b>52.88</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-29. PM10 Detailed Summary (Alternative 3) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	5.65	2.94	3.13	1.12	1.12	1.00	1.00	0.66	0.12	0.57
	Construction Worker Commuting	7.93	2.80	3.44	1.33	1.33	1.33	1.33	2.75	0.23	0.30
	Haul Trucks	23.26	11.01	10.95	--	--	--	--	2.16	0.10	0.62
	Fugitive Dust	6.60	3.30	3.30	--	--	--	--	0.53	--	6.14
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>43.43</b>	<b>20.04</b>	<b>20.81</b>	<b>2.45</b>	<b>2.45</b>	<b>2.33</b>	<b>2.33</b>	<b>6.10</b>	<b>0.45</b>	<b>7.63</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.10
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.95</b>	<b>0.45</b>	<b>0.18</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.17	0.17	0.12	0.41	0.12	--	--	--	--	0.10
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	2.36
<b>Downstream Channel Subtotal</b>		<b>0.36</b>	<b>0.36</b>	<b>1.06</b>	<b>2.96</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.72</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	0.02
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.17
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>
<b>GRAND TOTAL</b>		<b>44.59</b>	<b>20.40</b>	<b>24.02</b>	<b>5.66</b>	<b>2.70</b>	<b>2.33</b>	<b>2.33</b>	<b>9.05</b>	<b>0.89</b>	<b>10.74</b>
<b>Yolo County Total</b>		<b>44.59</b>	<b>20.40</b>	<b>24.02</b>	<b>5.66</b>	<b>2.70</b>	<b>2.33</b>	<b>2.33</b>	<b>9.05</b>	<b>0.89</b>	<b>10.74</b>
<b>Sutter County Total</b>		<b>43.43</b>	<b>20.04</b>	<b>20.81</b>	<b>2.45</b>	<b>2.45</b>	<b>2.33</b>	<b>2.33</b>	<b>6.10</b>	<b>0.45</b>	<b>7.63</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-30. PM10 Detailed Summary (Alternative 4) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.44	3.61	3.73	3.27	10.37	9.98	14.66	14.06	14.06	13.83	13.83	15.74	16.91	18.34	5.90	6.94	5.79	5.88	8.35
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	4.17	4.17	3.85	3.85	6.23	7.47	9.44	6.23	6.60	5.68	5.59	8.11
	Haul Trucks	1.32	0.87	1.33	--	0.38	--	0.21	--	--	--	--	11.10	12.19	23.14	23.12	22.93	22.37	22.05	28.18
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	360.96	248.30	248.30	248.30	248.30	248.54	248.54	251.84	6.60	6.60	6.60	6.60	8.24
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.97</b>	<b>11.89</b>	<b>14.76</b>	<b>10.41</b>	<b>42.36</b>	<b>41.17</b>	<b>380.41</b>	<b>266.53</b>	<b>266.53</b>	<b>265.98</b>	<b>265.98</b>	<b>281.61</b>	<b>285.12</b>	<b>302.76</b>	<b>41.85</b>	<b>43.06</b>	<b>40.44</b>	<b>40.12</b>	<b>52.88</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	223.53	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.58</b>	<b>2.78</b>	<b>16.11</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.32	0.66	0.66	0.66	0.66	1.86	2.54	2.54	1.99	2.87	2.87	2.87	1.41	2.59	2.59	2.59	2.59	2.59	1.29
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	112.65	115.71	115.71	112.65	115.53	115.53	115.53	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.53</b>	<b>2.01</b>	<b>2.01</b>	<b>1.61</b>	<b>1.61</b>	<b>115.43</b>	<b>119.35</b>	<b>119.35</b>	<b>115.99</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>10.28</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>9.72</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.44	2.38	2.54	5.75	6.26	7.61	4.63	2.87	2.88	4.74	0.78	0.54	0.70	0.42	0.64	0.76	0.75	0.23	0.11
	Construction Worker Commuting	1.19	0.87	1.10	1.19	2.02	2.11	2.98	1.97	1.79	2.70	0.87	1.05	0.41	0.50	0.41	0.50	0.60	0.60	0.18
	Haul Trucks	0.52	0.31	0.41	12.12	12.62	12.12	12.33	12.12	12.12	15.76	0.10	0.62	--	0.45	--	0.04	--	0.25	--
	Fugitive Dust	--	5.00	5.00	22.00	22.00	134.65	123.06	10.41	10.41	123.06	--	--	--	--	--	--	--	--	--
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>2.15</b>	<b>8.56</b>	<b>9.04</b>	<b>41.06</b>	<b>42.90</b>	<b>156.49</b>	<b>143.00</b>	<b>27.37</b>	<b>27.19</b>	<b>146.26</b>	<b>1.75</b>	<b>2.22</b>	<b>1.11</b>	<b>1.37</b>	<b>1.06</b>	<b>1.31</b>	<b>1.35</b>	<b>1.08</b>	<b>0.29</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.45	3.05	3.20	4.40	6.26	7.61	8.60	6.84	6.85	8.71	7.07	4.36	4.63	4.36	4.58	4.70	4.69	4.17	4.05
	Construction Worker Commuting	1.38	1.28	1.51	1.65	2.02	2.11	4.63	3.62	3.44	4.35	3.76	3.44	3.35	3.44	3.35	3.44	3.53	3.53	3.12
	Haul Trucks	0.63	0.79	0.89	16.94	17.44	16.94	17.15	16.94	16.94	28.85	28.85	29.20	28.85	29.30	28.85	28.89	28.85	29.10	28.85
	Fugitive Dust	--	5.53	5.53	15.41	22.00	134.65	131.24	18.59	18.59	131.24	18.59	10.94	10.94	10.94	10.94	10.94	10.94	10.94	10.94
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>2.46</b>	<b>10.65</b>	<b>11.13</b>	<b>38.40</b>	<b>47.72</b>	<b>161.31</b>	<b>161.62</b>	<b>45.99</b>	<b>45.82</b>	<b>173.16</b>	<b>58.27</b>	<b>47.94</b>	<b>47.77</b>	<b>48.03</b>	<b>47.71</b>	<b>47.97</b>	<b>48.01</b>	<b>47.73</b>	<b>46.95</b>
<b>GRAND TOTAL</b>		<b>13.00</b>	<b>35.95</b>	<b>153.74</b>	<b>93.83</b>	<b>361.52</b>	<b>477.77</b>	<b>820.84</b>	<b>468.54</b>	<b>458.32</b>	<b>922.38</b>	<b>562.04</b>	<b>453.70</b>	<b>346.86</b>	<b>373.23</b>	<b>112.15</b>	<b>114.03</b>	<b>110.44</b>	<b>111.61</b>	<b>111.29</b>
<b>Yolo County Total</b>		<b>13.00</b>	<b>35.95</b>	<b>153.74</b>	<b>93.83</b>	<b>361.52</b>	<b>477.77</b>	<b>820.84</b>	<b>468.54</b>	<b>458.32</b>	<b>922.38</b>	<b>562.04</b>	<b>453.70</b>	<b>346.86</b>	<b>373.23</b>	<b>112.15</b>	<b>114.03</b>	<b>110.44</b>	<b>111.61</b>	<b>111.29</b>
<b>Sutter County Total</b>		<b>4.97</b>	<b>11.89</b>	<b>14.76</b>	<b>10.41</b>	<b>42.36</b>	<b>41.17</b>	<b>380.41</b>	<b>266.53</b>	<b>266.53</b>	<b>265.98</b>	<b>265.98</b>	<b>281.61</b>	<b>285.12</b>	<b>302.76</b>	<b>41.85</b>	<b>43.06</b>	<b>40.44</b>	<b>40.12</b>	<b>52.88</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-30. PM10 Detailed Summary (Alternative 4) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	5.65	2.94	3.13	1.02	1.02	0.89	0.89	0.66	0.12	0.57
	Construction Worker Commuting	7.93	2.80	3.44	1.33	1.33	1.33	1.33	2.75	0.23	0.30
	Haul Trucks	23.26	11.01	10.95	--	--	--	--	2.16	0.10	0.62
	Fugitive Dust	6.60	3.30	3.30	--	--	--	--	0.53	--	6.14
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>43.43</b>	<b>20.04</b>	<b>20.81</b>	<b>2.35</b>	<b>2.35</b>	<b>2.22</b>	<b>2.22</b>	<b>6.10</b>	<b>0.45</b>	<b>7.62</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.10
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.95</b>	<b>0.45</b>	<b>0.18</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.17	0.17	0.12	0.41	0.12	--	--	--	--	0.10
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	2.36
<b>Downstream Channel Subtotal</b>		<b>0.36</b>	<b>0.36</b>	<b>1.06</b>	<b>2.96</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.72</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	0.02
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.17
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.15	0.15	0.53	0.12	--	--	--	--	--	0.13
	Construction Worker Commuting	0.37	0.37	0.46	0.09	--	--	--	--	--	0.06
	Haul Trucks	--	--	1.95	0.04	--	--	--	--	--	0.34
	Fugitive Dust	--	--	0.53	--	--	--	--	--	--	1.17
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.52</b>	<b>0.52</b>	<b>3.48</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.70</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	1.68	1.63	0.69	0.14	--	--	--	--	--	0.27
	Construction Worker Commuting	0.92	1.47	0.69	0.09	--	--	--	--	--	0.17
	Haul Trucks	16.94	17.32	2.14	0.04	--	--	--	--	--	1.25
	Fugitive Dust	9.88	9.88	0.53	--	--	--	--	--	--	1.50
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>29.41</b>	<b>30.30</b>	<b>4.04</b>	<b>0.27</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.18</b>
<b>GRAND TOTAL</b>		<b>74.52</b>	<b>51.21</b>	<b>31.54</b>	<b>6.07</b>	<b>2.60</b>	<b>2.22</b>	<b>2.22</b>	<b>9.05</b>	<b>0.89</b>	<b>15.62</b>
<b>Yolo County Total</b>		<b>74.52</b>	<b>51.21</b>	<b>31.54</b>	<b>6.07</b>	<b>2.60</b>	<b>2.22</b>	<b>2.22</b>	<b>9.05</b>	<b>0.89</b>	<b>15.62</b>
<b>Sutter County Total</b>		<b>43.43</b>	<b>20.04</b>	<b>20.81</b>	<b>2.35</b>	<b>2.35</b>	<b>2.22</b>	<b>2.22</b>	<b>6.10</b>	<b>0.45</b>	<b>7.62</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-31. PM10 Detailed Summary (Alternative 5) - Unmitigated**

#	Activity																			M:	
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug		19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																					
1	Offroad Construction Equipment Exhaust	2.14	10.05	30.33	38.29	44.47	42.60	36.96	40.84	14.12	12.14	11.63	8.39	14.00	12.14	11.46	10.33	10.33	6.57	1.56	
	Construction Worker Commuting	6.78	5.96	8.39	5.50	9.26	8.34	5.45	9.30	11.92	10.59	9.81	8.34	11.50	10.59	9.63	10.31	10.31	6.65	0.92	
	Haul Trucks	3.30	1.21	1.15	--	0.38	0.38	0.38	19.89	39.12	38.91	38.91	38.91	38.91	38.91	38.91	41.19	41.19	21.86	--	
	Fugitive Dust	0.40	10.17	87.66	640.73	753.38	640.73	636.26	641.21	124.14	11.48	11.48	11.48	124.14	11.48	11.48	11.48	11.48	11.48	6.54	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>12.62</b>	<b>27.39</b>	<b>127.53</b>	<b>684.52</b>	<b>807.49</b>	<b>692.05</b>	<b>679.05</b>	<b>711.24</b>	<b>189.30</b>	<b>73.12</b>	<b>71.83</b>	<b>67.12</b>	<b>188.56</b>	<b>73.12</b>	<b>71.48</b>	<b>73.31</b>	<b>73.31</b>	<b>41.62</b>	<b>2.48</b>	
<b>Supplemental Fish Passage West</b>																					
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12	
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09	
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04	
	Fugitive Dust	--	0.13	--	0.53	223.49	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--	
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.53</b>	<b>2.78</b>	<b>16.29</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>	
<b>Agricultural Crossing 1</b>																					
3	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39	
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41	
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38	
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--	
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>	
<b>River Grading Site</b>																					
4	Offroad Construction Equipment Exhaust	0.73	1.30	2.28	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	
	Construction Worker Commuting	--	--	0.69	0.87	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	
	Haul Trucks	0.29	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	0.53	6.29	6.29	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	
	Marine Equipment Exhaust	1.01	--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	
<b>River Grading Site Subtotal</b>		<b>2.56</b>	<b>7.69</b>	<b>9.76</b>	<b>3.31</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	<b>3.13</b>	
<b>GRAND TOTAL</b>		<b>17.08</b>	<b>37.91</b>	<b>254.10</b>	<b>690.20</b>	<b>1037.50</b>	<b>698.54</b>	<b>698.81</b>	<b>723.67</b>	<b>195.23</b>	<b>293.55</b>	<b>191.31</b>	<b>72.50</b>	<b>194.27</b>	<b>77.87</b>	<b>76.69</b>	<b>78.70</b>	<b>77.65</b>	<b>47.99</b>	<b>7.04</b>	
Yolo County Total		16.42	36.66	252.73	688.19	810.97	695.76	682.53	723.31	192.78	77.45	190.77	71.42	192.61	77.18	75.61	78.45	77.35	47.70	6.79	
Sutter County Total		0.66	1.25	1.37	2.01	226.53	2.78	16.29	0.36	2.45	216.10	0.55	1.08	1.66	0.69	1.08	0.25	0.29	0.29	0.25	



Table L1-31. PM10 Detailed Summary (Alternative 5) -

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.62	0.71	0.71	2.82	2.57	0.12	0.53	0.00	0.00	0.24	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.51
	Construction Worker Commuting	0.55	0.46	0.46	7.15	2.61	4.72	0.60	0.00	0.00	0.18	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	2.15
	Haul Trucks	0.19	--	--	5.06	2.28	0.86	1.85	--	--	0.92	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.36</b>	<b>1.17</b>	<b>1.17</b>	<b>15.03</b>	<b>7.46</b>	<b>5.71</b>	<b>3.51</b>	<b>--</b>	<b>--</b>	<b>1.35</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.66</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.96</b>	<b>0.45</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	1.40	2.34	0.06	0.06	--	0.73	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.69	1.97	1.28	1.47	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	5.45	5.45	5.45	--	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.53	6.29	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--
	Marine Equipment Exhaust	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>3.13</b>	<b>16.55</b>	<b>6.79</b>	<b>6.97</b>	<b>0.18</b>	<b>1.55</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>5.29</b>	<b>17.72</b>	<b>10.11</b>	<b>22.25</b>	<b>7.65</b>	<b>7.26</b>	<b>3.51</b>	<b>2.96</b>	<b>0.45</b>	<b>1.35</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.66</b>
Yolo County Total		5.29	17.72	10.11	22.25	7.65	7.26	3.51	--	--	1.35	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.66
Sutter County Total		--	--	--	--	--	--	--	2.96	0.45	--	--	--	--	--	--	--	--	--	--

**Table L1-31. PM10 Detailed Summary (Alternative 5) -**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.59	0.24	--	2.12	2.05	0.07
	Construction Worker Commuting	1.05	0.18	--	0.50	0.44	0.06
	Haul Trucks	--	0.92	--	1.00	1.00	0.00
	Fugitive Dust	--	--	--	9.27	9.27	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.64</b>	<b>1.35</b>	<b>--</b>	<b>12.90</b>	<b>12.77</b>	<b>0.12</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.01	0.01	--
	Construction Worker Commuting	--	--	--	0.04	0.04	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	--	--	--	0.09	0.09	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.16</b>	<b>0.16</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.02	0.02	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	--	--	--	0.17	0.17	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>	<b>0.20</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.04	0.04	--
	Construction Worker Commuting	--	--	--	0.05	0.05	--
	Haul Trucks	--	--	--	0.05	0.05	--
	Fugitive Dust	--	--	--	0.01	0.01	--
	Marine Equipment Exhaust	--	--	--	0.08	0.08	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.23</b>	<b>0.23</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>1.64</b>	<b>1.35</b>	<b>--</b>	<b>13.49</b>	<b>13.36</b>	<b>0.12</b>
Yolo County Total		1.64	1.35	--	13.33	13.21	0.12
Sutter County Total		--	--	--	0.16	0.16	--

**Table L1-32. PM10 Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.44	4.96	5.30	4.16	14.92	14.53	15.44	14.65	14.42	15.59	26.76	26.76	26.09	27.12	26.36	26.07	27.24	26.88	25.71
	Construction Worker Commuting	4.40	6.14	3.25	2.34	3.39	2.98	4.31	3.71	3.39	4.63	14.58	14.58	14.30	14.67	14.48	13.66	14.90	14.80	13.43
	Haul Trucks	1.82	2.06	1.35	1.15	0.38	--	0.21	--	--	1.15	40.00	40.00	39.91	39.72	40.04	38.85	40.00	40.19	38.91
	Fugitive Dust	--	6.33	6.33	6.06	150.24	150.24	36.18	33.12	33.12	33.12	377.72	377.72	377.72	377.72	377.72	377.72	377.72	377.72	377.72
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6.66</b>	<b>19.49</b>	<b>16.22</b>	<b>13.71</b>	<b>168.94</b>	<b>167.75</b>	<b>56.14</b>	<b>51.48</b>	<b>50.93</b>	<b>54.48</b>	<b>459.05</b>	<b>459.05</b>	<b>458.02</b>	<b>459.23</b>	<b>458.60</b>	<b>456.30</b>	<b>459.85</b>	<b>459.59</b>	<b>455.77</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.20	0.57	0.12	0.66	2.68	1.86	2.59	0.17	0.24	0.23	0.23	0.39	0.60	0.41	0.12	0.12	0.11	0.11	0.12
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	223.53	--	3.30	--	--	215.51	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.66</b>	<b>1.25</b>	<b>1.37</b>	<b>2.01</b>	<b>226.58</b>	<b>2.78</b>	<b>16.11</b>	<b>0.36</b>	<b>2.45</b>	<b>216.10</b>	<b>0.55</b>	<b>1.08</b>	<b>1.66</b>	<b>0.69</b>	<b>1.08</b>	<b>0.25</b>	<b>0.29</b>	<b>0.29</b>	<b>0.25</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.32	0.66	0.66	0.66	0.66	1.86	2.54	2.54	1.99	2.87	2.87	2.87	1.41	2.59	2.59	2.59	2.59	2.59	1.29
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	112.65	115.71	115.71	112.65	115.53	115.53	115.53	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.53</b>	<b>2.01</b>	<b>2.01</b>	<b>1.61</b>	<b>1.61</b>	<b>115.43</b>	<b>119.35</b>	<b>119.35</b>	<b>115.99</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>10.28</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>9.72</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.32	0.66	1.86	0.17	0.17	0.12	0.15	0.68	0.15	0.12	2.10	0.62	0.52	0.52	0.45	0.91	0.35	1.28	0.39
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	112.65	--	--	--	--	2.74	--	--	112.65	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.24</b>	<b>1.58</b>	<b>115.43</b>	<b>0.36</b>	<b>0.36</b>	<b>0.58</b>	<b>0.35</b>	<b>8.94</b>	<b>0.35</b>	<b>1.20</b>	<b>115.80</b>	<b>1.17</b>	<b>0.93</b>	<b>0.93</b>	<b>1.00</b>	<b>2.00</b>	<b>0.91</b>	<b>2.95</b>	<b>1.19</b>
<b>GRAND TOTAL</b>		<b>10.08</b>	<b>24.33</b>	<b>135.03</b>	<b>17.68</b>	<b>397.48</b>	<b>286.55</b>	<b>191.94</b>	<b>180.12</b>	<b>169.72</b>	<b>391.46</b>	<b>695.08</b>	<b>580.98</b>	<b>470.88</b>	<b>480.29</b>	<b>480.13</b>	<b>478.00</b>	<b>480.50</b>	<b>482.28</b>	<b>466.93</b>
<b>Yolo County Total</b>		<b>10.08</b>	<b>24.33</b>	<b>135.03</b>	<b>17.68</b>	<b>397.48</b>	<b>286.55</b>	<b>191.94</b>	<b>180.12</b>	<b>169.72</b>	<b>391.46</b>	<b>695.08</b>	<b>580.98</b>	<b>470.88</b>	<b>480.29</b>	<b>480.13</b>	<b>478.00</b>	<b>480.50</b>	<b>482.28</b>	<b>466.93</b>
<b>Sutter County Total</b>		<b>6.66</b>	<b>19.49</b>	<b>16.22</b>	<b>13.71</b>	<b>168.94</b>	<b>167.75</b>	<b>56.14</b>	<b>51.48</b>	<b>50.93</b>	<b>54.48</b>	<b>459.05</b>	<b>459.05</b>	<b>458.02</b>	<b>459.23</b>	<b>458.60</b>	<b>456.30</b>	<b>459.85</b>	<b>459.59</b>	<b>455.77</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-32. PM10 Detailed Summary (Alternative 6) -**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	27.19	16.47	5.71	6.70	1.66	1.41	1.41	0.95	0.36	1.17
	Construction Worker Commuting	15.35	13.89	6.00	6.74	5.09	1.60	1.60	1.24	3.99	0.62
	Haul Trucks	44.19	44.19	22.19	22.19	1.46	--	--	1.65	0.92	1.50
	Fugitive Dust	379.37	346.25	6.60	6.60	--	--	--	0.53	--	13.14
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>466.10</b>	<b>420.80</b>	<b>40.50</b>	<b>42.22</b>	<b>8.20</b>	<b>3.01</b>	<b>3.01</b>	<b>4.37</b>	<b>5.27</b>	<b>16.42</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.41	0.12	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.10
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.95</b>	<b>0.45</b>	<b>0.18</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.17	0.17	0.12	0.41	0.12	--	--	--	--	0.10
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	2.36
<b>Downstream Channel Subtotal</b>		<b>0.36</b>	<b>0.36</b>	<b>1.06</b>	<b>2.96</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.72</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.48	--	0.53	0.12	--	--	--	--	--	0.02
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.17
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.80</b>	<b>--</b>	<b>2.15</b>	<b>0.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.20</b>
<b>GRAND TOTAL</b>		<b>467.26</b>	<b>421.15</b>	<b>43.71</b>	<b>45.43</b>	<b>8.45</b>	<b>3.01</b>	<b>3.01</b>	<b>7.32</b>	<b>5.72</b>	<b>19.53</b>
<b>Yolo County Total</b>		<b>467.26</b>	<b>421.15</b>	<b>43.71</b>	<b>45.43</b>	<b>8.45</b>	<b>3.01</b>	<b>3.01</b>	<b>7.32</b>	<b>5.72</b>	<b>19.53</b>
<b>Sutter County Total</b>		<b>466.10</b>	<b>420.80</b>	<b>40.50</b>	<b>42.22</b>	<b>8.20</b>	<b>3.01</b>	<b>3.01</b>	<b>4.37</b>	<b>5.27</b>	<b>16.42</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-33. PM2.5 Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.35	3.04	3.12	2.74	4.34	4.64	6.41	5.35	6.14	5.98	3.58	3.63	2.71	2.80	3.87	3.19	2.25	2.80	0.28
	Construction Worker Commuting	0.59	0.47	1.08	0.43	0.42	0.36	0.79	0.71	0.73	0.64	0.54	0.86	1.06	1.13	1.43	1.38	0.81	1.12	0.42
	Haul Trucks	0.35	0.26	0.40	--	--	--	0.13	0.02	--	--	--	2.19	5.40	4.94	5.28	5.28	3.30	5.48	0.19
	Fugitive Dust	--	1.45	1.45	1.42	2.99	4.30	25.45	12.87	14.19	14.19	12.58	11.27	0.25	0.50	0.50	0.50	0.50	0.50	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.29</b>	<b>5.21</b>	<b>6.05</b>	<b>4.59</b>	<b>7.75</b>	<b>9.30</b>	<b>32.78</b>	<b>18.95</b>	<b>21.05</b>	<b>20.81</b>	<b>16.70</b>	<b>17.94</b>	<b>9.42</b>	<b>9.38</b>	<b>11.08</b>	<b>10.35</b>	<b>6.86</b>	<b>9.90</b>	<b>0.89</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.12	0.45	0.09	0.54	2.40	1.55	1.68	0.13	0.17	0.15	0.15	0.28	0.44	0.34	0.09	0.09	0.08	0.08	0.09
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	23.46	--	0.50	--	--	21.55	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.26</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.21	0.54	0.54	0.54	0.54	1.55	2.13	2.13	1.63	2.43	2.43	2.43	0.93	1.68	1.68	1.68	1.68	1.68	0.84
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	11.27	12.64	12.64	11.27	12.61	12.61	12.61	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.55</b>	<b>0.83</b>	<b>0.83</b>	<b>0.71</b>	<b>0.71</b>	<b>13.06</b>	<b>15.07</b>	<b>15.07</b>	<b>13.27</b>	<b>15.38</b>	<b>15.38</b>	<b>15.38</b>	<b>3.32</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>3.11</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.21	0.54	1.55	0.13	0.13	0.09	0.10	0.58	0.10	0.09	1.74	0.47	0.41	0.41	0.31	0.71	0.28	1.05	0.28
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	11.27	--	--	--	--	1.34	--	--	11.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.47</b>	<b>0.77</b>	<b>13.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.21</b>	<b>0.16</b>	<b>3.60</b>	<b>0.16</b>	<b>0.38</b>	<b>13.29</b>	<b>0.62</b>	<b>0.53</b>	<b>0.53</b>	<b>0.45</b>	<b>1.01</b>	<b>0.44</b>	<b>1.50</b>	<b>0.51</b>
<b>GRAND TOTAL</b>		<b>2.55</b>	<b>7.43</b>	<b>20.38</b>	<b>6.32</b>	<b>34.60</b>	<b>24.37</b>	<b>53.26</b>	<b>37.81</b>	<b>35.26</b>	<b>58.38</b>	<b>45.61</b>	<b>34.42</b>	<b>14.00</b>	<b>16.53</b>	<b>18.10</b>	<b>17.70</b>	<b>13.65</b>	<b>17.75</b>	<b>4.63</b>
<b>Yolo County Total</b>		<b>2.30</b>	<b>6.81</b>	<b>19.95</b>	<b>5.49</b>	<b>8.64</b>	<b>22.57</b>	<b>48.01</b>	<b>37.63</b>	<b>34.48</b>	<b>36.58</b>	<b>45.38</b>	<b>33.94</b>	<b>13.26</b>	<b>16.12</b>	<b>17.75</b>	<b>17.58</b>	<b>13.52</b>	<b>17.62</b>	<b>4.51</b>
<b>Sutter County Total</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.26</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>

**Table L1-33. PM2.5 Detailed Summary (Alternative 1) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.20	1.62	0.88	0.88	0.88	0.77	0.43	1.80	0.09	0.19
	Construction Worker Commuting	0.04	0.06	0.36	0.36	0.36	0.36	0.28	0.74	0.06	0.04
	Haul Trucks	--	0.00	--	--	--	--	--	0.64	0.03	0.08
	Fugitive Dust	--	--	--	--	--	--	--	0.02	--	0.28
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.23</b>	<b>1.69</b>	<b>1.24</b>	<b>1.24</b>	<b>1.24</b>	<b>1.13</b>	<b>0.71</b>	<b>3.20</b>	<b>0.18</b>	<b>0.58</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.01
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.13	0.13	0.09	0.29	0.09	--	--	--	--	0.08
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.25
<b>Downstream Channel Subtotal</b>		<b>0.18</b>	<b>0.18</b>	<b>0.35</b>	<b>0.94</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	0.01
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.02
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.88</b>	<b>1.87</b>	<b>2.39</b>	<b>2.30</b>	<b>1.36</b>	<b>1.13</b>	<b>0.71</b>	<b>4.15</b>	<b>0.36</b>	<b>1.06</b>
<b>Yolo County Total</b>		<b>0.88</b>	<b>1.87</b>	<b>2.39</b>	<b>2.30</b>	<b>1.36</b>	<b>1.13</b>	<b>0.71</b>	<b>3.20</b>	<b>0.18</b>	<b>1.03</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.03</b>

**Table L1-34. PM2.5 Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.30	3.04	3.12	2.74	9.14	8.87	12.72	11.61	11.61	11.46	4.25	2.83	5.35	4.39	3.84	4.71	3.83	3.93	3.92
	Construction Worker Commuting	0.86	0.47	1.08	0.43	0.62	0.50	1.23	1.07	1.07	0.99	0.69	0.89	1.91	1.75	1.67	1.77	1.53	1.50	1.49
	Haul Trucks	0.40	0.27	0.41	--	0.11	--	0.06	--	--	--	--	3.36	7.72	7.72	7.71	7.65	7.48	7.38	5.67
	Fugitive Dust	--	1.65	1.65	1.63	7.40	7.40	40.56	27.92	27.92	27.92	22.04	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.75
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.56</b>	<b>5.43</b>	<b>6.27</b>	<b>4.80</b>	<b>17.27</b>	<b>16.77</b>	<b>54.57</b>	<b>40.60</b>	<b>40.60</b>	<b>40.36</b>	<b>26.98</b>	<b>7.58</b>	<b>15.98</b>	<b>14.86</b>	<b>14.22</b>	<b>15.14</b>	<b>13.84</b>	<b>13.81</b>	<b>11.83</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.12	0.45	0.09	0.54	2.40	1.55	1.68	0.13	0.17	0.15	0.15	0.28	0.44	0.34	0.09	0.09	0.08	0.08	0.09
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	23.46	--	0.50	--	--	21.55	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.26</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.21	0.54	0.54	0.54	0.54	1.55	2.13	2.13	1.63	2.43	2.43	2.43	0.93	1.68	1.68	1.68	1.68	1.68	0.84
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	11.27	12.64	12.64	11.27	12.61	12.61	12.61	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.55</b>	<b>0.83</b>	<b>0.83</b>	<b>0.71</b>	<b>0.71</b>	<b>13.06</b>	<b>15.07</b>	<b>15.07</b>	<b>13.27</b>	<b>15.38</b>	<b>15.38</b>	<b>15.38</b>	<b>3.32</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>3.11</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.21	0.54	1.55	0.13	0.13	0.09	0.10	0.58	0.10	0.09	1.74	0.47	0.41	0.41	0.31	0.71	0.28	1.05	0.28
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	11.27	--	--	--	--	1.34	--	--	11.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.47</b>	<b>0.77</b>	<b>13.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.21</b>	<b>0.16</b>	<b>3.60</b>	<b>0.16</b>	<b>0.38</b>	<b>13.29</b>	<b>0.62</b>	<b>0.53</b>	<b>0.53</b>	<b>0.45</b>	<b>1.01</b>	<b>0.44</b>	<b>1.50</b>	<b>0.51</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.65	1.13	1.60	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
	Construction Worker Commuting	--	--	0.18	0.23	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	Haul Trucks	0.09	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	2.75	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Marine Equipment Exhaust	0.93	--	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
<b>River Grading Site Subtotal</b>		<b>1.73</b>	<b>3.91</b>	<b>5.00</b>	<b>1.70</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>
<b>GRAND TOTAL</b>		<b>4.56</b>	<b>11.56</b>	<b>25.60</b>	<b>8.23</b>	<b>45.78</b>	<b>33.48</b>	<b>76.70</b>	<b>61.11</b>	<b>56.46</b>	<b>79.58</b>	<b>57.55</b>	<b>25.71</b>	<b>22.21</b>	<b>23.67</b>	<b>22.89</b>	<b>24.13</b>	<b>22.28</b>	<b>23.32</b>	<b>17.22</b>
<b>Yolo County Total</b>		<b>4.31</b>	<b>10.94</b>	<b>25.16</b>	<b>7.40</b>	<b>19.81</b>	<b>31.69</b>	<b>71.45</b>	<b>60.92</b>	<b>55.68</b>	<b>57.78</b>	<b>57.31</b>	<b>25.24</b>	<b>21.47</b>	<b>23.25</b>	<b>22.54</b>	<b>24.01</b>	<b>22.15</b>	<b>23.18</b>	<b>17.10</b>
<b>Sutter County Total</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.26</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>

**Table L1-34. PM2.5 Detailed Summary (Alternative 2) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1.96	0.37	0.41	0.88	0.88	0.77	0.77	0.46	0.09	0.33
	Construction Worker Commuting	0.79	0.71	0.23	0.36	0.36	0.36	0.36	0.74	0.06	0.06
	Haul Trucks	4.08	0.33	--	--	--	--	--	0.66	0.03	0.15
	Fugitive Dust	0.50	--	--	--	--	--	--	0.06	--	0.46
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>7.33</b>	<b>1.41</b>	<b>0.64</b>	<b>1.24</b>	<b>1.24</b>	<b>1.13</b>	<b>1.13</b>	<b>1.91</b>	<b>0.18</b>	<b>1.00</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.01
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.13	0.13	0.09	0.29	0.09	--	--	--	--	0.08
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.25
<b>Downstream Channel Subtotal</b>		<b>0.18</b>	<b>0.18</b>	<b>0.35</b>	<b>0.94</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	0.01
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.02
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	0.94	1.63	0.03	0.03	--	0.65	--	--	--	0.03
	Construction Worker Commuting	0.18	0.53	0.34	0.39	0.05	--	--	--	--	0.01
	Haul Trucks	--	1.66	1.66	1.66	--	0.09	--	--	--	0.02
	Fugitive Dust	0.06	2.75	--	--	--	0.06	--	--	--	0.01
	Marine Equipment Exhaust	0.47	0.47	--	--	--	--	--	--	--	0.07
<b>River Grading Site Subtotal</b>		<b>1.65</b>	<b>7.04</b>	<b>2.03</b>	<b>2.08</b>	<b>0.05</b>	<b>0.80</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.14</b>
<b>GRAND TOTAL</b>		<b>9.63</b>	<b>8.63</b>	<b>3.83</b>	<b>4.39</b>	<b>1.41</b>	<b>1.92</b>	<b>1.13</b>	<b>2.86</b>	<b>0.36</b>	<b>1.63</b>
<b>Yolo County Total</b>		<b>9.63</b>	<b>8.63</b>	<b>3.83</b>	<b>4.39</b>	<b>1.41</b>	<b>1.92</b>	<b>1.13</b>	<b>1.91</b>	<b>0.18</b>	<b>1.59</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.03</b>



**Table L1-35. PM2.5 Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.30	3.04	3.12	2.74	9.14	8.87	12.72	12.20	12.20	12.04	12.04	13.14	13.98	14.70	3.84	4.71	3.83	3.93	5.60
	Construction Worker Commuting	0.86	0.47	1.08	0.43	0.62	0.50	1.23	1.12	1.12	1.03	1.03	1.67	2.01	2.54	1.67	1.77	1.53	1.50	2.18
	Haul Trucks	0.40	0.26	0.40	--	0.12	--	0.06	--	--	--	--	3.38	3.71	7.05	7.04	6.98	6.81	6.71	8.58
	Fugitive Dust	--	1.65	1.65	1.63	7.40	7.40	40.56	29.29	29.29	29.29	29.29	28.42	28.42	28.92	1.00	1.00	1.00	1.00	1.25
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.56</b>	<b>5.42</b>	<b>6.27</b>	<b>4.80</b>	<b>17.27</b>	<b>16.77</b>	<b>54.57</b>	<b>42.61</b>	<b>42.61</b>	<b>42.37</b>	<b>42.37</b>	<b>46.61</b>	<b>48.11</b>	<b>53.20</b>	<b>13.55</b>	<b>14.46</b>	<b>13.17</b>	<b>13.14</b>	<b>17.61</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.12	0.45	0.09	0.54	2.40	1.55	1.68	0.13	0.17	0.15	0.15	0.28	0.44	0.34	0.09	0.09	0.08	0.08	0.09
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.33	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	23.47	--	0.50	--	--	21.55	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.20</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.21	0.54	0.54	0.54	0.54	1.55	2.13	2.13	1.63	2.43	2.43	2.43	0.93	1.68	1.68	1.68	1.68	1.68	0.84
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	11.27	12.64	12.64	11.27	12.61	12.61	12.61	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.55</b>	<b>0.83</b>	<b>0.83</b>	<b>0.71</b>	<b>0.71</b>	<b>13.06</b>	<b>15.07</b>	<b>15.07</b>	<b>13.27</b>	<b>15.38</b>	<b>15.38</b>	<b>15.38</b>	<b>3.32</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>3.11</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.21	0.54	1.55	0.13	0.13	0.09	0.10	0.58	0.10	0.09	1.74	0.47	0.41	0.41	0.31	0.71	0.28	1.05	0.28
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	11.27	--	--	--	--	1.34	--	--	11.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.47</b>	<b>0.77</b>	<b>13.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.21</b>	<b>0.16</b>	<b>3.60</b>	<b>0.16</b>	<b>0.38</b>	<b>13.29</b>	<b>0.62</b>	<b>0.53</b>	<b>0.53</b>	<b>0.45</b>	<b>1.01</b>	<b>0.44</b>	<b>1.50</b>	<b>0.51</b>
<b>GRAND TOTAL</b>		<b>2.83</b>	<b>7.64</b>	<b>20.59</b>	<b>6.53</b>	<b>44.14</b>	<b>31.83</b>	<b>75.00</b>	<b>61.46</b>	<b>56.82</b>	<b>79.94</b>	<b>71.29</b>	<b>63.09</b>	<b>52.69</b>	<b>60.35</b>	<b>20.57</b>	<b>21.81</b>	<b>19.96</b>	<b>20.99</b>	<b>21.35</b>
<b>Yolo County Total</b>		<b>2.83</b>	<b>7.64</b>	<b>20.59</b>	<b>6.53</b>	<b>44.14</b>	<b>31.83</b>	<b>75.00</b>	<b>61.46</b>	<b>56.82</b>	<b>79.94</b>	<b>71.29</b>	<b>63.09</b>	<b>52.69</b>	<b>60.35</b>	<b>20.57</b>	<b>21.81</b>	<b>19.96</b>	<b>20.99</b>	<b>21.35</b>
<b>Sutter County Total</b>		<b>1.56</b>	<b>5.42</b>	<b>6.27</b>	<b>4.80</b>	<b>17.27</b>	<b>16.77</b>	<b>54.57</b>	<b>42.61</b>	<b>42.61</b>	<b>42.37</b>	<b>42.37</b>	<b>46.61</b>	<b>48.11</b>	<b>53.20</b>	<b>13.55</b>	<b>14.46</b>	<b>13.17</b>	<b>13.14</b>	<b>17.61</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-35. PM2.5 Detailed Summary (Alternative 3) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	3.73	1.96	2.09	0.88	0.88	0.77	0.77	0.46	0.09	0.46
	Construction Worker Commuting	2.13	0.75	0.92	0.36	0.36	0.36	0.36	0.74	0.06	0.08
	Haul Trucks	7.08	3.35	3.33	--	--	--	--	0.66	0.03	0.19
	Fugitive Dust	1.00	0.50	0.50	--	--	--	--	0.06	--	0.75
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>13.94</b>	<b>6.56</b>	<b>6.84</b>	<b>1.24</b>	<b>1.24</b>	<b>1.13</b>	<b>1.13</b>	<b>1.92</b>	<b>0.18</b>	<b>1.48</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.13	0.13	0.09	0.29	0.09	--	--	--	--	0.08
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.25
<b>Downstream Channel Subtotal</b>		<b>0.18</b>	<b>0.18</b>	<b>0.35</b>	<b>0.94</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	0.01
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.02
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>14.58</b>	<b>6.75</b>	<b>8.00</b>	<b>2.30</b>	<b>1.36</b>	<b>1.13</b>	<b>1.13</b>	<b>2.86</b>	<b>0.36</b>	<b>1.96</b>
<b>Yolo County Total</b>		<b>14.58</b>	<b>6.75</b>	<b>8.00</b>	<b>2.30</b>	<b>1.36</b>	<b>1.13</b>	<b>1.13</b>	<b>2.86</b>	<b>0.36</b>	<b>1.96</b>
<b>Sutter County Total</b>		<b>13.94</b>	<b>6.56</b>	<b>6.84</b>	<b>1.24</b>	<b>1.24</b>	<b>1.13</b>	<b>1.13</b>	<b>1.92</b>	<b>0.18</b>	<b>1.48</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-36. PM2.5 Detailed Summary (Alternative 4) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	3.73	1.96	2.09	0.78	0.78	0.67	0.67	0.46	0.09	0.46
	Construction Worker Commuting	2.13	0.75	0.92	0.36	0.36	0.36	0.36	0.74	0.06	0.08
	Haul Trucks	7.08	3.35	3.33	--	--	--	--	0.66	0.03	0.19
	Fugitive Dust	1.00	0.50	0.50	--	--	--	--	0.06	--	0.75
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>13.94</b>	<b>6.56</b>	<b>6.84</b>	<b>1.14</b>	<b>1.14</b>	<b>1.03</b>	<b>1.03</b>	<b>1.92</b>	<b>0.18</b>	<b>1.48</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.13	0.13	0.09	0.29	0.09	--	--	--	--	0.08
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.25
<b>Downstream Channel Subtotal</b>		<b>0.18</b>	<b>0.18</b>	<b>0.35</b>	<b>0.94</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	0.01
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.02
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.11	0.11	0.37	0.09	--	--	--	--	--	0.11
	Construction Worker Commuting	0.10	0.10	0.12	0.02	--	--	--	--	--	0.02
	Haul Trucks	--	--	0.60	0.01	--	--	--	--	--	0.10
	Fugitive Dust	--	--	0.06	--	--	--	--	--	--	0.20
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.20</b>	<b>0.20</b>	<b>1.15</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.43</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	1.41	1.36	0.48	0.09	--	--	--	--	--	0.22
	Construction Worker Commuting	0.25	0.39	0.18	0.02	--	--	--	--	--	0.04
	Haul Trucks	5.16	5.27	0.65	0.01	--	--	--	--	--	0.38
	Fugitive Dust	3.32	3.32	0.06	--	--	--	--	--	--	0.29
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>10.13</b>	<b>10.35</b>	<b>1.37</b>	<b>0.13</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.93</b>
<b>GRAND TOTAL</b>		<b>24.92</b>	<b>17.30</b>	<b>10.51</b>	<b>2.46</b>	<b>1.26</b>	<b>1.03</b>	<b>1.03</b>	<b>2.86</b>	<b>0.36</b>	<b>3.32</b>
<b>Yolo County Total</b>		<b>24.92</b>	<b>17.30</b>	<b>10.51</b>	<b>2.46</b>	<b>1.26</b>	<b>1.03</b>	<b>1.03</b>	<b>2.86</b>	<b>0.36</b>	<b>3.32</b>
<b>Sutter County Total</b>		<b>13.94</b>	<b>6.56</b>	<b>6.84</b>	<b>1.14</b>	<b>1.14</b>	<b>1.03</b>	<b>1.03</b>	<b>1.92</b>	<b>0.18</b>	<b>1.48</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-37. PM2.5 Detailed Summary (Alternative 5) - Unmitigated**

#	Activity																			M:
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	1.65	8.27	26.98	33.62	38.63	37.08	32.40	34.92	10.21	8.57	8.25	5.52	10.12	8.57	8.11	6.91	6.91	4.47	1.29
	Construction Worker Commuting	1.82	1.60	2.25	1.48	2.49	2.24	1.47	2.50	3.20	2.84	2.64	2.24	3.09	2.84	2.59	2.77	2.77	1.79	0.25
	Haul Trucks	1.01	0.37	0.35	--	0.11	0.11	0.11	0.11	0.06	11.85	11.85	11.85	11.85	11.85	11.85	12.54	12.54	6.66	--
	Fugitive Dust	0.06	2.15	21.17	76.45	87.72	76.45	74.93	75.68	12.94	1.67	1.67	1.67	12.94	1.67	1.67	1.67	1.67	0.92	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.54</b>	<b>12.39</b>	<b>50.75</b>	<b>111.55</b>	<b>128.95</b>	<b>115.89</b>	<b>108.91</b>	<b>113.21</b>	<b>26.41</b>	<b>24.93</b>	<b>24.40</b>	<b>21.28</b>	<b>37.99</b>	<b>24.93</b>	<b>24.22</b>	<b>23.89</b>	<b>23.89</b>	<b>13.84</b>	<b>1.53</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.12	0.45	0.09	0.54	2.40	1.55	1.68	0.13	0.17	0.15	0.15	0.28	0.44	0.34	0.09	0.09	0.08	0.08	0.09
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	23.46	--	0.50	--	--	21.55	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.26</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.21	0.54	1.55	0.13	0.13	0.09	0.10	0.58	0.10	0.09	1.74	0.47	0.41	0.41	0.31	0.71	0.28	1.05	0.28
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	11.27	--	--	--	--	1.34	--	--	11.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.47</b>	<b>0.77</b>	<b>13.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.21</b>	<b>0.16</b>	<b>3.60</b>	<b>0.16</b>	<b>0.38</b>	<b>13.29</b>	<b>0.62</b>	<b>0.53</b>	<b>0.53</b>	<b>0.45</b>	<b>1.01</b>	<b>0.44</b>	<b>1.50</b>	<b>0.51</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.65	1.13	1.60	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
	Construction Worker Commuting	--	--	0.18	0.23	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	Haul Trucks	0.09	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	2.75	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Marine Equipment Exhaust	0.93	--	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
<b>River Grading Site Subtotal</b>		<b>1.73</b>	<b>3.91</b>	<b>5.00</b>	<b>1.70</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>
<b>GRAND TOTAL</b>		<b>6.98</b>	<b>17.69</b>	<b>69.25</b>	<b>114.27</b>	<b>156.75</b>	<b>119.55</b>	<b>115.97</b>	<b>118.65</b>	<b>29.00</b>	<b>48.77</b>	<b>39.58</b>	<b>24.03</b>	<b>40.91</b>	<b>27.52</b>	<b>26.67</b>	<b>26.67</b>	<b>26.11</b>	<b>17.12</b>	<b>3.81</b>
Yolo County Total		6.73	17.07	68.81	113.44	130.79	117.75	110.72	118.47	28.22	26.97	39.34	23.55	40.17	27.11	26.32	26.55	25.98	16.99	3.69
Sutter County Total		0.25	0.62	0.44	0.83	25.97	1.79	5.26	0.18	0.79	21.80	0.24	0.47	0.74	0.41	0.35	0.12	0.13	0.13	0.12

Table L1-37. PM2.5 Detailed Summary (Alternative 5) -

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.47	0.57	0.57	2.04	1.87	0.09	0.37	0.00	0.00	0.17	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.92
	Construction Worker Commuting	0.15	0.12	0.12	1.92	0.70	1.27	0.16	0.00	0.00	0.05	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.58
	Haul Trucks	0.06	--	--	1.54	0.69	0.26	0.56	--	--	0.28	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.68</b>	<b>0.69</b>	<b>0.69</b>	<b>5.50</b>	<b>3.26</b>	<b>1.62</b>	<b>1.15</b>	<b>--</b>	<b>--</b>	<b>0.50</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.50</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.94	1.63	0.03	0.03	--	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.18	0.53	0.34	0.39	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	1.66	1.66	1.66	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
	Marine Equipment Exhaust	0.47	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>1.65</b>	<b>7.04</b>	<b>2.03</b>	<b>2.08</b>	<b>0.05</b>	<b>0.80</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>2.79</b>	<b>7.73</b>	<b>3.53</b>	<b>7.71</b>	<b>3.31</b>	<b>2.41</b>	<b>1.15</b>	<b>0.94</b>	<b>0.18</b>	<b>0.50</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.43</b>	<b>2.50</b>
Yolo County Total		2.79	7.73	3.53	7.71	3.31	2.41	1.15	--	--	0.50	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.50
Sutter County Total		--	--	--	--	--	--	--	0.94	0.18	--	--	--	--	--	--	--	--	--	--

**Table L1-37. PM2.5 Detailed Summary (Alternative 5) -**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.43	0.17	--	1.79	1.74	0.05
	Construction Worker Commuting	0.28	0.05	--	0.13	0.12	0.02
	Haul Trucks	--	0.28	--	0.31	0.31	0.00
	Fugitive Dust	--	--	--	1.43	1.43	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.71</b>	<b>0.50</b>	<b>--</b>	<b>3.66</b>	<b>3.60</b>	<b>0.07</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.01	0.01	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	--	--	--	0.01	0.01	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>	<b>0.03</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.01	0.01	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	--	--	--	0.02	0.02	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>	<b>0.04</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.03	0.03	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.02	0.02	--
	Fugitive Dust	--	--	--	0.01	0.01	--
	Marine Equipment Exhaust	--	--	--	0.07	0.07	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.14</b>	<b>0.14</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.71</b>	<b>0.50</b>	<b>--</b>	<b>3.88</b>	<b>3.81</b>	<b>0.07</b>
Yolo County Total		0.71	0.50	--	3.84	3.78	0.07
Sutter County Total		--	--	--	0.03	0.03	--

**Table L1-38. PM2.5 Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.30	4.12	4.34	3.43	13.14	12.86	13.51	12.84	12.69	13.52	21.17	21.17	20.62	21.49	20.81	20.70	21.54	21.25	20.42
	Construction Worker Commuting	1.18	1.65	0.87	0.63	0.91	0.80	1.16	1.00	0.91	1.24	3.92	3.92	3.84	3.94	3.89	3.67	4.00	3.98	3.61
	Haul Trucks	0.55	0.63	0.41	0.35	0.12	--	0.06	--	--	0.35	12.18	12.18	12.15	12.09	12.19	11.83	12.18	12.24	11.85
	Fugitive Dust	--	1.73	1.73	1.69	20.62	20.62	9.21	7.83	7.83	7.83	42.89	42.89	42.89	42.89	42.89	42.89	42.89	42.89	42.89
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>2.04</b>	<b>8.12</b>	<b>7.35</b>	<b>6.10</b>	<b>34.79</b>	<b>34.28</b>	<b>23.94</b>	<b>21.67</b>	<b>21.43</b>	<b>22.95</b>	<b>80.15</b>	<b>80.15</b>	<b>79.50</b>	<b>80.41</b>	<b>79.78</b>	<b>79.09</b>	<b>80.61</b>	<b>80.36</b>	<b>78.76</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.12	0.45	0.09	0.54	2.40	1.55	1.68	0.13	0.17	0.15	0.15	0.28	0.44	0.34	0.09	0.09	0.08	0.08	0.09
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.33	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	23.47	--	0.50	--	--	21.55	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.25</b>	<b>0.62</b>	<b>0.44</b>	<b>0.83</b>	<b>25.97</b>	<b>1.79</b>	<b>5.20</b>	<b>0.18</b>	<b>0.79</b>	<b>21.80</b>	<b>0.24</b>	<b>0.47</b>	<b>0.74</b>	<b>0.41</b>	<b>0.35</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.21	0.54	0.54	0.54	0.54	1.55	2.13	2.13	1.63	2.43	2.43	2.43	0.93	1.68	1.68	1.68	1.68	1.68	0.84
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	11.27	12.64	12.64	11.27	12.61	12.61	12.61	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.55</b>	<b>0.83</b>	<b>0.83</b>	<b>0.71</b>	<b>0.71</b>	<b>13.06</b>	<b>15.07</b>	<b>15.07</b>	<b>13.27</b>	<b>15.38</b>	<b>15.38</b>	<b>15.38</b>	<b>3.32</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>6.22</b>	<b>3.11</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.21	0.54	1.55	0.13	0.13	0.09	0.10	0.58	0.10	0.09	1.74	0.47	0.41	0.41	0.31	0.71	0.28	1.05	0.28
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	11.27	--	--	--	--	1.34	--	--	11.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.47</b>	<b>0.77</b>	<b>13.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.21</b>	<b>0.16</b>	<b>3.60</b>	<b>0.16</b>	<b>0.38</b>	<b>13.29</b>	<b>0.62</b>	<b>0.53</b>	<b>0.53</b>	<b>0.45</b>	<b>1.01</b>	<b>0.44</b>	<b>1.50</b>	<b>0.51</b>
<b>GRAND TOTAL</b>		<b>3.30</b>	<b>10.34</b>	<b>21.68</b>	<b>7.83</b>	<b>61.65</b>	<b>49.34</b>	<b>44.37</b>	<b>40.53</b>	<b>35.64</b>	<b>60.52</b>	<b>109.06</b>	<b>96.63</b>	<b>84.08</b>	<b>87.57</b>	<b>86.80</b>	<b>86.44</b>	<b>87.40</b>	<b>88.21</b>	<b>82.50</b>
<b>Yolo County Total</b>		<b>3.30</b>	<b>10.34</b>	<b>21.68</b>	<b>7.83</b>	<b>61.65</b>	<b>49.34</b>	<b>44.37</b>	<b>40.53</b>	<b>35.64</b>	<b>60.52</b>	<b>109.06</b>	<b>96.63</b>	<b>84.08</b>	<b>87.57</b>	<b>86.80</b>	<b>86.44</b>	<b>87.40</b>	<b>88.21</b>	<b>82.50</b>
<b>Sutter County Total</b>		<b>2.04</b>	<b>8.12</b>	<b>7.35</b>	<b>6.10</b>	<b>34.79</b>	<b>34.28</b>	<b>23.94</b>	<b>21.67</b>	<b>21.43</b>	<b>22.95</b>	<b>80.15</b>	<b>80.15</b>	<b>79.50</b>	<b>80.41</b>	<b>79.78</b>	<b>79.09</b>	<b>80.61</b>	<b>80.36</b>	<b>78.76</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.



**Table L1-38. PM2.5 Detailed Summary (Alternative 6) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	21.38	11.77	3.77	4.58	1.31	1.11	1.11	0.69	0.26	0.94
	Construction Worker Commuting	4.13	3.73	1.61	1.81	1.37	0.43	0.43	0.33	1.07	0.17
	Haul Trucks	13.45	13.45	6.75	6.75	0.44	--	--	0.50	0.28	0.46
	Fugitive Dust	43.14	35.30	1.00	1.00	--	--	--	0.06	--	1.56
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>82.10</b>	<b>64.26</b>	<b>13.13</b>	<b>14.14</b>	<b>3.12</b>	<b>1.54</b>	<b>1.54</b>	<b>1.58</b>	<b>1.61</b>	<b>3.12</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.29	0.09	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.94</b>	<b>0.18</b>	<b>0.04</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.13	0.13	0.09	0.29	0.09	--	--	--	--	0.08
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.25
<b>Downstream Channel Subtotal</b>		<b>0.18</b>	<b>0.18</b>	<b>0.35</b>	<b>0.94</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.37	--	0.37	0.09	--	--	--	--	--	0.01
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.02
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.46</b>	<b>--</b>	<b>0.80</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>82.74</b>	<b>64.44</b>	<b>14.29</b>	<b>15.21</b>	<b>3.24</b>	<b>1.54</b>	<b>1.54</b>	<b>2.52</b>	<b>1.79</b>	<b>3.60</b>
<b>Yolo County Total</b>		<b>82.74</b>	<b>64.44</b>	<b>14.29</b>	<b>15.21</b>	<b>3.24</b>	<b>1.54</b>	<b>1.54</b>	<b>2.52</b>	<b>1.79</b>	<b>3.60</b>
<b>Sutter County Total</b>		<b>82.10</b>	<b>64.26</b>	<b>13.13</b>	<b>14.14</b>	<b>3.12</b>	<b>1.54</b>	<b>1.54</b>	<b>1.58</b>	<b>1.61</b>	<b>3.12</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-39. GHG Detailed Summary (Alternative 1) - Unmitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	1,867
	Construction Worker Commuting	119
	Haul Trucks	877
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>2,862</b>
<b>Supplemental Fish Passage West</b>		
2	Offroad Construction Equipment Exhaust	96
	Construction Worker Commuting	8
	Haul Trucks	35
	Fugitive Dust	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>139</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	1,008
	Construction Worker Commuting	57
	Haul Trucks	662
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>1,728</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	95
	Construction Worker Commuting	9
	Haul Trucks	34
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>
<b>GRAND TOTAL</b>		<b>4,866</b>
<b>Yolo County Total</b>		<b>4,727</b>
<b>Sutter County Total</b>		<b>139</b>

**Table L1-40. GHG Detailed Summary (Alternative 2) - Unmitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	3,336
	Construction Worker Commuting	183
	Haul Trucks	1,780
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>5,299</b>
<b>Supplemental Fish Passage West</b>		
2	Offroad Construction Equipment Exhaust	96
	Construction Worker Commuting	8
	Haul Trucks	35
	Fugitive Dust	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>139</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	1,008
	Construction Worker Commuting	57
	Haul Trucks	662
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>1,728</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	95
	Construction Worker Commuting	9
	Haul Trucks	34
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>
<b>River Grading Site</b>		
5	Offroad Construction Equipment Exhaust	417
	Construction Worker Commuting	45
	Haul Trucks	174
	Fugitive Dust	n/a
	Marine Equipment Exhaust	1,985
<b>River Grading Site Subtotal</b>		<b>2,621</b>
<b>GRAND TOTAL</b>		<b>9,924</b>
<b>Yolo County Total</b>		<b>9,785</b>
<b>Sutter County Total</b>		<b>139</b>

**Table L1-41. GHG Detailed Summary (Alternative 3) - Unmitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	4,570
	Construction Worker Commuting	233
	Haul Trucks	2,170
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6,973</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	115
	Construction Worker Commuting	10
	Haul Trucks	45
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>170</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	1,008
	Construction Worker Commuting	57
	Haul Trucks	662
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>1,728</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	95
	Construction Worker Commuting	9
	Haul Trucks	34
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>
<b>GRAND TOTAL</b>		<b>9,008</b>
<b>Yolo County Total</b>		<b>9,008</b>
<b>Sutter County Total</b>		<b>6,973</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-42. GHG Detailed Summary (Alternative 4) - Unmitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	4,563
	Construction Worker Commuting	233
	Haul Trucks	2,170
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6,966</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	115
	Construction Worker Commuting	10
	Haul Trucks	45
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>170</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	1,008
	Construction Worker Commuting	57
	Haul Trucks	662
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>1,728</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	95
	Construction Worker Commuting	9
	Haul Trucks	34
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>
<b>Northern Water Control Structure Improvements</b>		
5	Offroad Construction Equipment Exhaust	923
	Construction Worker Commuting	51
	Haul Trucks	1,180
	Fugitive Dust	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>2,154</b>
<b>Southern Water Control Structure Improvements</b>		
6	Offroad Construction Equipment Exhaust	2,363
	Construction Worker Commuting	131
	Haul Trucks	4,385
	Fugitive Dust	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>6,879</b>
<b>GRAND TOTAL</b>		<b>18,034</b>
<b>Yolo County Total</b>		<b>18,034</b>
<b>Sutter County Total</b>		<b>6,966</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

Table L1-43. GHG Detailed Summary (Alternative 5) - Unmitigated

#	Activity	Emissions , MTCO <sub>2</sub> e/ project	Year 1, MTCO <sub>2</sub> e/yr	Year 2, MTCO <sub>2</sub> e/yr
<b>Intake Channel, Headworks, and Outlet Channel</b>				
1	Offroad Construction Equipment Exhaust	14,363	13,901	462
	Construction Worker Commuting	392	347	45
	Haul Trucks	3,526	3,526	0
	Fugitive Dust	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>18,281</b>	<b>17,775</b>	<b>507</b>
<b>Supplemental Fish Passage West</b>				
2	Offroad Construction Equipment Exhaust	96	96	0
	Construction Worker Commuting	8	8	0
	Haul Trucks	35	35	0
	Fugitive Dust	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>139</b>	<b>139</b>	<b>0</b>
<b>Agricultural Crossing 1</b>				
3	Offroad Construction Equipment Exhaust	95	95	0
	Construction Worker Commuting	9	9	0
	Haul Trucks	34	34	0
	Fugitive Dust	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>	<b>137</b>	<b>0</b>
<b>River Grading Site</b>				
4	Offroad Construction Equipment Exhaust	417	417	0
	Construction Worker Commuting	45	45	0
	Haul Trucks	174	174	0
	Fugitive Dust	n/a	n/a	n/a
	Marine Equipment Exhaust	1,985	1,985	0
<b>River Grading Site Subtotal</b>		<b>2,621</b>	<b>2,621</b>	<b>0</b>
<b>GRAND TOTAL</b>		<b>21,179</b>	<b>20,672</b>	<b>507</b>
<b>Yolo County Total</b>		<b>21,040</b>	<b>20,533</b>	<b>507</b>
<b>Sutter County Total</b>		<b>139</b>	<b>139</b>	<b>0</b>

**Table L1-44. GHG Detailed Summary (Alternative 6) - Unmitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	9,887
	Construction Worker Commuting	485
	Haul Trucks	5,261
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>15,634</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	115
	Construction Worker Commuting	10
	Haul Trucks	45
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>170</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	1,008
	Construction Worker Commuting	57
	Haul Trucks	662
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>1,728</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	95
	Construction Worker Commuting	9
	Haul Trucks	34
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>137</b>
<b>GRAND TOTAL</b>		<b>17,669</b>
<b>Yolo County Total</b>		<b>17,669</b>
<b>Sutter County Total</b>		<b>15,634</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Comparison of Emissions**

**Table L1-45. Maximum Daily Mitigated Emissions**

Alternative	Description	ROG, lbs/day	NOx, lbs/day	CO, lbs/day	SO2, lbs/day	PM10, lbs/day	PM2.5, lbs/day
1	East Side Small Gated Notch	45	541	228	2	199	31
	<i>Percent Reduction (Compared to Unmitigated)</i>	-10%	-19%	-13%	-1%	-57%	-48%
2	Central Small Gated Notch	58	748	357	3	265	36
	<i>Percent Reduction (Compared to Unmitigated)</i>	-9%	-19%	-17%	-1%	-56%	-55%
3	West Side Small Gated Notch	45	707	404	3	266	35
	<i>Percent Reduction (Compared to Unmitigated)</i>	-25%	-36%	-14%	-1%	-56%	-57%
4	Managed Flow	80	1,083	571	5	443	70
	<i>Percent Reduction (Compared to Unmitigated)</i>	-16%	-30%	-17%	-1%	-52%	-49%
5	Multiple Gates	134	815	671	4	478	68
	<i>Percent Reduction (Compared to Unmitigated)</i>	-7%	-46%	-21%	-1%	-54%	-57%
6	Large Gated Notch	57	1,057	596	4	344	56
	<i>Percent Reduction (Compared to Unmitigated)</i>	-35%	-34%	-13%	-1%	-51%	-49%
Yolo-Solano AQMD Significance Thresholds		n/a	n/a	n/a	n/a	80	n/a
Feather River AQMD Significance Thresholds		n/a	n/a	n/a	n/a	80	n/a

**Table L1-46. Annual Mitigated Emissions**

Alternative	Description	ROG, tpy	NOx, tpy	CO, tpy	SO2, tpy	PM10, tpy	PM2.5, tpy	Emissions, MTCO2e/project
1	East Side Small Gated Notch	0.8	10.1	7.9	0.0	3.1	0.6	3,813
	<i>Percent Reduction (Compared to Unmitigated)</i>	-33%	-36%	-10%	-1%	-49%	-40%	-22%
2	Central Small Gated Notch	1.8	16.8	15.7	0.1	4.5	0.9	8,819
	<i>Percent Reduction (Compared to Unmitigated)</i>	-25%	-44%	-9%	-1%	-45%	-42%	-11%
3	West Side Small Gated Notch	1.3	18.3	13.5	0.1	5.7	1.1	7,773
	<i>Percent Reduction (Compared to Unmitigated)</i>	-38%	-40%	-13%	-1%	-47%	-46%	-14%
4	Managed Flow	2.4	38.1	23.6	0.2	9.4	2.1	12,269
	<i>Percent Reduction (Compared to Unmitigated)</i>	-34%	-33%	-12%	0%	-40%	-38%	-32%
5	Multiple Gates	3.8	29.4	38.3	0.2	8.4	2.0	6,804
	<i>Percent Reduction (Compared to Unmitigated)</i>	-41%	-60%	-16%	0%	-38%	-49%	-68%
6	Large Gated Notch	2.3	36.6	24.5	0.2	10.6	2.0	6,659
	<i>Percent Reduction (Compared to Unmitigated)</i>	-40%	-39%	-14%	-1%	-46%	-45%	-62%
Yolo-Solano AQMD Significance Thresholds		10	10	n/a	n/a	n/a	n/a	1,100
Feather River AQMD Significance Thresholds		2.5	2.5	n/a	n/a	n/a	n/a	1,100
Feather River AQMD Significance Thresholds (Alt 5)		3.6	3.6	n/a	n/a	n/a	n/a	1,100
General Conformity De Minimis Thresholds		25	25	100	100	100	100	n/a

Note: Emissions include construction of downstream reach.

Construction occurs over two dry seasons for Alternative 5 only.

Feather River AQMD NOx and ROG significance threshold equal to 25 lbs/day multiplied by project length, not to exceed 4.5 tons per year.

Only certain portions (certain urban areas) are designated maintenance for PM10 and CO; therefore, only the portion of emissions that occur in those areas are subject to general conformit

Construction Duration

200 days  
6.7 months

Legend

Exceeds CEQA significance threshold  
Exceeds general conformity de minimis

Construction Duration (Alternative 5)

284 days  
9.5 months

Construction Season

	Year 1	Year 2
Start	15-Apr	15-Apr
End	1-Nov	8-Jul



**Table L1-47. ROG Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.40	22.98	23.20	22.71	2.85	2.76	5.18	4.48	5.16	4.88	3.62	4.15	6.53	7.99	9.46	8.80	5.64	6.64	0.30
	Construction Worker Commuting	0.10	0.08	0.18	0.07	0.07	0.06	0.13	0.12	0.12	0.11	0.09	0.14	0.18	0.19	0.24	0.23	0.14	0.19	0.07
	Haul Trucks	0.34	0.25	0.39	--	--	--	0.12	0.02	--	--	--	2.09	5.17	4.73	5.05	5.05	3.16	5.24	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.84</b>	<b>23.30</b>	<b>23.77</b>	<b>22.78</b>	<b>2.92</b>	<b>2.82</b>	<b>5.43</b>	<b>4.62</b>	<b>5.28</b>	<b>4.98</b>	<b>3.71</b>	<b>6.39</b>	<b>11.88</b>	<b>12.90</b>	<b>14.75</b>	<b>14.09</b>	<b>8.93</b>	<b>12.07</b>	<b>0.55</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.52</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.76	10.76	10.76	10.76	1.65	1.97	1.97	1.65	2.15	2.48	2.48	2.67	5.12	5.12	5.12	5.12	5.12	2.56
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.45</b>	<b>10.90</b>	<b>10.90</b>	<b>10.78</b>	<b>10.78</b>	<b>1.69</b>	<b>2.02</b>	<b>2.02</b>	<b>1.74</b>	<b>2.20</b>	<b>2.54</b>	<b>2.54</b>	<b>4.37</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>4.22</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>GRAND TOTAL</b>		<b>1.91</b>	<b>45.49</b>	<b>36.62</b>	<b>44.62</b>	<b>15.13</b>	<b>6.33</b>	<b>15.15</b>	<b>8.68</b>	<b>7.65</b>	<b>7.71</b>	<b>8.44</b>	<b>10.05</b>	<b>17.36</b>	<b>22.06</b>	<b>23.84</b>	<b>23.58</b>	<b>17.87</b>	<b>21.93</b>	<b>5.43</b>
<b>Yolo County Total</b>		<b>1.68</b>	<b>44.89</b>	<b>36.36</b>	<b>33.72</b>	<b>13.86</b>	<b>4.64</b>	<b>7.63</b>	<b>8.53</b>	<b>7.20</b>	<b>7.40</b>	<b>8.14</b>	<b>9.55</b>	<b>16.63</b>	<b>21.73</b>	<b>23.66</b>	<b>23.46</b>	<b>17.75</b>	<b>21.81</b>	<b>5.31</b>
<b>Sutter County Total</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.52</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>

**Table L1-47. ROG Detailed Summary (Alternative 1) - I**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.19	0.30	1.04	1.04	1.04	0.97	0.65	0.93	0.11	0.40
	Construction Worker Commuting	0.01	0.01	0.06	0.06	0.06	0.06	0.05	0.12	0.01	0.01
	Haul Trucks	--	0.00	--	--	--	--	--	0.61	0.03	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.20</b>	<b>0.31</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.03</b>	<b>0.70</b>	<b>1.67</b>	<b>0.14</b>	<b>0.48</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	0.02
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.10</b>	<b>0.14</b>	<b>0.02</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.15	0.15	0.11	0.60	0.11	--	--	--	--	0.24
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.16</b>	<b>0.16</b>	<b>0.23</b>	<b>1.10</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.30</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>
<b>GRAND TOTAL</b>		<b>0.69</b>	<b>0.47</b>	<b>2.30</b>	<b>2.32</b>	<b>1.22</b>	<b>1.03</b>	<b>0.70</b>	<b>2.76</b>	<b>0.29</b>	<b>0.83</b>
<b>Yolo County Total</b>		<b>0.69</b>	<b>0.47</b>	<b>2.30</b>	<b>2.32</b>	<b>1.22</b>	<b>1.03</b>	<b>0.70</b>	<b>1.67</b>	<b>0.14</b>	<b>0.81</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.10</b>	<b>0.14</b>	<b>0.02</b>

Table L1-48. ROG Detailed Summary (Alternative 2) - Mitigated

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.40	22.98	23.08	22.71	5.36	4.96	9.35	8.62	8.62	8.33	4.55	6.37	12.71	11.66	11.07	12.02	10.85	10.76	9.42
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.18	0.18	0.16	0.11	0.15	0.32	0.29	0.28	0.30	0.25	0.25	0.25
	Haul Trucks	0.39	0.26	0.39	--	0.11	--	0.06	--	--	--	--	3.22	7.39	7.39	7.38	7.32	7.16	7.06	5.42
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.93</b>	<b>23.31</b>	<b>23.65</b>	<b>22.78</b>	<b>5.58</b>	<b>5.04</b>	<b>9.62</b>	<b>8.79</b>	<b>8.79</b>	<b>8.49</b>	<b>4.67</b>	<b>9.74</b>	<b>20.42</b>	<b>19.34</b>	<b>18.72</b>	<b>19.63</b>	<b>18.26</b>	<b>18.08</b>	<b>15.08</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.52</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.76	10.76	10.76	10.76	1.65	1.97	1.97	1.65	2.15	2.48	2.48	2.67	5.12	5.12	5.12	5.12	5.12	2.56
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.45</b>	<b>10.90</b>	<b>10.90</b>	<b>10.78</b>	<b>10.78</b>	<b>1.69</b>	<b>2.02</b>	<b>2.02</b>	<b>1.74</b>	<b>2.20</b>	<b>2.54</b>	<b>2.54</b>	<b>4.37</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>4.22</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	1.51	12.27	5.76	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73
	Construction Worker Commuting	--	--	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.08	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	6.54	--	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27
<b>River Grading Site Subtotal</b>		<b>8.13</b>	<b>12.30</b>	<b>9.06</b>	<b>7.04</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>
<b>GRAND TOTAL</b>		<b>10.13</b>	<b>57.79</b>	<b>45.57</b>	<b>51.66</b>	<b>24.82</b>	<b>15.58</b>	<b>26.36</b>	<b>19.89</b>	<b>18.19</b>	<b>18.25</b>	<b>16.42</b>	<b>20.43</b>	<b>32.93</b>	<b>35.52</b>	<b>34.85</b>	<b>36.15</b>	<b>34.23</b>	<b>34.97</b>	<b>26.99</b>
<b>Yolo County Total</b>		<b>9.90</b>	<b>57.19</b>	<b>45.30</b>	<b>40.76</b>	<b>23.55</b>	<b>13.89</b>	<b>18.84</b>	<b>19.73</b>	<b>17.74</b>	<b>17.94</b>	<b>16.12</b>	<b>19.93</b>	<b>32.21</b>	<b>35.19</b>	<b>34.67</b>	<b>36.03</b>	<b>34.10</b>	<b>34.85</b>	<b>26.87</b>
<b>Sutter County Total</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.52</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>

**Table L1-48. ROG Detailed Summary (Alternative 2) - I**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	5.42	0.41	0.58	1.00	1.00	0.92	0.92	0.81	0.11	0.59
	Construction Worker Commuting	0.13	0.12	0.04	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	3.91	0.31	--	--	--	--	--	0.63	0.03	0.15
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>9.46</b>	<b>0.84</b>	<b>0.62</b>	<b>1.06</b>	<b>1.06</b>	<b>0.98</b>	<b>0.98</b>	<b>1.56</b>	<b>0.14</b>	<b>0.75</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	0.02
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.10</b>	<b>0.14</b>	<b>0.02</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.15	0.15	0.11	0.60	0.11	--	--	--	--	0.24
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.16</b>	<b>0.16</b>	<b>0.23</b>	<b>1.10</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.30</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	3.73	5.86	0.10	0.10	--	1.51	--	--	--	0.12
	Construction Worker Commuting	0.03	0.09	0.06	0.07	0.01	--	--	--	--	0.00
	Haul Trucks	--	1.59	1.59	1.59	--	0.08	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	3.27	3.27	--	--	--	--	--	--	--	0.53
<b>River Grading Site Subtotal</b>		<b>7.03</b>	<b>10.80</b>	<b>1.74</b>	<b>1.75</b>	<b>0.01</b>	<b>1.59</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.67</b>
<b>GRAND TOTAL</b>		<b>16.98</b>	<b>11.80</b>	<b>3.56</b>	<b>4.03</b>	<b>1.19</b>	<b>2.57</b>	<b>0.98</b>	<b>2.66</b>	<b>0.29</b>	<b>1.77</b>
<b>Yolo County Total</b>		<b>16.98</b>	<b>11.80</b>	<b>3.56</b>	<b>4.03</b>	<b>1.19</b>	<b>2.57</b>	<b>0.98</b>	<b>1.56</b>	<b>0.14</b>	<b>1.75</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.10</b>	<b>0.14</b>	<b>0.02</b>

**Table L1-49. ROG Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.40	22.98	23.08	22.71	5.36	4.96	9.35	8.94	8.94	8.65	8.65	13.45	14.67	18.74	11.07	12.02	10.85	10.76	14.54
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.19	0.19	0.17	0.17	0.28	0.33	0.42	0.28	0.30	0.25	0.25	0.36
	Haul Trucks	0.39	0.25	0.39	--	0.11	--	0.06	--	--	--	--	3.23	3.55	6.74	6.73	6.68	6.52	6.42	8.21
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.93</b>	<b>23.31</b>	<b>23.65</b>	<b>22.78</b>	<b>5.58</b>	<b>5.04</b>	<b>9.62</b>	<b>9.12</b>	<b>9.12</b>	<b>8.82</b>	<b>8.82</b>	<b>16.97</b>	<b>18.55</b>	<b>25.90</b>	<b>18.08</b>	<b>18.99</b>	<b>17.62</b>	<b>17.44</b>	<b>23.11</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.47</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.76	10.76	10.76	10.76	1.65	1.97	1.97	1.65	2.15	2.48	2.48	2.67	5.12	5.12	5.12	5.12	5.12	2.56
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.45</b>	<b>10.90</b>	<b>10.90</b>	<b>10.78</b>	<b>10.78</b>	<b>1.69</b>	<b>2.02</b>	<b>2.02</b>	<b>1.74</b>	<b>2.20</b>	<b>2.54</b>	<b>2.54</b>	<b>4.37</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>4.22</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>GRAND TOTAL</b>		<b>2.01</b>	<b>45.49</b>	<b>36.51</b>	<b>44.62</b>	<b>17.80</b>	<b>8.55</b>	<b>19.28</b>	<b>13.19</b>	<b>11.49</b>	<b>11.54</b>	<b>13.55</b>	<b>20.63</b>	<b>24.03</b>	<b>35.05</b>	<b>27.18</b>	<b>28.48</b>	<b>26.56</b>	<b>27.30</b>	<b>27.99</b>
<b>Yolo County Total</b>		<b>2.01</b>	<b>45.49</b>	<b>36.51</b>	<b>44.62</b>	<b>17.80</b>	<b>8.55</b>	<b>19.28</b>	<b>13.19</b>	<b>11.49</b>	<b>11.54</b>	<b>13.55</b>	<b>20.63</b>	<b>24.03</b>	<b>35.05</b>	<b>27.18</b>	<b>28.48</b>	<b>26.56</b>	<b>27.30</b>	<b>27.99</b>
<b>Sutter County Total</b>		<b>0.93</b>	<b>23.31</b>	<b>23.65</b>	<b>22.78</b>	<b>5.58</b>	<b>5.04</b>	<b>9.62</b>	<b>9.12</b>	<b>9.12</b>	<b>8.82</b>	<b>8.82</b>	<b>16.97</b>	<b>18.55</b>	<b>25.90</b>	<b>18.08</b>	<b>18.99</b>	<b>17.62</b>	<b>17.44</b>	<b>23.11</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

25.90

**Table L1-49. ROG Detailed Summary (Alternative 3) - I**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	10.65	5.42	5.70	1.00	1.00	0.92	0.92	0.81	0.11	0.79
	Construction Worker Commuting	0.35	0.12	0.15	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	6.77	3.21	3.19	--	--	--	--	0.63	0.03	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>17.78</b>	<b>8.76</b>	<b>9.05</b>	<b>1.06</b>	<b>1.06</b>	<b>0.98</b>	<b>0.98</b>	<b>1.57</b>	<b>0.14</b>	<b>0.98</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	0.02
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.09</b>	<b>0.14</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.15	0.15	0.11	0.60	0.11	--	--	--	--	0.24
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.16</b>	<b>0.16</b>	<b>0.23</b>	<b>1.10</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.30</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>
<b>GRAND TOTAL</b>		<b>18.28</b>	<b>8.92</b>	<b>10.25</b>	<b>2.28</b>	<b>1.18</b>	<b>0.98</b>	<b>0.98</b>	<b>2.66</b>	<b>0.29</b>	<b>1.33</b>
<b>Yolo County Total</b>		<b>18.28</b>	<b>8.92</b>	<b>10.25</b>	<b>2.28</b>	<b>1.18</b>	<b>0.98</b>	<b>0.98</b>	<b>2.66</b>	<b>0.29</b>	<b>1.33</b>
<b>Sutter County Total</b>		<b>17.78</b>	<b>8.76</b>	<b>9.05</b>	<b>1.06</b>	<b>1.06</b>	<b>0.98</b>	<b>0.98</b>	<b>1.57</b>	<b>0.14</b>	<b>0.98</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-50. ROG Detailed Summary (Alternative 4) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.40	22.98	23.08	22.71	5.36	4.96	9.35	8.94	8.94	8.65	8.65	13.45	14.67	18.74	11.07	12.02	10.85	10.76	14.54
	Construction Worker Commuting	0.14	0.08	0.18	0.07	0.10	0.08	0.20	0.19	0.19	0.17	0.17	0.28	0.33	0.42	0.28	0.30	0.25	0.25	0.36
	Haul Trucks	0.39	0.25	0.39	--	0.11	--	0.06	--	--	--	--	3.23	3.55	6.74	6.73	6.68	6.52	6.42	8.21
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.93</b>	<b>23.31</b>	<b>23.65</b>	<b>22.78</b>	<b>5.58</b>	<b>5.04</b>	<b>9.62</b>	<b>9.12</b>	<b>9.12</b>	<b>8.82</b>	<b>8.82</b>	<b>16.97</b>	<b>18.55</b>	<b>25.90</b>	<b>18.08</b>	<b>18.99</b>	<b>17.62</b>	<b>17.44</b>	<b>23.11</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.47</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.76	10.76	10.76	10.76	1.65	1.97	1.97	1.65	2.15	2.48	2.48	2.67	5.12	5.12	5.12	5.12	5.12	2.56
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.45</b>	<b>10.90</b>	<b>10.90</b>	<b>10.78</b>	<b>10.78</b>	<b>1.69</b>	<b>2.02</b>	<b>2.02</b>	<b>1.74</b>	<b>2.20</b>	<b>2.54</b>	<b>2.54</b>	<b>4.37</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>4.22</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	0.04	0.06	0.07	0.11	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.40	11.66	11.81	2.79	3.30	4.44	4.96	3.49	3.40	5.05	0.79	0.56	0.49	0.45	0.51	0.62	0.63	0.22	0.12
	Construction Worker Commuting	0.05	0.04	0.05	0.05	0.09	0.09	0.13	0.09	0.08	0.12	0.04	0.05	0.02	0.02	0.02	0.02	0.03	0.03	0.01
	Haul Trucks	0.15	0.09	0.12	3.53	3.68	3.53	3.59	3.53	3.53	4.59	0.03	0.18	--	0.13	--	0.01	--	0.07	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.61</b>	<b>11.79</b>	<b>11.98</b>	<b>6.38</b>	<b>7.07</b>	<b>8.07</b>	<b>8.68</b>	<b>7.11</b>	<b>7.00</b>	<b>9.76</b>	<b>0.85</b>	<b>0.79</b>	<b>0.51</b>	<b>0.61</b>	<b>0.53</b>	<b>0.65</b>	<b>0.65</b>	<b>0.32</b>	<b>0.13</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.43	22.42	22.58	23.06	3.30	4.44	8.78	7.31	7.22	8.87	7.50	6.22	6.25	6.22	6.27	6.38	6.39	5.99	5.88
	Construction Worker Commuting	0.06	0.06	0.07	0.07	0.09	0.09	0.21	0.16	0.15	0.19	0.17	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.14
	Haul Trucks	0.18	0.23	0.26	4.93	5.08	4.93	5.00	4.93	4.93	8.40	8.40	8.51	8.40	8.53	8.40	8.41	8.40	8.48	8.40
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.67</b>	<b>22.71</b>	<b>22.90</b>	<b>28.07</b>	<b>8.48</b>	<b>9.47</b>	<b>13.98</b>	<b>12.41</b>	<b>12.31</b>	<b>17.47</b>	<b>16.08</b>	<b>14.88</b>	<b>14.81</b>	<b>14.90</b>	<b>14.83</b>	<b>14.95</b>	<b>14.95</b>	<b>14.62</b>	<b>14.42</b>
<b>GRAND TOTAL</b>		<b>3.29</b>	<b>79.99</b>	<b>71.39</b>	<b>79.07</b>	<b>33.34</b>	<b>26.09</b>	<b>41.95</b>	<b>32.70</b>	<b>30.80</b>	<b>38.77</b>	<b>30.48</b>	<b>36.29</b>	<b>39.35</b>	<b>50.56</b>	<b>42.53</b>	<b>44.08</b>	<b>42.17</b>	<b>42.25</b>	<b>42.54</b>
<b>Yolo County Total</b>		<b>3.29</b>	<b>79.99</b>	<b>71.39</b>	<b>79.07</b>	<b>33.34</b>	<b>26.09</b>	<b>41.95</b>	<b>32.70</b>	<b>30.80</b>	<b>38.77</b>	<b>30.48</b>	<b>36.29</b>	<b>39.35</b>	<b>50.56</b>	<b>42.53</b>	<b>44.08</b>	<b>42.17</b>	<b>42.25</b>	<b>42.54</b>
<b>Sutter County Total</b>		<b>0.93</b>	<b>23.31</b>	<b>23.65</b>	<b>22.78</b>	<b>5.58</b>	<b>5.04</b>	<b>9.62</b>	<b>9.12</b>	<b>9.12</b>	<b>8.82</b>	<b>8.82</b>	<b>16.97</b>	<b>18.55</b>	<b>25.90</b>	<b>18.08</b>	<b>18.99</b>	<b>17.62</b>	<b>17.44</b>	<b>23.11</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

25.90

**Table L1-50. ROG Detailed Summary (Alternative 4) - I**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	10.65	5.42	5.70	1.04	1.04	0.97	0.97	0.81	0.11	0.79
	Construction Worker Commuting	0.35	0.12	0.15	0.06	0.06	0.06	0.06	0.12	0.01	0.01
	Haul Trucks	6.77	3.21	3.19	--	--	--	--	0.63	0.03	0.18
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>17.78</b>	<b>8.76</b>	<b>9.05</b>	<b>1.10</b>	<b>1.10</b>	<b>1.03</b>	<b>1.03</b>	<b>1.57</b>	<b>0.14</b>	<b>0.98</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	0.02
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.09</b>	<b>0.14</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.15	0.15	0.11	0.60	0.11	--	--	--	--	0.24
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.16</b>	<b>0.16</b>	<b>0.23</b>	<b>1.10</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.30</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.19	0.19	0.71	0.11	--	--	--	--	--	0.17
	Construction Worker Commuting	0.02	0.02	0.02	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.57	0.01	--	--	--	--	--	0.10
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.21</b>	<b>0.21</b>	<b>1.30</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.27</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	0.98	0.94	0.86	0.13	--	--	--	--	--	0.47
	Construction Worker Commuting	0.04	0.07	0.03	0.00	--	--	--	--	--	0.01
	Haul Trucks	4.93	5.05	0.62	0.01	--	--	--	--	--	0.36
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>5.96</b>	<b>6.05</b>	<b>1.51</b>	<b>0.15</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.84</b>
<b>GRAND TOTAL</b>		<b>24.44</b>	<b>15.17</b>	<b>13.06</b>	<b>2.59</b>	<b>1.22</b>	<b>1.03</b>	<b>1.03</b>	<b>2.66</b>	<b>0.29</b>	<b>2.44</b>
<b>Yolo County Total</b>		<b>24.44</b>	<b>15.17</b>	<b>13.06</b>	<b>2.59</b>	<b>1.22</b>	<b>1.03</b>	<b>1.03</b>	<b>2.66</b>	<b>0.29</b>	<b>2.44</b>
<b>Sutter County Total</b>		<b>17.78</b>	<b>8.76</b>	<b>9.05</b>	<b>1.10</b>	<b>1.10</b>	<b>1.03</b>	<b>1.03</b>	<b>1.57</b>	<b>0.14</b>	<b>0.98</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-51. ROG Detailed Summary (Alternative 5) - Mitigated**

#	Activity																			Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	2.06	110.19	15.25	22.22	28.02	26.37	21.73	29.42	21.35	19.59	18.89	16.01	21.25	19.59	18.74	18.00	18.00	10.42	1.40
	Construction Worker Commuting	0.30	0.27	0.37	0.25	0.41	0.37	0.24	0.42	0.53	0.47	0.44	0.37	0.51	0.47	0.43	0.46	0.46	0.30	0.04
	Haul Trucks	0.96	0.35	0.34	--	0.11	0.11	0.11	5.79	11.40	11.33	11.33	11.33	11.33	11.33	11.33	12.00	12.00	6.37	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.32</b>	<b>110.81</b>	<b>15.96</b>	<b>22.47</b>	<b>28.54</b>	<b>26.85</b>	<b>22.09</b>	<b>35.63</b>	<b>33.28</b>	<b>31.40</b>	<b>30.66</b>	<b>27.71</b>	<b>33.09</b>	<b>31.40</b>	<b>30.50</b>	<b>30.45</b>	<b>30.45</b>	<b>17.08</b>	<b>1.44</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.28	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.52</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	1.51	12.27	5.76	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73
	Construction Worker Commuting	--	--	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.08	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	6.54	--	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27
<b>River Grading Site Subtotal</b>		<b>8.13</b>	<b>12.30</b>	<b>9.06</b>	<b>7.04</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>	<b>7.03</b>
<b>GRAND TOTAL</b>		<b>12.08</b>	<b>134.39</b>	<b>26.98</b>	<b>40.56</b>	<b>37.01</b>	<b>35.70</b>	<b>36.81</b>	<b>44.70</b>	<b>40.93</b>	<b>38.95</b>	<b>39.88</b>	<b>35.87</b>	<b>41.23</b>	<b>39.14</b>	<b>38.19</b>	<b>38.53</b>	<b>37.98</b>	<b>25.53</b>	<b>9.13</b>
Yolo County Total		11.84	133.79	26.71	29.67	35.73	34.01	29.29	44.54	40.49	38.65	39.58	35.37	40.51	38.82	38.00	38.41	37.86	25.41	9.01
Sutter County Total		0.24	0.60	0.27	10.90	1.28	1.69	7.52	0.16	0.45	0.30	0.30	0.50	0.72	0.33	0.18	0.12	0.13	0.13	0.12

Table L1-51. ROG Detailed Summary (Alternative 5) - I

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.60	0.51	0.51	2.84	2.62	0.11	0.71	0.00	0.00	0.21	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.93
	Construction Worker Commuting	0.02	0.02	0.02	0.32	0.12	0.21	0.03	0.00	0.00	0.01	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
	Haul Trucks	0.06	--	--	1.47	0.66	0.25	0.54	--	--	0.27	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.68</b>	<b>0.54</b>	<b>0.54</b>	<b>4.63</b>	<b>3.40</b>	<b>0.57</b>	<b>1.27</b>	<b>--</b>	<b>--</b>	<b>0.49</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>2.03</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.10</b>	<b>0.14</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	3.73	5.86	0.10	0.10	--	1.51	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.03	0.09	0.06	0.07	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	1.59	1.59	1.59	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	3.27	3.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>7.03</b>	<b>10.80</b>	<b>1.74</b>	<b>1.75</b>	<b>0.01</b>	<b>1.59</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>8.04</b>	<b>11.34</b>	<b>3.24</b>	<b>6.50</b>	<b>3.41</b>	<b>2.16</b>	<b>1.27</b>	<b>1.10</b>	<b>0.14</b>	<b>0.49</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>2.03</b>
Yolo County Total		8.04	11.34	3.24	6.50	3.41	2.16	1.27	--	--	0.49	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	2.03
Sutter County Total		--	--	--	--	--	--	--	1.10	0.14	--	--	--	--	--	--	--	--	--	--

**Table L1-51. ROG Detailed Summary (Alternative 5) - I**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.65	0.21	0.00	2.81	2.76	0.05
	Construction Worker Commuting	0.05	0.01	0.00	0.02	0.02	0.00
	Haul Trucks	--	0.27	--	0.29	0.29	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.70</b>	<b>0.49</b>	<b>--</b>	<b>3.13</b>	<b>3.07</b>	<b>0.05</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.02	0.02	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>	<b>0.02</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.02	0.02	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>	<b>0.03</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.12	0.12	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
	Marine Equipment Exhaust	--	--	--	0.53	0.53	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.67</b>	<b>0.67</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.70</b>	<b>0.49</b>	<b>--</b>	<b>3.85</b>	<b>3.79</b>	<b>0.05</b>
Yolo County Total		0.70	0.49	--	3.82	3.77	0.05
Sutter County Total		--	--	--	0.02	0.02	--

**Table L1-52. ROG Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.40	34.40	34.86	33.76	8.18	7.78	9.11	8.69	8.40	9.61	29.33	29.33	28.74	29.69	29.04	28.44	29.65	29.44	28.22
	Construction Worker Commuting	0.20	0.27	0.15	0.10	0.15	0.13	0.19	0.17	0.15	0.21	0.65	0.65	0.64	0.66	0.65	0.61	0.67	0.66	0.60
	Haul Trucks	0.53	0.60	0.39	0.34	0.11	--	0.06	--	--	0.33	11.65	11.65	11.63	11.57	11.66	11.32	11.65	11.71	11.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.13</b>	<b>35.28</b>	<b>35.40</b>	<b>34.20</b>	<b>8.45</b>	<b>7.91</b>	<b>9.37</b>	<b>8.85</b>	<b>8.55</b>	<b>10.15</b>	<b>41.63</b>	<b>41.63</b>	<b>41.01</b>	<b>41.92</b>	<b>41.35</b>	<b>40.37</b>	<b>41.97</b>	<b>41.81</b>	<b>40.16</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.19	0.55	0.11	10.76	1.26	1.65	5.12	0.15	0.21	0.29	0.29	0.40	0.57	0.31	0.11	0.11	0.12	0.12	0.11
	Construction Worker Commuting	0.02	0.02	0.04	0.02	0.02	0.04	0.11	0.01	0.07	0.02	0.01	0.02	0.03	0.01	0.04	0.00	0.01	0.01	0.00
	Haul Trucks	0.03	0.03	0.12	0.12	--	--	2.23	--	0.16	--	--	0.08	0.12	--	0.04	0.01	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.24</b>	<b>0.60</b>	<b>0.27</b>	<b>10.90</b>	<b>1.28</b>	<b>1.69</b>	<b>7.47</b>	<b>0.16</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.50</b>	<b>0.72</b>	<b>0.33</b>	<b>0.18</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.12</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.30	10.76	10.76	10.76	10.76	1.65	1.97	1.97	1.65	2.15	2.48	2.48	2.67	5.12	5.12	5.12	5.12	5.12	2.56
	Construction Worker Commuting	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.11	0.11	0.11	0.11	0.11	0.06
	Haul Trucks	0.11	0.12	0.12	--	--	--	--	--	0.03	--	--	--	1.63	3.20	3.20	3.20	3.20	3.20	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.45</b>	<b>10.90</b>	<b>10.90</b>	<b>10.78</b>	<b>10.78</b>	<b>1.69</b>	<b>2.02</b>	<b>2.02</b>	<b>1.74</b>	<b>2.20</b>	<b>2.54</b>	<b>2.54</b>	<b>4.37</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>8.44</b>	<b>4.22</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.30	10.58	1.65	0.15	0.15	0.11	0.15	0.32	0.15	0.11	1.84	0.60	0.37	0.37	0.45	0.85	0.30	1.16	0.40
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.05	0.02	0.02	0.02	0.02	0.04	0.02	0.06	0.02
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.56	0.02	0.07	--	--	--	--	--	0.04	0.06	0.07	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.39</b>	<b>10.68</b>	<b>1.69</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.18</b>	<b>1.89</b>	<b>0.18</b>	<b>0.22</b>	<b>1.89</b>	<b>0.62</b>	<b>0.38</b>	<b>0.38</b>	<b>0.47</b>	<b>0.93</b>	<b>0.37</b>	<b>1.30</b>	<b>0.54</b>
<b>GRAND TOTAL</b>		<b>2.20</b>	<b>57.46</b>	<b>48.26</b>	<b>56.04</b>	<b>20.66</b>	<b>11.42</b>	<b>19.03</b>	<b>12.92</b>	<b>10.92</b>	<b>12.88</b>	<b>46.36</b>	<b>45.30</b>	<b>46.49</b>	<b>51.07</b>	<b>50.45</b>	<b>49.86</b>	<b>50.91</b>	<b>51.67</b>	<b>45.04</b>
<b>Yolo County Total</b>		<b>2.20</b>	<b>57.46</b>	<b>48.26</b>	<b>56.04</b>	<b>20.66</b>	<b>11.42</b>	<b>19.03</b>	<b>12.92</b>	<b>10.92</b>	<b>12.88</b>	<b>46.36</b>	<b>45.30</b>	<b>46.49</b>	<b>51.07</b>	<b>50.45</b>	<b>49.86</b>	<b>50.91</b>	<b>51.67</b>	<b>45.04</b>
<b>Sutter County Total</b>		<b>1.13</b>	<b>35.28</b>	<b>35.40</b>	<b>34.20</b>	<b>8.45</b>	<b>7.91</b>	<b>9.37</b>	<b>8.85</b>	<b>8.55</b>	<b>10.15</b>	<b>41.63</b>	<b>41.63</b>	<b>41.01</b>	<b>41.92</b>	<b>41.35</b>	<b>40.37</b>	<b>41.97</b>	<b>41.81</b>	<b>40.16</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-52. ROG Detailed Summary (Alternative 6) - I**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	31.06	26.03	10.83	11.61	1.46	1.28	1.28	1.18	0.32	1.49
	Construction Worker Commuting	0.69	0.62	0.27	0.30	0.23	0.07	0.07	0.06	0.18	0.03
	Haul Trucks	12.87	12.87	6.46	6.46	0.42	--	--	0.48	0.27	0.44
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>44.62</b>	<b>39.52</b>	<b>17.56</b>	<b>18.37</b>	<b>2.12</b>	<b>1.35</b>	<b>1.35</b>	<b>1.71</b>	<b>0.77</b>	<b>1.96</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.60	0.11	0.02
	Construction Worker Commuting	--	--	--	--	--	--	--	0.02	0.01	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.48	0.03	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.09</b>	<b>0.14</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.15	0.15	0.11	0.60	0.11	--	--	--	--	0.24
	Construction Worker Commuting	0.01	0.01	0.03	0.02	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.10	0.48	0.01	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.16</b>	<b>0.16</b>	<b>0.23</b>	<b>1.10</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.30</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.32	--	0.71	0.11	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	--	0.03	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.24	0.01	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.33</b>	<b>--</b>	<b>0.97</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.03</b>
<b>GRAND TOTAL</b>		<b>45.11</b>	<b>39.68</b>	<b>18.76</b>	<b>19.59</b>	<b>2.24</b>	<b>1.35</b>	<b>1.35</b>	<b>2.81</b>	<b>0.91</b>	<b>2.31</b>
<b>Yolo County Total</b>		<b>45.11</b>	<b>39.68</b>	<b>18.76</b>	<b>19.59</b>	<b>2.24</b>	<b>1.35</b>	<b>1.35</b>	<b>2.81</b>	<b>0.91</b>	<b>2.31</b>
<b>Sutter County Total</b>		<b>44.62</b>	<b>39.52</b>	<b>17.56</b>	<b>18.37</b>	<b>2.12</b>	<b>1.35</b>	<b>1.35</b>	<b>1.71</b>	<b>0.77</b>	<b>1.96</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-53. NOx Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	7.40	26.47	30.04	22.87	19.26	17.17	58.53	41.73	45.83	44.08	38.21	46.42	123.81	168.57	179.64	175.78	114.44	125.89	3.63
	Construction Worker Commuting	0.49	0.39	0.90	0.36	0.35	0.30	0.65	0.59	0.60	0.53	0.45	0.71	0.88	0.94	1.18	1.14	0.67	0.93	0.35
	Haul Trucks	9.78	7.34	11.25	--	--	--	3.59	0.56	--	--	--	61.03	150.75	137.95	147.40	147.40	92.12	152.92	5.38
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>17.68</b>	<b>34.20</b>	<b>42.19</b>	<b>23.22</b>	<b>19.60</b>	<b>17.47</b>	<b>62.77</b>	<b>42.88</b>	<b>46.43</b>	<b>44.61</b>	<b>38.66</b>	<b>108.16</b>	<b>275.43</b>	<b>307.46</b>	<b>328.22</b>	<b>324.33</b>	<b>207.24</b>	<b>279.74</b>	<b>9.36</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>177.14</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	5.32	6.79	6.79	6.79	6.79	23.51	25.52	25.52	23.51	28.25	29.59	29.59	57.06	109.96	109.96	109.96	109.96	109.96	54.98
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>8.76</b>	<b>10.29</b>	<b>10.29</b>	<b>6.88</b>	<b>6.88</b>	<b>23.71</b>	<b>25.77</b>	<b>25.77</b>	<b>24.76</b>	<b>28.53</b>	<b>29.87</b>	<b>29.87</b>	<b>105.10</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>102.00</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>
<b>GRAND TOTAL</b>		<b>38.00</b>	<b>58.30</b>	<b>82.05</b>	<b>41.39</b>	<b>33.42</b>	<b>67.08</b>	<b>268.32</b>	<b>117.13</b>	<b>83.10</b>	<b>79.36</b>	<b>95.64</b>	<b>150.35</b>	<b>392.83</b>	<b>517.50</b>	<b>540.72</b>	<b>540.46</b>	<b>417.60</b>	<b>497.23</b>	<b>121.24</b>
<b>Yolo County Total</b>		<b>33.87</b>	<b>52.02</b>	<b>76.19</b>	<b>31.10</b>	<b>27.48</b>	<b>43.37</b>	<b>91.18</b>	<b>116.13</b>	<b>73.84</b>	<b>77.53</b>	<b>93.82</b>	<b>143.80</b>	<b>383.54</b>	<b>514.42</b>	<b>537.31</b>	<b>538.03</b>	<b>416.54</b>	<b>496.17</b>	<b>118.81</b>
<b>Sutter County Total</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>177.14</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>

**Table L1-53. NOx Detailed Summary (Alternative 1) - N**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1.55	3.63	7.69	7.69	7.69	6.80	3.78	18.73	2.08	3.36
	Construction Worker Commuting	0.03	0.05	0.30	0.30	0.30	0.30	0.23	0.61	0.05	0.03
	Haul Trucks	--	0.03	--	--	--	--	--	17.87	0.82	2.12
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.58</b>	<b>3.71</b>	<b>7.99</b>	<b>7.99</b>	<b>7.99</b>	<b>7.09</b>	<b>4.01</b>	<b>37.21</b>	<b>2.95</b>	<b>5.51</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	0.17
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.16</b>	<b>2.95</b>	<b>0.27</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.96	0.96	2.08	13.08	2.08	--	--	--	--	2.47
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>1.00</b>	<b>1.00</b>	<b>5.15</b>	<b>27.16</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.09</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	0.14
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>5.58</b>	<b>4.71</b>	<b>35.31</b>	<b>37.57</b>	<b>10.42</b>	<b>7.09</b>	<b>4.01</b>	<b>64.37</b>	<b>5.90</b>	<b>10.08</b>
<b>Yolo County Total</b>		<b>5.58</b>	<b>4.71</b>	<b>35.31</b>	<b>37.57</b>	<b>10.42</b>	<b>7.09</b>	<b>4.01</b>	<b>37.21</b>	<b>2.95</b>	<b>9.82</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.16</b>	<b>2.95</b>	<b>0.27</b>

**Table L1-54. NOx Detailed Summary (Alternative 2) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	7.40	26.47	28.56	22.87	30.98	26.88	93.76	75.86	75.86	74.11	56.52	119.46	241.72	233.77	228.75	234.62	225.57	224.41	181.72
	Construction Worker Commuting	0.71	0.39	0.90	0.36	0.51	0.42	1.02	0.89	0.89	0.82	0.57	0.73	1.58	1.45	1.39	1.47	1.26	1.24	1.23
	Haul Trucks	11.25	7.48	11.39	--	3.19	--	1.79	--	--	--	--	93.80	215.57	215.57	215.17	213.54	208.81	206.09	158.15
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>19.37</b>	<b>34.34</b>	<b>40.85</b>	<b>23.22</b>	<b>34.68</b>	<b>27.30</b>	<b>96.58</b>	<b>76.75</b>	<b>76.75</b>	<b>74.92</b>	<b>57.09</b>	<b>213.99</b>	<b>458.88</b>	<b>450.79</b>	<b>445.31</b>	<b>449.63</b>	<b>435.64</b>	<b>431.74</b>	<b>341.11</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>177.14</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	5.32	6.79	6.79	6.79	6.79	23.51	25.52	25.52	23.51	28.25	29.59	29.59	57.06	109.96	109.96	109.96	109.96	109.96	54.98
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>8.76</b>	<b>10.29</b>	<b>10.29</b>	<b>6.88</b>	<b>6.88</b>	<b>23.71</b>	<b>25.77</b>	<b>25.77</b>	<b>24.76</b>	<b>28.53</b>	<b>29.87</b>	<b>29.87</b>	<b>105.10</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>102.00</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	1.09	1.63	2.12	3.26	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	7.73	6.72	73.62	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19
	Construction Worker Commuting	--	--	0.15	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Haul Trucks	2.45	0.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	48.89	--	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45
<b>River Grading Site Subtotal</b>		<b>59.06</b>	<b>7.58</b>	<b>98.22</b>	<b>81.83</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>
<b>GRAND TOTAL</b>		<b>98.76</b>	<b>66.03</b>	<b>178.93</b>	<b>123.23</b>	<b>130.29</b>	<b>158.71</b>	<b>383.92</b>	<b>232.79</b>	<b>195.21</b>	<b>191.47</b>	<b>195.86</b>	<b>337.97</b>	<b>658.06</b>	<b>742.63</b>	<b>739.59</b>	<b>747.55</b>	<b>727.80</b>	<b>731.03</b>	<b>534.79</b>
<b>Yolo County Total</b>		<b>94.63</b>	<b>59.75</b>	<b>173.07</b>	<b>112.93</b>	<b>124.35</b>	<b>134.99</b>	<b>206.78</b>	<b>231.79</b>	<b>185.95</b>	<b>189.64</b>	<b>194.04</b>	<b>331.42</b>	<b>648.77</b>	<b>739.55</b>	<b>736.18</b>	<b>745.12</b>	<b>726.74</b>	<b>729.97</b>	<b>532.35</b>
<b>Sutter County Total</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>177.14</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>



**Table L1-54. NOx Detailed Summary (Alternative 2) - M**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	113.59	5.71	3.71	7.49	7.49	6.59	6.59	17.25	2.08	6.17
	Construction Worker Commuting	0.65	0.59	0.19	0.30	0.30	0.30	0.30	0.61	0.05	0.05
	Haul Trucks	113.93	9.13	--	--	--	--	--	18.33	0.82	4.31
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>228.17</b>	<b>15.43</b>	<b>3.91</b>	<b>7.78</b>	<b>7.78</b>	<b>6.89</b>	<b>6.89</b>	<b>36.19</b>	<b>2.95</b>	<b>10.53</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	0.17
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.16</b>	<b>2.95</b>	<b>0.27</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.96	0.96	2.08	13.08	2.08	--	--	--	--	2.47
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>1.00</b>	<b>1.00</b>	<b>5.15</b>	<b>27.16</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.09</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	0.14
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	57.19	73.70	0.09	0.09	--	7.73	--	--	--	0.71
	Construction Worker Commuting	0.15	0.44	0.29	0.33	0.04	--	--	--	--	0.01
	Haul Trucks	--	46.28	46.28	46.28	--	2.45	--	--	--	0.42
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	24.45	24.45	--	--	--	--	--	--	--	0.60
<b>River Grading Site Subtotal</b>		<b>81.79</b>	<b>144.87</b>	<b>46.65</b>	<b>46.69</b>	<b>0.04</b>	<b>10.17</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.74</b>
<b>GRAND TOTAL</b>		<b>313.97</b>	<b>161.30</b>	<b>77.89</b>	<b>84.06</b>	<b>10.25</b>	<b>17.06</b>	<b>6.89</b>	<b>63.34</b>	<b>5.90</b>	<b>16.84</b>
<b>Yolo County Total</b>		<b>313.97</b>	<b>161.30</b>	<b>77.89</b>	<b>84.06</b>	<b>10.25</b>	<b>17.06</b>	<b>6.89</b>	<b>36.19</b>	<b>2.95</b>	<b>16.57</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.16</b>	<b>2.95</b>	<b>0.27</b>

**Table L1-55. NOx Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	7.40	26.47	28.56	22.87	30.98	26.88	93.76	77.87	77.87	76.12	76.12	184.07	196.37	298.38	228.75	234.62	225.57	224.41	291.69
	Construction Worker Commuting	0.71	0.39	0.90	0.36	0.51	0.42	1.02	0.93	0.93	0.86	0.86	1.39	1.66	2.10	1.39	1.47	1.26	1.24	1.81
	Haul Trucks	11.25	7.39	11.30	--	3.26	--	1.79	--	--	--	--	94.31	103.61	196.67	196.44	194.81	190.09	187.37	239.45
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>19.37</b>	<b>34.25</b>	<b>40.76</b>	<b>23.22</b>	<b>34.75</b>	<b>27.30</b>	<b>96.58</b>	<b>78.80</b>	<b>78.80</b>	<b>76.98</b>	<b>76.98</b>	<b>279.76</b>	<b>301.64</b>	<b>497.15</b>	<b>426.58</b>	<b>430.90</b>	<b>416.92</b>	<b>413.02</b>	<b>532.94</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	65.07	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>175.60</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	5.32	6.79	6.79	6.79	6.79	23.51	25.52	25.52	23.51	28.25	29.59	29.59	57.06	109.96	109.96	109.96	109.96	109.96	54.98
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>8.76</b>	<b>10.29</b>	<b>10.29</b>	<b>6.88</b>	<b>6.88</b>	<b>23.71</b>	<b>25.77</b>	<b>25.77</b>	<b>24.76</b>	<b>28.53</b>	<b>29.87</b>	<b>29.87</b>	<b>105.10</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>102.00</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	1.09	1.63	2.12	3.26	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>
<b>GRAND TOTAL</b>		<b>39.69</b>	<b>58.36</b>	<b>80.62</b>	<b>41.39</b>	<b>48.57</b>	<b>76.92</b>	<b>300.59</b>	<b>153.05</b>	<b>115.47</b>	<b>111.73</b>	<b>133.96</b>	<b>321.95</b>	<b>419.03</b>	<b>707.19</b>	<b>639.08</b>	<b>647.03</b>	<b>627.28</b>	<b>630.52</b>	<b>644.82</b>
<b>Yolo County Total</b>		<b>39.69</b>	<b>58.36</b>	<b>80.62</b>	<b>41.39</b>	<b>48.57</b>	<b>76.92</b>	<b>300.59</b>	<b>153.05</b>	<b>115.47</b>	<b>111.73</b>	<b>133.96</b>	<b>321.95</b>	<b>419.03</b>	<b>707.19</b>	<b>639.08</b>	<b>647.03</b>	<b>627.28</b>	<b>630.52</b>	<b>644.82</b>
<b>Sutter County Total</b>		<b>19.37</b>	<b>34.25</b>	<b>40.76</b>	<b>23.22</b>	<b>34.75</b>	<b>27.30</b>	<b>96.58</b>	<b>78.80</b>	<b>78.80</b>	<b>76.98</b>	<b>76.98</b>	<b>279.76</b>	<b>301.64</b>	<b>497.15</b>	<b>426.58</b>	<b>430.90</b>	<b>416.92</b>	<b>413.02</b>	<b>532.94</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

532.94

**Table L1-55. NOx Detailed Summary (Alternative 3) - N**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	225.64	113.59	113.68	7.49	7.49	6.59	6.59	17.25	2.08	8.33
	Construction Worker Commuting	1.76	0.62	0.77	0.30	0.30	0.30	0.30	0.61	0.05	0.07
	Haul Trucks	197.64	93.55	93.06	--	--	--	--	18.40	0.82	5.25
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>425.04</b>	<b>207.76</b>	<b>207.50</b>	<b>7.78</b>	<b>7.78</b>	<b>6.89</b>	<b>6.89</b>	<b>36.26</b>	<b>2.95</b>	<b>13.64</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	0.22
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.09</b>	<b>2.95</b>	<b>0.34</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.96	0.96	2.08	13.08	2.08	--	--	--	--	2.47
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>1.00</b>	<b>1.00</b>	<b>5.15</b>	<b>27.16</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.09</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	0.14
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>429.05</b>	<b>208.76</b>	<b>234.83</b>	<b>37.37</b>	<b>10.21</b>	<b>6.89</b>	<b>6.89</b>	<b>63.34</b>	<b>5.90</b>	<b>18.29</b>
<b>Yolo County Total</b>		<b>429.05</b>	<b>208.76</b>	<b>234.83</b>	<b>37.37</b>	<b>10.21</b>	<b>6.89</b>	<b>6.89</b>	<b>63.34</b>	<b>5.90</b>	<b>18.29</b>
<b>Sutter County Total</b>		<b>425.04</b>	<b>207.76</b>	<b>207.50</b>	<b>7.78</b>	<b>7.78</b>	<b>6.89</b>	<b>6.89</b>	<b>36.26</b>	<b>2.95</b>	<b>13.64</b>

Note: Construction of the intake channel, headworks, and outlet channel would

Table L1-56. NOx Detailed Summary (Alternative 4) - Mitigated

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	7.40	26.47	28.56	22.87	30.98	26.88	93.76	77.87	77.87	76.12	76.12	184.07	196.37	298.38	228.75	234.62	225.57	224.41	291.69
	Construction Worker Commuting	0.71	0.39	0.90	0.36	0.51	0.42	1.02	0.93	0.93	0.86	0.86	1.39	1.66	2.10	1.39	1.47	1.26	1.24	1.81
	Haul Trucks	11.25	7.39	11.30	--	3.26	--	1.79	--	--	--	--	94.31	103.61	196.67	196.44	194.81	190.09	187.37	239.45
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>19.37</b>	<b>34.25</b>	<b>40.76</b>	<b>23.22</b>	<b>34.75</b>	<b>27.30</b>	<b>96.58</b>	<b>78.80</b>	<b>78.80</b>	<b>76.98</b>	<b>76.98</b>	<b>279.76</b>	<b>301.64</b>	<b>497.15</b>	<b>426.58</b>	<b>430.90</b>	<b>416.92</b>	<b>413.02</b>	<b>532.94</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	65.07	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>175.60</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	5.32	6.79	6.79	6.79	6.79	23.51	25.52	25.52	23.51	28.25	29.59	29.59	57.06	109.96	109.96	109.96	109.96	109.96	54.98
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>8.76</b>	<b>10.29</b>	<b>10.29</b>	<b>6.88</b>	<b>6.88</b>	<b>23.71</b>	<b>25.77</b>	<b>25.77</b>	<b>24.76</b>	<b>28.53</b>	<b>29.87</b>	<b>29.87</b>	<b>105.10</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>102.00</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	1.09	1.63	2.12	3.26	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	7.40	14.33	16.46	17.44	23.62	40.95	84.60	60.76	60.55	84.06	6.38	6.23	4.46	4.14	4.56	6.65	5.58	3.10	1.02
	Construction Worker Commuting	0.27	0.19	0.24	0.27	0.45	0.47	0.66	0.44	0.40	0.60	0.19	0.23	0.09	0.11	0.09	0.11	0.13	0.13	0.04
	Haul Trucks	4.40	2.64	3.45	102.95	107.24	102.95	104.74	102.95	102.95	133.88	0.82	5.27	--	3.80	--	0.33	--	2.12	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>12.07</b>	<b>17.16</b>	<b>20.16</b>	<b>120.65</b>	<b>131.31</b>	<b>144.36</b>	<b>190.01</b>	<b>164.14</b>	<b>163.90</b>	<b>218.55</b>	<b>7.39</b>	<b>11.73</b>	<b>4.55</b>	<b>8.06</b>	<b>4.66</b>	<b>7.09</b>	<b>5.72</b>	<b>5.36</b>	<b>1.06</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	7.43	21.12	23.24	25.14	23.62	40.95	145.45	121.60	121.40	144.91	123.15	118.13	118.45	118.13	118.55	120.64	119.57	117.09	115.01
	Construction Worker Commuting	0.31	0.29	0.34	0.37	0.45	0.47	1.03	0.81	0.77	0.97	0.84	0.77	0.74	0.77	0.74	0.77	0.79	0.79	0.69
	Haul Trucks	5.38	6.73	7.55	143.94	148.23	143.94	145.73	143.94	143.94	245.14	245.14	248.13	245.14	248.95	245.14	245.47	245.14	247.26	245.14
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>13.11</b>	<b>28.13</b>	<b>31.13</b>	<b>169.45</b>	<b>172.30</b>	<b>185.35</b>	<b>292.21</b>	<b>266.35</b>	<b>266.10</b>	<b>391.02</b>	<b>369.13</b>	<b>367.03</b>	<b>364.34</b>	<b>367.84</b>	<b>364.44</b>	<b>366.87</b>	<b>365.50</b>	<b>365.14</b>	<b>360.84</b>
<b>GRAND TOTAL</b>		<b>64.88</b>	<b>103.65</b>	<b>131.90</b>	<b>331.49</b>	<b>352.18</b>	<b>406.63</b>	<b>782.81</b>	<b>583.54</b>	<b>545.48</b>	<b>721.30</b>	<b>510.48</b>	<b>700.71</b>	<b>787.92</b>	<b>1083.10</b>	<b>1008.17</b>	<b>1020.99</b>	<b>998.50</b>	<b>1001.01</b>	<b>1006.72</b>
<b>Yolo County Total</b>		<b>64.88</b>	<b>103.65</b>	<b>131.90</b>	<b>331.49</b>	<b>352.18</b>	<b>406.63</b>	<b>782.81</b>	<b>583.54</b>	<b>545.48</b>	<b>721.30</b>	<b>510.48</b>	<b>700.71</b>	<b>787.92</b>	<b>1083.10</b>	<b>1008.17</b>	<b>1020.99</b>	<b>998.50</b>	<b>1001.01</b>	<b>1006.72</b>
<b>Sutter County Total</b>		<b>19.37</b>	<b>34.25</b>	<b>40.76</b>	<b>23.22</b>	<b>34.75</b>	<b>27.30</b>	<b>96.58</b>	<b>78.80</b>	<b>78.80</b>	<b>76.98</b>	<b>76.98</b>	<b>279.76</b>	<b>301.64</b>	<b>497.15</b>	<b>426.58</b>	<b>430.90</b>	<b>416.92</b>	<b>413.02</b>	<b>532.94</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

532.94

**Table L1-56. NOx Detailed Summary (Alternative 4) - N**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	225.64	113.59	113.68	7.69	7.69	6.80	6.80	17.25	2.08	8.33
	Construction Worker Commuting	1.76	0.62	0.77	0.30	0.30	0.30	0.30	0.61	0.05	0.07
	Haul Trucks	197.64	93.55	93.06	--	--	--	--	18.40	0.82	5.25
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>425.04</b>	<b>207.76</b>	<b>207.50</b>	<b>7.99</b>	<b>7.99</b>	<b>7.09</b>	<b>7.09</b>	<b>36.26</b>	<b>2.95</b>	<b>13.64</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	0.22
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.09</b>	<b>2.95</b>	<b>0.34</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.96	0.96	2.08	13.08	2.08	--	--	--	--	2.47
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>1.00</b>	<b>1.00</b>	<b>5.15</b>	<b>27.16</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.09</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	0.14
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	1.08	1.08	15.16	2.08	--	--	--	--	--	1.47
	Construction Worker Commuting	0.08	0.08	0.10	0.02	--	--	--	--	--	0.01
	Haul Trucks	--	--	16.61	0.33	--	--	--	--	--	2.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>1.17</b>	<b>1.17</b>	<b>31.87</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.34</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	6.07	7.20	17.29	2.11	--	--	--	--	--	4.88
	Construction Worker Commuting	0.20	0.33	0.15	0.02	--	--	--	--	--	0.04
	Haul Trucks	143.94	147.20	18.16	0.33	--	--	--	--	--	10.61
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>150.22</b>	<b>154.72</b>	<b>35.61</b>	<b>2.45</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>15.52</b>
<b>GRAND TOTAL</b>		<b>580.43</b>	<b>364.65</b>	<b>302.31</b>	<b>42.46</b>	<b>10.42</b>	<b>7.09</b>	<b>7.09</b>	<b>63.34</b>	<b>5.90</b>	<b>38.15</b>
<b>Yolo County Total</b>		<b>580.43</b>	<b>364.65</b>	<b>302.31</b>	<b>42.46</b>	<b>10.42</b>	<b>7.09</b>	<b>7.09</b>	<b>63.34</b>	<b>5.90</b>	<b>38.15</b>
<b>Sutter County Total</b>		<b>425.04</b>	<b>207.76</b>	<b>207.50</b>	<b>7.99</b>	<b>7.99</b>	<b>7.09</b>	<b>7.09</b>	<b>36.26</b>	<b>2.95</b>	<b>13.64</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-57. NOx Detailed Summary (Alternative 5) - Mitigated**

#	Activity																				Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
<b>Intake Channel, Headworks, and Outlet Channel</b>																					
1	Offroad Construction Equipment Exhaust	23.48	91.48	84.33	187.02	241.99	218.48	183.58	348.52	386.13	360.54	356.25	334.14	384.05	360.54	355.29	356.03	356.03	193.17	10.46	
	Construction Worker Commuting	1.51	1.33	1.87	1.22	2.06	1.86	1.21	2.07	2.65	2.36	2.18	1.86	2.56	2.36	2.14	2.30	2.30	1.48	0.20	
	Haul Trucks	28.06	10.29	9.80	--	3.19	3.19	3.19	169.04	332.45	330.65	330.65	330.65	330.65	330.65	330.65	350.01	350.01	185.78	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>53.05</b>	<b>103.10</b>	<b>96.00</b>	<b>188.24</b>	<b>247.24</b>	<b>223.53</b>	<b>187.98</b>	<b>519.63</b>	<b>721.23</b>	<b>693.55</b>	<b>689.08</b>	<b>666.65</b>	<b>717.26</b>	<b>693.55</b>	<b>688.08</b>	<b>708.33</b>	<b>708.33</b>	<b>380.43</b>	<b>10.66</b>	
<b>Supplemental Fish Passage West</b>																					
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08	
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02	
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	66.60	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Supplemental Fish Passage West Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>177.14</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>	
<b>Agricultural Crossing 1</b>																					
3	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10	
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09	
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	--	1.09	1.63	2.12	3.26	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>	
<b>River Grading Site</b>																					
4	Offroad Construction Equipment Exhaust	7.73	6.72	73.62	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	57.19	
	Construction Worker Commuting	--	--	0.15	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
	Haul Trucks	2.45	0.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Marine Equipment Exhaust	48.89	--	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	24.45	
<b>River Grading Site Subtotal</b>		<b>59.06</b>	<b>7.58</b>	<b>98.22</b>	<b>81.83</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	<b>81.79</b>	
<b>GRAND TOTAL</b>		<b>123.67</b>	<b>124.49</b>	<b>223.78</b>	<b>281.37</b>	<b>335.97</b>	<b>331.22</b>	<b>449.55</b>	<b>649.90</b>	<b>814.93</b>	<b>781.56</b>	<b>797.99</b>	<b>760.75</b>	<b>811.35</b>	<b>781.42</b>	<b>778.41</b>	<b>802.29</b>	<b>796.52</b>	<b>475.76</b>	<b>102.33</b>	
Yolo County Total		119.54	118.21	217.93	271.07	330.03	307.50	272.42	648.91	805.67	779.73	796.16	754.21	802.06	778.34	775.00	799.86	795.46	474.70	99.90	
Sutter County Total		4.13	6.28	5.85	10.29	5.94	23.71	177.14	1.00	9.26	1.83	1.82	6.55	9.29	3.08	3.41	2.43	1.06	1.06	2.43	

Table L1-57. NOx Detailed Summary (Alternative 5) - M

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	5.65	4.48	4.48	30.31	26.14	2.08	15.16	0.00	0.00	4.17	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.47	15.53
	Construction Worker Commuting	0.12	0.10	0.10	1.59	0.58	1.05	0.13	0.00	0.00	0.04	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.48
	Haul Trucks	1.63	--	--	42.99	19.35	7.34	15.72	--	--	7.82	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>7.40</b>	<b>4.58</b>	<b>4.58</b>	<b>74.89</b>	<b>46.08</b>	<b>10.47</b>	<b>31.02</b>	<b>--</b>	<b>--</b>	<b>12.03</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>16.01</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	13.99	0.82	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.16</b>	<b>2.95</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	57.19	73.70	0.09	0.09	--	7.73	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.15	0.44	0.29	0.33	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	46.28	46.28	46.28	--	2.45	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	24.45	24.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>81.79</b>	<b>144.87</b>	<b>46.65</b>	<b>46.69</b>	<b>0.04</b>	<b>10.17</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>92.20</b>	<b>149.45</b>	<b>73.41</b>	<b>124.02</b>	<b>46.12</b>	<b>20.64</b>	<b>31.02</b>	<b>27.16</b>	<b>2.95</b>	<b>12.03</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>15.90</b>	<b>16.01</b>
Yolo County Total		92.20	149.45	73.41	124.02	46.12	20.64	31.02	--	--	12.03	15.90	15.90	15.90	15.90	15.90	15.90	15.90	15.90	16.01
Sutter County Total		--	--	--	--	--	--	--	27.16	2.95	--	--	--	--	--	--	--	--	--	--

**Table L1-57. NOx Detailed Summary (Alternative 5) - M**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	3.78	4.17	0.00	18.50	18.08	0.42
	Construction Worker Commuting	0.23	0.04	0.00	0.11	0.10	0.01
	Haul Trucks	--	7.82	--	8.53	8.53	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.01</b>	<b>12.03</b>	<b>--</b>	<b>27.14</b>	<b>26.71</b>	<b>0.44</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.17	0.17	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.08	0.08	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.27</b>	<b>0.27</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.14	0.14	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.08	0.08	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>	<b>0.22</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.71	0.71	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.42	0.42	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
	Marine Equipment Exhaust	--	--	--	0.60	0.60	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>1.74</b>	<b>1.74</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>4.01</b>	<b>12.03</b>	<b>--</b>	<b>29.36</b>	<b>28.93</b>	<b>0.44</b>
Yolo County Total		4.01	12.03	--	29.10	28.66	0.44
Sutter County Total		--	--	--	0.27	0.27	--



**Table L1-58. NOx Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	7.40	40.70	42.12	31.40	60.15	56.05	54.71	50.61	48.86	61.16	492.69	492.69	487.67	493.54	489.69	483.33	495.63	494.78	482.48
	Construction Worker Commuting	0.98	1.37	0.72	0.52	0.75	0.66	0.96	0.83	0.75	1.03	3.24	3.24	3.18	3.26	3.22	3.04	3.32	3.29	2.99
	Haul Trucks	15.49	17.48	11.45	9.80	3.26	--	1.79	--	--	9.74	339.87	339.87	339.15	337.52	340.24	330.14	339.87	341.50	330.62
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>23.87</b>	<b>59.55</b>	<b>54.29</b>	<b>41.72</b>	<b>64.17</b>	<b>56.71</b>	<b>57.46</b>	<b>51.43</b>	<b>49.61</b>	<b>71.92</b>	<b>835.81</b>	<b>835.81</b>	<b>830.00</b>	<b>834.33</b>	<b>833.15</b>	<b>816.50</b>	<b>838.82</b>	<b>839.57</b>	<b>816.09</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	3.24	5.36	2.08	6.79	5.86	23.51	109.96	0.96	4.17	1.75	1.75	4.10	5.62	3.02	2.08	2.08	1.02	1.02	2.08
	Construction Worker Commuting	0.08	0.10	0.18	0.09	0.08	0.20	0.57	0.04	0.37	0.08	0.07	0.09	0.14	0.06	0.18	0.02	0.04	0.04	0.02
	Haul Trucks	0.82	0.82	3.59	3.42	--	--	65.07	--	4.73	--	--	2.35	3.53	--	1.14	0.33	--	--	0.33
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>4.13</b>	<b>6.28</b>	<b>5.85</b>	<b>10.29</b>	<b>5.94</b>	<b>23.71</b>	<b>175.60</b>	<b>1.00</b>	<b>9.26</b>	<b>1.83</b>	<b>1.82</b>	<b>6.55</b>	<b>9.29</b>	<b>3.08</b>	<b>3.41</b>	<b>2.43</b>	<b>1.06</b>	<b>1.06</b>	<b>2.43</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	5.32	6.79	6.79	6.79	6.79	23.51	25.52	25.52	23.51	28.25	29.59	29.59	57.06	109.96	109.96	109.96	109.96	109.96	54.98
	Construction Worker Commuting	0.18	0.09	0.09	0.09	0.09	0.20	0.24	0.24	0.28	0.29	0.29	0.29	0.36	0.57	0.57	0.57	0.57	0.57	0.29
	Haul Trucks	3.26	3.42	3.42	--	--	--	--	--	0.98	--	--	--	47.68	93.43	93.43	93.43	93.43	93.43	46.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>8.76</b>	<b>10.29</b>	<b>10.29</b>	<b>6.88</b>	<b>6.88</b>	<b>23.71</b>	<b>25.77</b>	<b>25.77</b>	<b>24.76</b>	<b>28.53</b>	<b>29.87</b>	<b>29.87</b>	<b>105.10</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>203.96</b>	<b>102.00</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	5.32	4.88	23.51	0.96	0.96	2.08	2.13	2.01	2.13	2.08	25.06	5.65	2.91	2.91	5.00	8.44	3.63	10.04	4.10
	Construction Worker Commuting	0.15	0.09	0.20	0.04	0.04	0.10	0.03	0.04	0.03	0.18	0.23	0.12	0.09	0.09	0.12	0.21	0.08	0.32	0.09
	Haul Trucks	1.96	2.56	--	--	--	--	0.49	45.43	0.49	2.12	--	--	--	--	1.09	1.63	2.12	3.26	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>7.43</b>	<b>7.53</b>	<b>23.71</b>	<b>1.00</b>	<b>1.00</b>	<b>2.19</b>	<b>2.65</b>	<b>47.48</b>	<b>2.65</b>	<b>4.39</b>	<b>25.29</b>	<b>5.77</b>	<b>3.00</b>	<b>3.00</b>	<b>5.12</b>	<b>9.74</b>	<b>5.34</b>	<b>12.47</b>	<b>7.45</b>
<b>GRAND TOTAL</b>		<b>44.20</b>	<b>83.66</b>	<b>94.15</b>	<b>59.89</b>	<b>77.99</b>	<b>106.33</b>	<b>261.47</b>	<b>125.68</b>	<b>86.29</b>	<b>106.68</b>	<b>892.79</b>	<b>877.99</b>	<b>947.40</b>	<b>1044.37</b>	<b>1045.64</b>	<b>1032.64</b>	<b>1049.18</b>	<b>1057.07</b>	<b>927.97</b>
<b>Yolo County Total</b>		<b>44.20</b>	<b>83.66</b>	<b>94.15</b>	<b>59.89</b>	<b>77.99</b>	<b>106.33</b>	<b>261.47</b>	<b>125.68</b>	<b>86.29</b>	<b>106.68</b>	<b>892.79</b>	<b>877.99</b>	<b>947.40</b>	<b>1044.37</b>	<b>1045.64</b>	<b>1032.64</b>	<b>1049.18</b>	<b>1057.07</b>	<b>927.97</b>
<b>Sutter County Total</b>		<b>23.87</b>	<b>59.55</b>	<b>54.29</b>	<b>41.72</b>	<b>64.17</b>	<b>56.71</b>	<b>57.46</b>	<b>51.43</b>	<b>49.61</b>	<b>71.92</b>	<b>835.81</b>	<b>835.81</b>	<b>830.00</b>	<b>834.33</b>	<b>833.15</b>	<b>816.50</b>	<b>838.82</b>	<b>839.57</b>	<b>816.09</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-58. NOx Detailed Summary (Alternative 6) - N**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	537.54	514.09	223.64	230.63	12.79	9.82	9.82	16.80	6.25	19.05
	Construction Worker Commuting	3.42	3.09	1.34	1.50	1.13	0.36	0.36	0.28	0.89	0.14
	Haul Trucks	375.48	375.48	188.53	188.53	12.39	--	--	13.99	7.82	12.73
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>916.44</b>	<b>892.66</b>	<b>413.50</b>	<b>420.66</b>	<b>26.32</b>	<b>10.17</b>	<b>10.17</b>	<b>31.06</b>	<b>14.97</b>	<b>31.92</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	13.08	2.08	0.22
	Construction Worker Commuting	--	--	--	--	--	--	--	0.08	0.05	0.01
	Haul Trucks	--	--	--	--	--	--	--	13.93	0.82	0.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>27.09</b>	<b>2.95</b>	<b>0.34</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.96	0.96	2.08	13.08	2.08	--	--	--	--	2.47
	Construction Worker Commuting	0.04	0.04	0.13	0.08	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	2.93	13.99	0.33	--	--	--	--	1.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>1.00</b>	<b>1.00</b>	<b>5.15</b>	<b>27.16</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.09</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	2.94	--	15.16	2.08	--	--	--	--	--	0.14
	Construction Worker Commuting	0.07	--	0.13	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	6.88	0.33	--	--	--	--	--	0.08
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>3.01</b>	<b>--</b>	<b>22.18</b>	<b>2.43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>920.44</b>	<b>893.66</b>	<b>440.83</b>	<b>450.25</b>	<b>28.75</b>	<b>10.17</b>	<b>10.17</b>	<b>58.15</b>	<b>17.92</b>	<b>36.56</b>
<b>Yolo County Total</b>		<b>920.44</b>	<b>893.66</b>	<b>440.83</b>	<b>450.25</b>	<b>28.75</b>	<b>10.17</b>	<b>10.17</b>	<b>58.15</b>	<b>17.92</b>	<b>36.56</b>
<b>Sutter County Total</b>		<b>916.44</b>	<b>892.66</b>	<b>413.50</b>	<b>420.66</b>	<b>26.32</b>	<b>10.17</b>	<b>10.17</b>	<b>31.06</b>	<b>14.97</b>	<b>31.92</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-59. CO Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	12.79	102.66	110.17	93.21	67.42	70.54	100.26	85.80	101.72	97.22	68.88	69.71	67.65	78.37	99.27	83.70	55.87	71.71	8.17
	Construction Worker Commuting	4.92	3.90	9.03	3.59	3.49	2.97	6.57	5.95	6.05	5.33	4.51	7.18	8.82	9.44	11.90	11.49	6.77	9.34	3.49
	Haul Trucks	2.06	1.55	2.37	--	--	--	0.76	0.12	--	--	--	12.87	31.78	29.08	31.08	31.08	19.42	32.24	1.13
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>19.78</b>	<b>108.10</b>	<b>121.57</b>	<b>96.80</b>	<b>70.90</b>	<b>73.52</b>	<b>107.59</b>	<b>91.87</b>	<b>107.77</b>	<b>102.56</b>	<b>73.40</b>	<b>89.76</b>	<b>108.26</b>	<b>116.89</b>	<b>142.24</b>	<b>126.27</b>	<b>82.06</b>	<b>113.28</b>	<b>12.79</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.59</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	8.74	29.86	29.86	29.86	29.86	27.52	36.23	36.23	27.52	35.68	43.52	43.52	27.46	46.80	46.80	46.80	46.80	46.80	23.40
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>11.27</b>	<b>31.50</b>	<b>31.50</b>	<b>30.78</b>	<b>30.78</b>	<b>29.57</b>	<b>38.69</b>	<b>38.69</b>	<b>30.50</b>	<b>38.55</b>	<b>46.39</b>	<b>46.39</b>	<b>41.10</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>36.12</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>GRAND TOTAL</b>		<b>47.41</b>	<b>183.31</b>	<b>189.30</b>	<b>163.64</b>	<b>135.41</b>	<b>137.75</b>	<b>217.77</b>	<b>153.83</b>	<b>155.97</b>	<b>152.77</b>	<b>159.00</b>	<b>154.07</b>	<b>167.53</b>	<b>203.85</b>	<b>227.85</b>	<b>218.48</b>	<b>168.36</b>	<b>219.07</b>	<b>60.44</b>
<b>Yolo County Total</b>		<b>41.74</b>	<b>168.17</b>	<b>182.64</b>	<b>132.15</b>	<b>106.25</b>	<b>108.18</b>	<b>151.18</b>	<b>149.26</b>	<b>143.17</b>	<b>147.46</b>	<b>153.79</b>	<b>147.07</b>	<b>158.51</b>	<b>198.29</b>	<b>221.71</b>	<b>214.15</b>	<b>163.64</b>	<b>214.35</b>	<b>56.11</b>
<b>Sutter County Total</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.59</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>

**Table L1-59. CO Detailed Summary (Alternative 1) - Mi**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	4.12	8.17	23.15	23.15	23.15	19.66	14.71	17.00	4.06	4.09
	Construction Worker Commuting	0.31	0.51	2.97	2.97	2.97	2.97	2.36	6.16	0.51	0.34
	Haul Trucks	--	0.01	--	--	--	--	--	3.77	0.17	0.45
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.42</b>	<b>8.69</b>	<b>26.13</b>	<b>26.13</b>	<b>26.13</b>	<b>22.63</b>	<b>17.07</b>	<b>26.92</b>	<b>4.74</b>	<b>4.87</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	0.20
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.10
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.20</b>	<b>4.74</b>	<b>0.32</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.16	4.16	4.06	5.43	4.06	--	--	--	--	1.88
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.57</b>	<b>4.57</b>	<b>6.01</b>	<b>9.20</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.38</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	0.28
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>14.66</b>	<b>13.26</b>	<b>44.41</b>	<b>39.66</b>	<b>30.46</b>	<b>22.63</b>	<b>17.07</b>	<b>36.13</b>	<b>9.48</b>	<b>7.88</b>
<b>Yolo County Total</b>		<b>14.66</b>	<b>13.26</b>	<b>44.41</b>	<b>39.66</b>	<b>30.46</b>	<b>22.63</b>	<b>17.07</b>	<b>26.92</b>	<b>4.74</b>	<b>7.56</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.20</b>	<b>4.74</b>	<b>0.32</b>

Table L1-60. CO Detailed Summary (Alternative 2) - Mitigated

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	12.79	102.66	106.71	93.21	124.09	118.52	184.47	169.82	169.82	165.33	80.31	72.06	135.60	114.45	105.58	122.67	103.29	102.67	96.01
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	8.92	8.92	8.21	5.74	7.39	15.90	14.57	13.95	14.77	12.72	12.52	12.41
	Haul Trucks	2.37	1.58	2.40	--	0.67	--	0.38	--	--	--	--	19.77	45.45	45.45	45.36	45.02	44.02	43.45	33.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.35</b>	<b>108.13</b>	<b>118.14</b>	<b>96.80</b>	<b>129.90</b>	<b>122.72</b>	<b>195.10</b>	<b>178.74</b>	<b>178.74</b>	<b>173.53</b>	<b>86.05</b>	<b>99.22</b>	<b>196.95</b>	<b>174.47</b>	<b>164.89</b>	<b>182.46</b>	<b>160.04</b>	<b>158.63</b>	<b>141.76</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.59</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	8.74	29.86	29.86	29.86	29.86	27.52	36.23	36.23	27.52	35.68	43.52	43.52	27.46	46.80	46.80	46.80	46.80	46.80	23.40
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>11.27</b>	<b>31.50</b>	<b>31.50</b>	<b>30.78</b>	<b>30.78</b>	<b>29.57</b>	<b>38.69</b>	<b>38.69</b>	<b>30.50</b>	<b>38.55</b>	<b>46.39</b>	<b>46.39</b>	<b>41.10</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>36.12</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	16.46	33.87	47.43	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68
	Construction Worker Commuting	--	--	1.54	1.95	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
	Haul Trucks	0.52	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	46.74	--	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
<b>River Grading Site Subtotal</b>		<b>63.71</b>	<b>34.05</b>	<b>72.34</b>	<b>52.00</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>
<b>GRAND TOTAL</b>		<b>113.70</b>	<b>217.39</b>	<b>258.21</b>	<b>215.64</b>	<b>245.99</b>	<b>238.54</b>	<b>356.87</b>	<b>292.28</b>	<b>278.54</b>	<b>275.33</b>	<b>223.24</b>	<b>215.12</b>	<b>307.81</b>	<b>313.01</b>	<b>302.09</b>	<b>326.26</b>	<b>297.92</b>	<b>316.01</b>	<b>240.99</b>
<b>Yolo County Total</b>		<b>108.02</b>	<b>202.26</b>	<b>251.56</b>	<b>184.14</b>	<b>216.83</b>	<b>208.96</b>	<b>290.29</b>	<b>287.72</b>	<b>265.73</b>	<b>270.02</b>	<b>218.03</b>	<b>208.12</b>	<b>298.79</b>	<b>307.45</b>	<b>295.95</b>	<b>321.93</b>	<b>293.20</b>	<b>311.29</b>	<b>236.66</b>
<b>Sutter County Total</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.59</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>

**Table L1-60. CO Detailed Summary (Alternative 2) - Mi**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	54.97	12.23	14.05	21.99	21.99	18.50	18.50	13.54	4.06	6.42
	Construction Worker Commuting	6.57	5.95	1.95	2.97	2.97	2.97	2.97	6.16	0.51	0.52
	Haul Trucks	24.02	1.92	--	--	--	--	--	3.86	0.17	0.91
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>85.56</b>	<b>20.10</b>	<b>16.00</b>	<b>24.97</b>	<b>24.97</b>	<b>21.47</b>	<b>21.47</b>	<b>23.56</b>	<b>4.74</b>	<b>7.85</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	0.20
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.10
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.20</b>	<b>4.74</b>	<b>0.32</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.16	4.16	4.06	5.43	4.06	--	--	--	--	1.88
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.57</b>	<b>4.57</b>	<b>6.01</b>	<b>9.20</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.38</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	0.28
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	26.68	48.31	0.88	0.88	--	16.46	--	--	--	0.78
	Construction Worker Commuting	1.54	4.41	2.87	3.28	0.41	--	--	--	--	0.11
	Haul Trucks	--	9.76	9.76	9.76	--	0.52	--	--	--	0.09
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	23.37	23.37	--	--	--	--	--	--	--	3.83
<b>River Grading Site Subtotal</b>		<b>51.59</b>	<b>85.85</b>	<b>13.51</b>	<b>13.92</b>	<b>0.41</b>	<b>16.97</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.81</b>
<b>GRAND TOTAL</b>		<b>147.38</b>	<b>110.52</b>	<b>47.79</b>	<b>52.42</b>	<b>29.71</b>	<b>38.44</b>	<b>21.47</b>	<b>32.77</b>	<b>9.48</b>	<b>15.67</b>
<b>Yolo County Total</b>		<b>147.38</b>	<b>110.52</b>	<b>47.79</b>	<b>52.42</b>	<b>29.71</b>	<b>38.44</b>	<b>21.47</b>	<b>23.56</b>	<b>4.74</b>	<b>15.35</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.20</b>	<b>4.74</b>	<b>0.32</b>

**Table L1-61. CO Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	12.79	102.66	106.71	93.21	124.09	118.52	184.47	178.53	178.53	174.03	174.03	212.13	228.86	254.52	105.58	122.67	103.29	102.67	142.81
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	9.34	9.34	8.62	8.62	13.95	16.72	21.13	13.95	14.77	12.72	12.52	18.16
	Haul Trucks	2.37	1.56	2.38	--	0.69	--	0.38	--	--	--	--	19.88	21.84	41.46	41.42	41.07	40.07	39.50	50.48
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.35</b>	<b>108.11</b>	<b>118.12</b>	<b>96.80</b>	<b>129.91</b>	<b>122.72</b>	<b>195.10</b>	<b>187.86</b>	<b>187.86</b>	<b>182.65</b>	<b>182.65</b>	<b>245.96</b>	<b>267.43</b>	<b>317.11</b>	<b>160.94</b>	<b>178.51</b>	<b>156.09</b>	<b>154.69</b>	<b>211.45</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.26</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	8.74	29.86	29.86	29.86	29.86	27.52	36.23	36.23	27.52	35.68	43.52	43.52	27.46	46.80	46.80	46.80	46.80	46.80	23.40
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>11.27</b>	<b>31.50</b>	<b>31.50</b>	<b>30.78</b>	<b>30.78</b>	<b>29.57</b>	<b>38.69</b>	<b>38.69</b>	<b>30.50</b>	<b>38.55</b>	<b>46.39</b>	<b>46.39</b>	<b>41.10</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>36.12</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>GRAND TOTAL</b>		<b>49.98</b>	<b>183.32</b>	<b>185.85</b>	<b>163.64</b>	<b>194.42</b>	<b>186.95</b>	<b>304.96</b>	<b>249.82</b>	<b>236.07</b>	<b>232.86</b>	<b>268.25</b>	<b>310.27</b>	<b>326.70</b>	<b>404.07</b>	<b>246.56</b>	<b>270.73</b>	<b>242.39</b>	<b>260.48</b>	<b>259.09</b>
<b>Yolo County Total</b>		<b>49.98</b>	<b>183.32</b>	<b>185.85</b>	<b>163.64</b>	<b>194.42</b>	<b>186.95</b>	<b>304.96</b>	<b>249.82</b>	<b>236.07</b>	<b>232.86</b>	<b>268.25</b>	<b>310.27</b>	<b>326.70</b>	<b>404.07</b>	<b>246.56</b>	<b>270.73</b>	<b>242.39</b>	<b>260.48</b>	<b>259.09</b>
<b>Sutter County Total</b>		<b>22.35</b>	<b>108.11</b>	<b>118.12</b>	<b>96.80</b>	<b>129.91</b>	<b>122.72</b>	<b>195.10</b>	<b>187.86</b>	<b>187.86</b>	<b>182.65</b>	<b>182.65</b>	<b>245.96</b>	<b>267.43</b>	<b>317.11</b>	<b>160.94</b>	<b>178.51</b>	<b>156.09</b>	<b>154.69</b>	<b>211.45</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

317.11

**Table L1-61. CO Detailed Summary (Alternative 3) - Mi**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	105.83	54.97	60.85	21.99	21.99	18.50	18.50	13.54	4.06	8.64
	Construction Worker Commuting	17.75	6.26	7.69	2.97	2.97	2.97	2.97	6.16	0.51	0.66
	Haul Trucks	41.67	19.72	19.62	--	--	--	--	3.88	0.17	1.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>165.24</b>	<b>80.95</b>	<b>88.17</b>	<b>24.97</b>	<b>24.97</b>	<b>21.47</b>	<b>21.47</b>	<b>23.58</b>	<b>4.74</b>	<b>10.41</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	0.26
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.19</b>	<b>4.74</b>	<b>0.40</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.16	4.16	4.06	5.43	4.06	--	--	--	--	1.88
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.57</b>	<b>4.57</b>	<b>6.01</b>	<b>9.20</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.38</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	0.28
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>175.48</b>	<b>85.52</b>	<b>106.45</b>	<b>38.50</b>	<b>29.30</b>	<b>21.47</b>	<b>21.47</b>	<b>32.77</b>	<b>9.48</b>	<b>13.50</b>
<b>Yolo County Total</b>		<b>175.48</b>	<b>85.52</b>	<b>106.45</b>	<b>38.50</b>	<b>29.30</b>	<b>21.47</b>	<b>21.47</b>	<b>32.77</b>	<b>9.48</b>	<b>13.50</b>
<b>Sutter County Total</b>		<b>165.24</b>	<b>80.95</b>	<b>88.17</b>	<b>24.97</b>	<b>24.97</b>	<b>21.47</b>	<b>21.47</b>	<b>23.58</b>	<b>4.74</b>	<b>10.41</b>

Note: Construction of the intake channel, headworks, and outlet channel would



**Table L1-62. CO Detailed Summary (Alternative 4) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	12.79	102.66	106.71	93.21	124.09	118.52	184.47	178.53	178.53	174.03	174.03	212.13	228.86	254.52	105.58	122.67	103.29	102.67	142.81
	Construction Worker Commuting	7.18	3.90	9.03	3.59	5.13	4.21	10.26	9.34	9.34	8.62	8.62	13.95	16.72	21.13	13.95	14.77	12.72	12.52	18.16
	Haul Trucks	2.37	1.56	2.38	--	0.69	--	0.38	--	--	--	--	19.88	21.84	41.46	41.42	41.07	40.07	39.50	50.48
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>22.35</b>	<b>108.11</b>	<b>118.12</b>	<b>96.80</b>	<b>129.91</b>	<b>122.72</b>	<b>195.10</b>	<b>187.86</b>	<b>187.86</b>	<b>182.65</b>	<b>182.65</b>	<b>245.96</b>	<b>267.43</b>	<b>317.11</b>	<b>160.94</b>	<b>178.51</b>	<b>156.09</b>	<b>154.69</b>	<b>211.45</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.26</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	8.74	29.86	29.86	29.86	29.86	27.52	36.23	36.23	27.52	35.68	43.52	43.52	27.46	46.80	46.80	46.80	46.80	46.80	23.40
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>11.27</b>	<b>31.50</b>	<b>31.50</b>	<b>30.78</b>	<b>30.78</b>	<b>29.57</b>	<b>38.69</b>	<b>38.69</b>	<b>30.50</b>	<b>38.55</b>	<b>46.39</b>	<b>46.39</b>	<b>41.10</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>36.12</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	0.23	0.34	0.45	0.69	
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	12.79	58.86	63.36	74.76	84.40	102.28	72.39	45.31	44.93	72.45	17.26	10.07	8.85	6.02	9.06	13.11	13.37	8.37	4.31
	Construction Worker Commuting	2.67	1.95	2.46	2.67	4.51	4.72	6.67	4.41	4.00	6.05	1.95	2.36	0.92	1.13	0.92	1.13	1.33	1.33	0.41
	Haul Trucks	0.93	0.56	0.73	21.70	22.61	21.70	22.08	21.70	21.70	28.23	0.17	1.11	--	0.80	--	0.07	--	0.45	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>16.39</b>	<b>61.37</b>	<b>66.55</b>	<b>99.13</b>	<b>111.52</b>	<b>128.71</b>	<b>101.14</b>	<b>71.42</b>	<b>70.64</b>	<b>106.73</b>	<b>19.38</b>	<b>13.55</b>	<b>9.77</b>	<b>7.95</b>	<b>9.98</b>	<b>14.31</b>	<b>14.70</b>	<b>10.15</b>	<b>4.72</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	13.01	88.72	93.21	106.13	84.40	102.28	124.13	97.05	96.67	124.19	101.16	70.23	73.07	70.23	73.27	77.33	77.58	72.58	68.53
	Construction Worker Commuting	3.08	2.87	3.39	3.69	4.51	4.72	10.36	8.10	7.69	9.75	8.41	7.69	7.49	7.69	7.49	7.69	7.90	7.90	6.98
	Haul Trucks	1.13	1.42	1.59	30.35	31.25	30.35	30.72	30.35	30.35	51.68	51.68	52.31	51.68	52.48	51.68	51.75	51.68	52.13	51.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>17.23</b>	<b>93.01</b>	<b>98.19</b>	<b>140.17</b>	<b>120.16</b>	<b>137.35</b>	<b>165.22</b>	<b>135.50</b>	<b>134.71</b>	<b>185.62</b>	<b>161.26</b>	<b>130.24</b>	<b>132.24</b>	<b>130.41</b>	<b>132.45</b>	<b>136.78</b>	<b>137.17</b>	<b>132.61</b>	<b>127.18</b>
<b>GRAND TOTAL</b>		<b>83.59</b>	<b>337.70</b>	<b>350.59</b>	<b>402.95</b>	<b>426.10</b>	<b>453.01</b>	<b>571.33</b>	<b>456.74</b>	<b>441.41</b>	<b>525.22</b>	<b>448.89</b>	<b>454.06</b>	<b>468.71</b>	<b>542.43</b>	<b>388.98</b>	<b>421.81</b>	<b>394.26</b>	<b>403.23</b>	<b>390.99</b>
<b>Yolo County Total</b>		<b>83.59</b>	<b>337.70</b>	<b>350.59</b>	<b>402.95</b>	<b>426.10</b>	<b>453.01</b>	<b>571.33</b>	<b>456.74</b>	<b>441.41</b>	<b>525.22</b>	<b>448.89</b>	<b>454.06</b>	<b>468.71</b>	<b>542.43</b>	<b>388.98</b>	<b>421.81</b>	<b>394.26</b>	<b>403.23</b>	<b>390.99</b>
<b>Sutter County Total</b>		<b>22.35</b>	<b>108.11</b>	<b>118.12</b>	<b>96.80</b>	<b>129.91</b>	<b>122.72</b>	<b>195.10</b>	<b>187.86</b>	<b>187.86</b>	<b>182.65</b>	<b>182.65</b>	<b>245.96</b>	<b>267.43</b>	<b>317.11</b>	<b>160.94</b>	<b>178.51</b>	<b>156.09</b>	<b>154.69</b>	<b>211.45</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

317.11

**Table L1-62. CO Detailed Summary (Alternative 4) - Mi**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	105.83	54.97	60.85	23.15	23.15	19.66	19.66	13.54	4.06	8.65
	Construction Worker Commuting	17.75	6.26	7.69	2.97	2.97	2.97	2.97	6.16	0.51	0.66
	Haul Trucks	41.67	19.72	19.62	--	--	--	--	3.88	0.17	1.11
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>165.24</b>	<b>80.95</b>	<b>88.17</b>	<b>26.13</b>	<b>26.13</b>	<b>22.63</b>	<b>22.63</b>	<b>23.58</b>	<b>4.74</b>	<b>10.42</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	0.26
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.19</b>	<b>4.74</b>	<b>0.40</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.16	4.16	4.06	5.43	4.06	--	--	--	--	1.88
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.57</b>	<b>4.57</b>	<b>6.01</b>	<b>9.20</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.38</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	0.28
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	4.97	4.97	9.49	4.06	--	--	--	--	--	2.13
	Construction Worker Commuting	0.82	0.82	1.03	0.21	--	--	--	--	--	0.14
	Haul Trucks	--	--	3.50	0.07	--	--	--	--	--	0.60
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>5.79</b>	<b>5.79</b>	<b>14.02</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.87</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	26.54	26.44	13.98	4.28	--	--	--	--	--	4.58
	Construction Worker Commuting	2.05	3.28	1.54	0.21	--	--	--	--	--	0.37
	Haul Trucks	30.35	31.03	3.83	0.07	--	--	--	--	--	2.24
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>58.94</b>	<b>60.76</b>	<b>19.35</b>	<b>4.55</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.19</b>
<b>GRAND TOTAL</b>		<b>240.21</b>	<b>152.07</b>	<b>139.81</b>	<b>48.54</b>	<b>30.46</b>	<b>22.63</b>	<b>22.63</b>	<b>32.77</b>	<b>9.48</b>	<b>23.58</b>
<b>Yolo County Total</b>		<b>240.21</b>	<b>152.07</b>	<b>139.81</b>	<b>48.54</b>	<b>30.46</b>	<b>22.63</b>	<b>22.63</b>	<b>32.77</b>	<b>9.48</b>	<b>23.58</b>
<b>Sutter County Total</b>		<b>165.24</b>	<b>80.95</b>	<b>88.17</b>	<b>26.13</b>	<b>26.13</b>	<b>22.63</b>	<b>22.63</b>	<b>23.58</b>	<b>4.74</b>	<b>10.42</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-63. CO Detailed Summary (Alternative 5) - Mitigated**

#	Activity																			Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	54.61	369.38	358.27	458.62	564.15	536.62	435.20	505.39	253.01	221.43	212.11	153.16	248.95	221.43	207.95	177.99	177.99	111.85	29.42
	Construction Worker Commuting	15.18	13.34	18.77	12.31	20.72	18.67	12.21	20.82	26.67	23.70	21.95	18.67	25.75	23.70	21.54	23.08	23.08	14.87	2.05
	Haul Trucks	5.92	2.17	2.07	--	0.67	0.67	0.67	35.64	70.09	69.71	69.71	69.71	69.71	69.71	69.71	73.79	73.79	39.17	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>75.71</b>	<b>384.89</b>	<b>379.11</b>	<b>470.93</b>	<b>585.54</b>	<b>555.97</b>	<b>448.08</b>	<b>561.86</b>	<b>349.77</b>	<b>314.84</b>	<b>303.77</b>	<b>241.54</b>	<b>344.41</b>	<b>314.84</b>	<b>299.21</b>	<b>274.86</b>	<b>274.86</b>	<b>165.89</b>	<b>31.47</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	14.04	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.59</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	16.46	33.87	47.43	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68	26.68
	Construction Worker Commuting	--	--	1.54	1.95	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
	Haul Trucks	0.52	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	46.74	--	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37	23.37
<b>River Grading Site Subtotal</b>		<b>63.71</b>	<b>34.05</b>	<b>72.34</b>	<b>52.00</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>	<b>51.59</b>
<b>GRAND TOTAL</b>		<b>155.79</b>	<b>462.65</b>	<b>487.69</b>	<b>558.99</b>	<b>670.85</b>	<b>642.21</b>	<b>571.15</b>	<b>636.71</b>	<b>419.06</b>	<b>378.08</b>	<b>394.57</b>	<b>311.06</b>	<b>414.18</b>	<b>381.13</b>	<b>364.16</b>	<b>346.42</b>	<b>340.50</b>	<b>251.02</b>	<b>94.58</b>
Yolo County Total		150.11	447.51	481.03	527.50	641.69	612.63	504.57	632.14	406.26	372.77	389.36	304.06	405.15	375.58	358.02	342.09	335.78	246.30	90.25
Sutter County Total		5.67	15.14	6.66	31.50	29.16	29.57	66.59	4.57	12.80	5.31	5.21	7.00	9.03	5.56	6.14	4.33	4.72	4.72	4.33

Table L1-63. CO Detailed Summary (Alternative 5) - Mi

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	9.70	9.07	9.07	45.70	37.59	4.06	9.49	0.00	0.00	8.11	33.87	33.87	33.87	33.87	33.87	33.87	33.87	33.87	34.53
	Construction Worker Commuting	1.23	1.03	1.03	16.00	5.85	10.57	1.33	0.00	0.00	0.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.82
	Haul Trucks	0.34	--	--	9.06	4.08	1.55	3.31	--	--	1.65	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.27</b>	<b>10.10</b>	<b>10.10</b>	<b>70.77</b>	<b>47.52</b>	<b>16.17</b>	<b>14.14</b>	<b>--</b>	<b>--</b>	<b>10.17</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>39.35</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	2.95	0.17	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.20</b>	<b>4.74</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	26.68	48.31	0.88	0.88	--	16.46	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	1.54	4.41	2.87	3.28	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	9.76	9.76	9.76	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	23.37	23.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>51.59</b>	<b>85.85</b>	<b>13.51</b>	<b>13.92</b>	<b>0.41</b>	<b>16.97</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>68.53</b>	<b>95.95</b>	<b>35.88</b>	<b>89.02</b>	<b>47.93</b>	<b>33.14</b>	<b>14.14</b>	<b>9.20</b>	<b>4.74</b>	<b>10.17</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>38.28</b>	<b>39.35</b>
Yolo County Total		68.53	95.95	35.88	89.02	47.93	33.14	14.14	--	--	10.17	38.28	38.28	38.28	38.28	38.28	38.28	38.28	38.28	39.35
Sutter County Total		--	--	--	--	--	--	--	9.20	4.74	--	--	--	--	--	--	--	--	--	--

**Table L1-63. CO Detailed Summary (Alternative 5) - Mi**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	14.71	8.11	0.00	29.95	29.01	0.94
	Construction Worker Commuting	2.36	0.41	0.00	1.11	0.99	0.13
	Haul Trucks	--	1.65	--	1.80	1.80	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>17.07</b>	<b>10.17</b>	<b>--</b>	<b>32.86</b>	<b>31.80</b>	<b>1.07</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.20	0.20	--
	Construction Worker Commuting	--	--	--	0.10	0.10	--
	Haul Trucks	--	--	--	0.02	0.02	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>	<b>0.32</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.28	0.28	--
	Construction Worker Commuting	--	--	--	0.02	0.02	--
	Haul Trucks	--	--	--	0.02	0.02	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>	<b>0.32</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.78	0.78	--
	Construction Worker Commuting	--	--	--	0.11	0.11	--
	Haul Trucks	--	--	--	0.09	0.09	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
	Marine Equipment Exhaust	--	--	--	3.83	3.83	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>4.81</b>	<b>4.81</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>17.07</b>	<b>10.17</b>	<b>--</b>	<b>38.31</b>	<b>37.24</b>	<b>1.07</b>
Yolo County Total		17.07	10.17	--	37.99	36.93	1.07
Sutter County Total		--	--	--	0.32	0.32	--

**Table L1-64. CO Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	12.79	150.51	155.43	127.56	179.58	174.00	198.17	185.40	180.91	197.65	380.58	380.58	371.70	388.79	373.23	368.80	385.53	384.63	367.90
	Construction Worker Commuting	9.85	13.75	7.28	5.23	7.59	6.67	9.64	8.31	7.59	10.36	32.62	32.62	32.01	32.83	32.42	30.57	33.34	33.14	30.06
	Haul Trucks	3.26	3.69	2.41	2.07	0.69	--	0.38	--	--	2.05	71.65	71.65	71.50	71.16	71.73	69.60	71.65	72.00	69.70
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>25.91</b>	<b>167.94</b>	<b>165.13</b>	<b>134.85</b>	<b>187.86</b>	<b>180.67</b>	<b>208.19</b>	<b>193.71</b>	<b>188.50</b>	<b>210.06</b>	<b>484.85</b>	<b>484.85</b>	<b>475.21</b>	<b>492.78</b>	<b>477.37</b>	<b>468.97</b>	<b>490.53</b>	<b>489.77</b>	<b>467.66</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	4.68	13.94	4.06	29.86	28.34	27.52	46.80	4.16	8.11	4.49	4.49	5.58	6.85	4.94	4.06	4.06	4.31	4.31	4.06
	Construction Worker Commuting	0.82	1.03	1.85	0.92	0.82	2.05	5.74	0.41	3.69	0.82	0.72	0.92	1.44	0.62	1.85	0.21	0.41	0.41	0.21
	Haul Trucks	0.17	0.17	0.76	0.72	--	--	13.72	--	1.00	--	--	0.50	0.74	--	0.24	0.07	--	--	0.07
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>5.67</b>	<b>15.14</b>	<b>6.66</b>	<b>31.50</b>	<b>29.16</b>	<b>29.57</b>	<b>66.26</b>	<b>4.57</b>	<b>12.80</b>	<b>5.31</b>	<b>5.21</b>	<b>7.00</b>	<b>9.03</b>	<b>5.56</b>	<b>6.14</b>	<b>4.33</b>	<b>4.72</b>	<b>4.72</b>	<b>4.33</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	8.74	29.86	29.86	29.86	29.86	27.52	36.23	36.23	27.52	35.68	43.52	43.52	27.46	46.80	46.80	46.80	46.80	46.80	23.40
	Construction Worker Commuting	1.85	0.92	0.92	0.92	0.92	2.05	2.46	2.46	2.77	2.87	2.87	2.87	3.59	5.74	5.74	5.74	5.74	5.74	2.87
	Haul Trucks	0.69	0.72	0.72	--	--	--	--	--	0.21	--	--	--	10.05	19.70	19.70	19.70	19.70	19.70	9.85
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>11.27</b>	<b>31.50</b>	<b>31.50</b>	<b>30.78</b>	<b>30.78</b>	<b>29.57</b>	<b>38.69</b>	<b>38.69</b>	<b>30.50</b>	<b>38.55</b>	<b>46.39</b>	<b>46.39</b>	<b>41.10</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>72.24</b>	<b>36.12</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	8.74	27.11	27.52	4.16	4.16	4.06	4.50	8.71	4.50	4.06	31.64	9.70	8.23	8.23	5.99	13.26	8.17	25.20	5.58
	Construction Worker Commuting	1.54	0.92	2.05	0.41	0.41	1.03	0.31	0.41	0.31	1.85	2.36	1.23	0.92	0.92	1.23	2.15	0.82	3.18	0.92
	Haul Trucks	0.41	0.54	--	--	--	--	0.10	9.58	0.10	0.45	--	--	--	--	--	0.23	0.34	0.45	0.69
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>10.69</b>	<b>28.57</b>	<b>29.57</b>	<b>4.57</b>	<b>4.57</b>	<b>5.08</b>	<b>4.91</b>	<b>18.70</b>	<b>4.91</b>	<b>6.35</b>	<b>34.00</b>	<b>10.93</b>	<b>9.15</b>	<b>9.15</b>	<b>7.23</b>	<b>15.64</b>	<b>9.34</b>	<b>28.83</b>	<b>7.19</b>
<b>GRAND TOTAL</b>		<b>53.54</b>	<b>243.15</b>	<b>232.86</b>	<b>201.70</b>	<b>252.37</b>	<b>244.90</b>	<b>318.05</b>	<b>255.67</b>	<b>236.71</b>	<b>260.28</b>	<b>570.45</b>	<b>549.17</b>	<b>534.49</b>	<b>579.73</b>	<b>562.98</b>	<b>561.18</b>	<b>576.82</b>	<b>595.56</b>	<b>515.30</b>
<b>Yolo County Total</b>		<b>53.54</b>	<b>243.15</b>	<b>232.86</b>	<b>201.70</b>	<b>252.37</b>	<b>244.90</b>	<b>318.05</b>	<b>255.67</b>	<b>236.71</b>	<b>260.28</b>	<b>570.45</b>	<b>549.17</b>	<b>534.49</b>	<b>579.73</b>	<b>562.98</b>	<b>561.18</b>	<b>576.82</b>	<b>595.56</b>	<b>515.30</b>
<b>Sutter County Total</b>		<b>25.91</b>	<b>167.94</b>	<b>165.13</b>	<b>134.85</b>	<b>187.86</b>	<b>180.67</b>	<b>208.19</b>	<b>193.71</b>	<b>188.50</b>	<b>210.06</b>	<b>484.85</b>	<b>484.85</b>	<b>475.21</b>	<b>492.78</b>	<b>477.37</b>	<b>468.97</b>	<b>490.53</b>	<b>489.77</b>	<b>467.66</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-64. CO Detailed Summary (Alternative 6) - Mi**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	397.18	283.82	107.65	121.70	32.15	24.60	24.60	19.49	12.17	17.33
	Construction Worker Commuting	34.37	31.08	13.44	15.08	11.39	3.59	3.59	2.77	8.92	1.38
	Haul Trucks	79.16	79.16	39.75	39.75	2.61	--	--	2.95	1.65	2.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>510.71</b>	<b>394.07</b>	<b>160.84</b>	<b>176.52</b>	<b>46.15</b>	<b>28.19</b>	<b>28.19</b>	<b>25.21</b>	<b>22.74</b>	<b>21.39</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	5.43	4.06	0.26
	Construction Worker Commuting	--	--	--	--	--	--	--	0.82	0.51	0.13
	Haul Trucks	--	--	--	--	--	--	--	2.94	0.17	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.19</b>	<b>4.74</b>	<b>0.40</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	4.16	4.16	4.06	5.43	4.06	--	--	--	--	1.88
	Construction Worker Commuting	0.41	0.41	1.33	0.82	0.21	--	--	--	--	0.16
	Haul Trucks	--	--	0.62	2.95	0.07	--	--	--	--	0.34
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>4.57</b>	<b>4.57</b>	<b>6.01</b>	<b>9.20</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.38</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	4.95	--	9.49	4.06	--	--	--	--	--	0.28
	Construction Worker Commuting	0.72	--	1.33	0.21	--	--	--	--	--	0.02
	Haul Trucks	--	--	1.45	0.07	--	--	--	--	--	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>5.67</b>	<b>--</b>	<b>12.27</b>	<b>4.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>520.94</b>	<b>398.63</b>	<b>179.12</b>	<b>190.06</b>	<b>50.48</b>	<b>28.19</b>	<b>28.19</b>	<b>34.40</b>	<b>27.48</b>	<b>24.49</b>
<b>Yolo County Total</b>		<b>520.94</b>	<b>398.63</b>	<b>179.12</b>	<b>190.06</b>	<b>50.48</b>	<b>28.19</b>	<b>28.19</b>	<b>34.40</b>	<b>27.48</b>	<b>24.49</b>
<b>Sutter County Total</b>		<b>510.71</b>	<b>394.07</b>	<b>160.84</b>	<b>176.52</b>	<b>46.15</b>	<b>28.19</b>	<b>28.19</b>	<b>25.21</b>	<b>22.74</b>	<b>21.39</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-65. SO2 Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.22	0.18	0.29	0.31	0.45	0.41	0.48	0.45	0.30	0.29	0.35	0.44	0.55	0.48	0.32	0.36	0.02
	Construction Worker Commuting	0.02	0.02	0.04	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.04	0.03	0.04	0.01
	Haul Trucks	0.04	0.03	0.05	--	--	--	0.02	0.00	--	--	--	0.26	0.65	0.60	0.64	0.64	0.40	0.66	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.10</b>	<b>0.24</b>	<b>0.30</b>	<b>0.19</b>	<b>0.31</b>	<b>0.32</b>	<b>0.49</b>	<b>0.44</b>	<b>0.50</b>	<b>0.47</b>	<b>0.31</b>	<b>0.58</b>	<b>1.04</b>	<b>1.08</b>	<b>1.24</b>	<b>1.16</b>	<b>0.75</b>	<b>1.06</b>	<b>0.06</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.12	0.15	0.19	0.19	0.15	0.28	0.28	0.28	0.28	0.28	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.20</b>	<b>0.20</b>	<b>0.37</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.35</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.21</b>	<b>0.38</b>	<b>0.51</b>	<b>0.28</b>	<b>0.51</b>	<b>0.59</b>	<b>1.26</b>	<b>0.84</b>	<b>0.71</b>	<b>0.69</b>	<b>0.69</b>	<b>0.85</b>	<b>1.49</b>	<b>1.84</b>	<b>2.00</b>	<b>1.94</b>	<b>1.50</b>	<b>1.91</b>	<b>0.46</b>
<b>Yolo County Total</b>		<b>0.19</b>	<b>0.33</b>	<b>0.47</b>	<b>0.23</b>	<b>0.35</b>	<b>0.46</b>	<b>0.67</b>	<b>0.83</b>	<b>0.65</b>	<b>0.66</b>	<b>0.66</b>	<b>0.82</b>	<b>1.44</b>	<b>1.81</b>	<b>1.97</b>	<b>1.93</b>	<b>1.49</b>	<b>1.90</b>	<b>0.45</b>
<b>Sutter County Total</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>



**Table L1-65. SO2 Detailed Summary (Alternative 1) - M**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.01	0.02	0.07	0.07	0.07	0.06	0.04	0.07	0.01	0.02
	Construction Worker Commuting	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	--	0.00	--	--	--	--	--	0.08	0.00	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.01</b>	<b>0.02</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.05</b>	<b>0.17</b>	<b>0.02</b>	<b>0.03</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>0.05</b>	<b>0.03</b>	<b>0.19</b>	<b>0.19</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>0.27</b>	<b>0.03</b>	<b>0.05</b>
<b>Yolo County Total</b>		<b>0.05</b>	<b>0.03</b>	<b>0.19</b>	<b>0.19</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>0.17</b>	<b>0.02</b>	<b>0.04</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>

**Table L1-66. SO2 Detailed Summary (Alternative 2) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.83	0.83	0.81	0.34	0.39	0.73	0.63	0.61	0.69	0.59	0.60	0.52
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.03	0.03	0.03	0.02	0.03	0.06	0.06	0.05	0.06	0.05	0.05	0.05
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.93	0.93	0.93	0.92	0.90	0.89	0.68
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.25</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.92</b>	<b>0.87</b>	<b>0.87</b>	<b>0.84</b>	<b>0.37</b>	<b>0.82</b>	<b>1.72</b>	<b>1.62</b>	<b>1.59</b>	<b>1.67</b>	<b>1.55</b>	<b>1.54</b>	<b>1.25</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.12	0.15	0.19	0.19	0.15	0.28	0.28	0.28	0.28	0.28	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.20</b>	<b>0.20</b>	<b>0.37</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.35</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.05	0.07	0.23	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Haul Trucks	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.13	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>River Grading Site Subtotal</b>		<b>0.20</b>	<b>0.08</b>	<b>0.30</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>0.42</b>	<b>0.46</b>	<b>0.80</b>	<b>0.50</b>	<b>1.06</b>	<b>1.09</b>	<b>1.92</b>	<b>1.49</b>	<b>1.30</b>	<b>1.28</b>	<b>0.96</b>	<b>1.31</b>	<b>2.40</b>	<b>2.61</b>	<b>2.57</b>	<b>2.68</b>	<b>2.52</b>	<b>2.61</b>	<b>1.88</b>
<b>Yolo County Total</b>		<b>0.40</b>	<b>0.41</b>	<b>0.77</b>	<b>0.46</b>	<b>0.90</b>	<b>0.96</b>	<b>1.32</b>	<b>1.48</b>	<b>1.24</b>	<b>1.25</b>	<b>0.93</b>	<b>1.28</b>	<b>2.34</b>	<b>2.58</b>	<b>2.55</b>	<b>2.67</b>	<b>2.51</b>	<b>2.60</b>	<b>1.87</b>
<b>Sutter County Total</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>

**Table L1-66. SO2 Detailed Summary (Alternative 2) - M**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.30	0.03	0.03	0.06	0.06	0.06	0.06	0.06	0.01	0.03
	Construction Worker Commuting	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.49	0.04	--	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.82</b>	<b>0.09</b>	<b>0.04</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.05</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	0.15	0.23	0.00	0.00	--	0.05	--	--	--	0.00
	Construction Worker Commuting	0.01	0.02	0.01	0.01	0.00	--	--	--	--	0.00
	Haul Trucks	--	0.20	0.20	0.20	--	0.01	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.07	0.07	--	--	--	--	--	--	--	0.01
<b>River Grading Site Subtotal</b>		<b>0.22</b>	<b>0.52</b>	<b>0.21</b>	<b>0.22</b>	<b>0.00</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>1.09</b>	<b>0.62</b>	<b>0.37</b>	<b>0.40</b>	<b>0.09</b>	<b>0.13</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Yolo County Total</b>		<b>1.09</b>	<b>0.62</b>	<b>0.37</b>	<b>0.40</b>	<b>0.09</b>	<b>0.13</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.08</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>

**Table L1-67. SO2 Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.09	1.15	1.34	0.61	0.69	0.59	0.60	0.80
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.04	0.04	0.03	0.03	0.05	0.07	0.08	0.05	0.06	0.05	0.05	0.07
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.45	0.85	0.85	0.84	0.82	0.81	1.04
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.24</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.92</b>	<b>0.90</b>	<b>0.90</b>	<b>0.87</b>	<b>0.87</b>	<b>1.55</b>	<b>1.66</b>	<b>2.27</b>	<b>1.51</b>	<b>1.59</b>	<b>1.47</b>	<b>1.46</b>	<b>1.91</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.12	0.15	0.19	0.19	0.15	0.28	0.28	0.28	0.28	0.28	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.20</b>	<b>0.20</b>	<b>0.37</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.35</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.23</b>	<b>0.38</b>	<b>0.50</b>	<b>0.28</b>	<b>0.84</b>	<b>0.87</b>	<b>1.69</b>	<b>1.31</b>	<b>1.11</b>	<b>1.09</b>	<b>1.25</b>	<b>1.82</b>	<b>2.12</b>	<b>3.03</b>	<b>2.27</b>	<b>2.38</b>	<b>2.22</b>	<b>2.31</b>	<b>2.32</b>
<b>Yolo County Total</b>		<b>0.23</b>	<b>0.38</b>	<b>0.50</b>	<b>0.28</b>	<b>0.84</b>	<b>0.87</b>	<b>1.69</b>	<b>1.31</b>	<b>1.11</b>	<b>1.09</b>	<b>1.25</b>	<b>1.82</b>	<b>2.12</b>	<b>3.03</b>	<b>2.27</b>	<b>2.38</b>	<b>2.22</b>	<b>2.31</b>	<b>2.32</b>
<b>Sutter County Total</b>		<b>0.11</b>	<b>0.24</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.92</b>	<b>0.90</b>	<b>0.90</b>	<b>0.87</b>	<b>0.87</b>	<b>1.55</b>	<b>1.66</b>	<b>2.27</b>	<b>1.51</b>	<b>1.59</b>	<b>1.47</b>	<b>1.46</b>	<b>1.91</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-67. SO2 Detailed Summary (Alternative 3) - M**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.60	0.30	0.32	0.06	0.06	0.06	0.06	0.06	0.01	0.04
	Construction Worker Commuting	0.07	0.02	0.03	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.85	0.40	0.40	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.52</b>	<b>0.73</b>	<b>0.75</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>1.56</b>	<b>0.74</b>	<b>0.86</b>	<b>0.19</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Yolo County Total</b>		<b>1.56</b>	<b>0.74</b>	<b>0.86</b>	<b>0.19</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.09</b>
<b>Sutter County Total</b>		<b>1.52</b>	<b>0.73</b>	<b>0.75</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-68. SO2 Detailed Summary (Alternative 4) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.09	1.15	1.34	0.61	0.69	0.59	0.60	0.80
	Construction Worker Commuting	0.03	0.02	0.04	0.01	0.02	0.02	0.04	0.04	0.04	0.03	0.03	0.05	0.07	0.08	0.05	0.06	0.05	0.05	0.07
	Haul Trucks	0.05	0.03	0.05	--	0.01	--	0.01	--	--	--	--	0.41	0.45	0.85	0.85	0.84	0.82	0.81	1.04
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.11</b>	<b>0.24</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.92</b>	<b>0.90</b>	<b>0.90</b>	<b>0.87</b>	<b>0.87</b>	<b>1.55</b>	<b>1.66</b>	<b>2.27</b>	<b>1.51</b>	<b>1.59</b>	<b>1.47</b>	<b>1.46</b>	<b>1.91</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.12	0.15	0.19	0.19	0.15	0.28	0.28	0.28	0.28	0.28	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.20</b>	<b>0.20</b>	<b>0.37</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.35</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.04	0.12	0.13	0.31	0.34	0.43	0.34	0.23	0.22	0.34	0.06	0.03	0.04	0.02	0.04	0.05	0.05	0.02	0.01
	Construction Worker Commuting	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
	Haul Trucks	0.02	0.01	0.01	0.44	0.46	0.44	0.45	0.44	0.44	0.58	0.00	0.02	--	0.02	--	0.00	--	0.01	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.07</b>	<b>0.14</b>	<b>0.16</b>	<b>0.77</b>	<b>0.82</b>	<b>0.90</b>	<b>0.82</b>	<b>0.70</b>	<b>0.68</b>	<b>0.94</b>	<b>0.07</b>	<b>0.06</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.01</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.04	0.15	0.16	0.22	0.34	0.43	0.63	0.53	0.51	0.63	0.54	0.37	0.39	0.37	0.38	0.40	0.39	0.37	0.36
	Construction Worker Commuting	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Haul Trucks	0.02	0.03	0.03	0.62	0.64	0.62	0.63	0.62	0.62	1.06	1.06	1.07	1.06	1.08	1.06	1.06	1.06	1.07	1.06
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.07</b>	<b>0.19</b>	<b>0.21</b>	<b>0.85</b>	<b>1.00</b>	<b>1.07</b>	<b>1.30</b>	<b>1.18</b>	<b>1.16</b>	<b>1.73</b>	<b>1.63</b>	<b>1.47</b>	<b>1.48</b>	<b>1.48</b>	<b>1.47</b>	<b>1.49</b>	<b>1.48</b>	<b>1.47</b>	<b>1.44</b>
<b>GRAND TOTAL</b>		<b>0.37</b>	<b>0.71</b>	<b>0.87</b>	<b>1.90</b>	<b>2.66</b>	<b>2.84</b>	<b>3.81</b>	<b>3.19</b>	<b>2.95</b>	<b>3.76</b>	<b>2.95</b>	<b>3.36</b>	<b>3.64</b>	<b>4.55</b>	<b>3.79</b>	<b>3.92</b>	<b>3.75</b>	<b>3.81</b>	<b>3.77</b>
<b>Yolo County Total</b>		<b>0.37</b>	<b>0.71</b>	<b>0.87</b>	<b>1.90</b>	<b>2.66</b>	<b>2.84</b>	<b>3.81</b>	<b>3.19</b>	<b>2.95</b>	<b>3.76</b>	<b>2.95</b>	<b>3.36</b>	<b>3.64</b>	<b>4.55</b>	<b>3.79</b>	<b>3.92</b>	<b>3.75</b>	<b>3.81</b>	<b>3.77</b>
<b>Sutter County Total</b>		<b>0.11</b>	<b>0.24</b>	<b>0.29</b>	<b>0.19</b>	<b>0.64</b>	<b>0.60</b>	<b>0.92</b>	<b>0.90</b>	<b>0.90</b>	<b>0.87</b>	<b>0.87</b>	<b>1.55</b>	<b>1.66</b>	<b>2.27</b>	<b>1.51</b>	<b>1.59</b>	<b>1.47</b>	<b>1.46</b>	<b>1.91</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-68. SO2 Detailed Summary (Alternative 4) - M**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.60	0.30	0.32	0.07	0.07	0.06	0.06	0.06	0.01	0.04
	Construction Worker Commuting	0.07	0.02	0.03	0.01	0.01	0.01	0.01	0.02	0.00	0.00
	Haul Trucks	0.85	0.40	0.40	--	--	--	--	0.08	0.00	0.02
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.52</b>	<b>0.73</b>	<b>0.75</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.01	0.01	0.05	0.01	--	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.00	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.07	0.00	--	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.02</b>	<b>0.02</b>	<b>0.12</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	0.09	0.09	0.06	0.01	--	--	--	--	--	0.02
	Construction Worker Commuting	0.01	0.01	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	0.62	0.64	0.08	0.00	--	--	--	--	--	0.05
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>0.72</b>	<b>0.74</b>	<b>0.14</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.07</b>
<b>GRAND TOTAL</b>		<b>2.30</b>	<b>1.50</b>	<b>1.13</b>	<b>0.22</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.17</b>
<b>Yolo County Total</b>		<b>2.30</b>	<b>1.50</b>	<b>1.13</b>	<b>0.22</b>	<b>0.09</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.03</b>	<b>0.17</b>
<b>Sutter County Total</b>		<b>1.52</b>	<b>0.73</b>	<b>0.75</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.16</b>	<b>0.02</b>	<b>0.07</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-69. SO2 Detailed Summary (Alternative 5) - Mitigated**

#	Activity																			Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.18	0.52	1.79	2.27	2.75	2.63	2.20	2.62	1.36	1.23	1.16	0.89	1.35	1.23	1.15	0.98	0.98	0.56	0.12
	Construction Worker Commuting	0.06	0.05	0.07	0.05	0.08	0.07	0.05	0.08	0.10	0.09	0.09	0.07	0.10	0.09	0.08	0.09	0.09	0.06	0.01
	Haul Trucks	0.12	0.04	0.04	--	0.01	0.01	0.01	0.73	1.44	1.43	1.43	1.43	1.43	1.43	1.43	1.51	1.51	0.80	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.36</b>	<b>0.62</b>	<b>1.91</b>	<b>2.32</b>	<b>2.85</b>	<b>2.72</b>	<b>2.26</b>	<b>3.43</b>	<b>2.90</b>	<b>2.75</b>	<b>2.67</b>	<b>2.40</b>	<b>2.87</b>	<b>2.75</b>	<b>2.66</b>	<b>2.58</b>	<b>2.58</b>	<b>1.42</b>	<b>0.12</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.29	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.05	0.07	0.23	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Haul Trucks	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.13	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>River Grading Site Subtotal</b>		<b>0.20</b>	<b>0.08</b>	<b>0.30</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>
<b>GRAND TOTAL</b>		<b>0.62</b>	<b>0.79</b>	<b>2.37</b>	<b>2.60</b>	<b>3.24</b>	<b>3.08</b>	<b>3.09</b>	<b>3.90</b>	<b>3.19</b>	<b>3.03</b>	<b>3.06</b>	<b>2.68</b>	<b>3.18</b>	<b>3.02</b>	<b>2.93</b>	<b>2.87</b>	<b>2.84</b>	<b>1.78</b>	<b>0.39</b>
Yolo County Total		0.60	0.73	2.34	2.55	3.08	2.95	2.50	3.89	3.13	3.00	3.03	2.65	3.12	2.99	2.91	2.86	2.83	1.77	0.38
Sutter County Total		0.02	0.06	0.03	0.05	0.16	0.13	0.59	0.01	0.06	0.03	0.03	0.03	0.06	0.03	0.02	0.01	0.01	0.01	0.01



Table L1-69. SO2 Detailed Summary (Alternative 5) - M

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.03	0.04	0.04	0.15	0.13	0.01	0.05	0.00	0.00	0.02	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Construction Worker Commuting	0.00	0.00	0.00	0.06	0.02	0.04	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Haul Trucks	0.01	--	--	0.19	0.08	0.03	0.07	--	--	0.03	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.40</b>	<b>0.23</b>	<b>0.08</b>	<b>0.12</b>	--	--	<b>0.06</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage West Subtotal</b>		--	--	--	--	--	--	--	<b>0.10</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	--	<b>0.08</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.15	0.23	0.00	0.00	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.01	0.02	0.01	0.01	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	0.20	0.20	0.20	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marine Equipment Exhaust	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>0.22</b>	<b>0.52</b>	<b>0.21</b>	<b>0.22</b>	<b>0.00</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		<b>0.29</b>	<b>0.56</b>	<b>0.34</b>	<b>0.63</b>	<b>0.24</b>	<b>0.15</b>	<b>0.12</b>	<b>0.10</b>	<b>0.02</b>	<b>0.06</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
Yolo County Total		0.29	0.56	0.34	0.63	0.24	0.15	0.12	--	--	0.06	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Sutter County Total		--	--	--	--	--	--	--	0.10	0.02	--	--	--	--	--	--	--	--	--	--

**Table L1-69. SO2 Detailed Summary (Alternative 5) - M**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.04	0.02	0.00	0.14	0.13	0.00
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.00
	Haul Trucks	--	0.03	--	0.04	0.04	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.05</b>	<b>0.06</b>	<b>--</b>	<b>0.18</b>	<b>0.17</b>	<b>0.00</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>	<b>0.00</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>	<b>0.00</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.00	0.00	--
	Haul Trucks	--	--	--	0.00	0.00	--
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	--
	Marine Equipment Exhaust	--	--	--	0.01	0.01	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>	<b>0.02</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.05</b>	<b>0.06</b>	<b>--</b>	<b>0.20</b>	<b>0.19</b>	<b>0.00</b>
Yolo County Total		0.05	0.06	--	0.20	0.19	0.00
Sutter County Total		--	--	--	0.00	0.00	--

**Table L1-70. SO2 Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.04	0.29	0.33	0.23	0.86	0.84	0.99	0.94	0.92	0.97	2.03	2.03	2.01	2.09	2.02	2.00	2.06	2.05	1.99
	Construction Worker Commuting	0.04	0.05	0.03	0.02	0.03	0.03	0.04	0.03	0.03	0.04	0.13	0.13	0.12	0.13	0.13	0.12	0.13	0.13	0.12
	Haul Trucks	0.07	0.08	0.05	0.04	0.01	--	0.01	--	--	0.04	1.47	1.47	1.47	1.46	1.47	1.43	1.47	1.48	1.43
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.14</b>	<b>0.41</b>	<b>0.41</b>	<b>0.29</b>	<b>0.90</b>	<b>0.86</b>	<b>1.03</b>	<b>0.97</b>	<b>0.94</b>	<b>1.06</b>	<b>3.63</b>	<b>3.63</b>	<b>3.60</b>	<b>3.68</b>	<b>3.62</b>	<b>3.55</b>	<b>3.66</b>	<b>3.65</b>	<b>3.53</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.02	0.05	0.01	0.03	0.15	0.12	0.28	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
	Haul Trucks	0.00	0.00	0.02	0.01	--	--	0.28	--	0.02	--	--	0.01	0.02	--	0.00	0.00	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.05</b>	<b>0.16</b>	<b>0.13</b>	<b>0.59</b>	<b>0.01</b>	<b>0.06</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.03	0.03	0.12	0.15	0.15	0.12	0.15	0.19	0.19	0.15	0.28	0.28	0.28	0.28	0.28	0.14
	Construction Worker Commuting	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01
	Haul Trucks	0.01	0.01	0.01	--	--	--	--	--	0.00	--	--	--	0.21	0.40	0.40	0.40	0.40	0.40	0.20
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.20</b>	<b>0.20</b>	<b>0.37</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.35</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.03	0.02	0.12	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.13	0.03	0.02	0.02	0.02	0.05	0.02	0.11	0.02
	Construction Worker Commuting	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
	Haul Trucks	0.01	0.01	--	--	--	--	0.00	0.20	0.00	0.01	--	--	--	--	--	0.00	0.01	0.01	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.04</b>	<b>0.04</b>	<b>0.13</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.23</b>	<b>0.02</b>	<b>0.03</b>	<b>0.14</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.03</b>	<b>0.13</b>	<b>0.04</b>
<b>GRAND TOTAL</b>		<b>0.25</b>	<b>0.55</b>	<b>0.61</b>	<b>0.39</b>	<b>1.10</b>	<b>1.14</b>	<b>1.79</b>	<b>1.38</b>	<b>1.15</b>	<b>1.28</b>	<b>4.00</b>	<b>3.90</b>	<b>4.06</b>	<b>4.44</b>	<b>4.38</b>	<b>4.33</b>	<b>4.41</b>	<b>4.50</b>	<b>3.94</b>
<b>Yolo County Total</b>		<b>0.25</b>	<b>0.55</b>	<b>0.61</b>	<b>0.39</b>	<b>1.10</b>	<b>1.14</b>	<b>1.79</b>	<b>1.38</b>	<b>1.15</b>	<b>1.28</b>	<b>4.00</b>	<b>3.90</b>	<b>4.06</b>	<b>4.44</b>	<b>4.38</b>	<b>4.33</b>	<b>4.41</b>	<b>4.50</b>	<b>3.94</b>
<b>Sutter County Total</b>		<b>0.14</b>	<b>0.41</b>	<b>0.41</b>	<b>0.29</b>	<b>0.90</b>	<b>0.86</b>	<b>1.03</b>	<b>0.97</b>	<b>0.94</b>	<b>1.06</b>	<b>3.63</b>	<b>3.63</b>	<b>3.60</b>	<b>3.68</b>	<b>3.62</b>	<b>3.55</b>	<b>3.66</b>	<b>3.65</b>	<b>3.53</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-70. SO2 Detailed Summary (Alternative 6) - M**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	2.14	1.52	0.60	0.66	0.11	0.09	0.09	0.07	0.03	0.09
	Construction Worker Commuting	0.13	0.12	0.05	0.06	0.04	0.01	0.01	0.01	0.03	0.01
	Haul Trucks	1.62	1.62	0.81	0.81	0.05	--	--	0.06	0.03	0.06
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.90</b>	<b>3.27</b>	<b>1.47</b>	<b>1.53</b>	<b>0.20</b>	<b>0.10</b>	<b>0.10</b>	<b>0.14</b>	<b>0.10</b>	<b>0.15</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.04	0.01	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	--	--	--	--	0.06	0.00	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.01	0.01	0.01	0.04	0.01	--	--	--	--	0.01
	Construction Worker Commuting	0.00	0.00	0.01	0.00	0.00	--	--	--	--	0.00
	Haul Trucks	--	--	0.01	0.06	0.00	--	--	--	--	0.01
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Downstream Channel Subtotal</b>		<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.03	--	0.05	0.01	--	--	--	--	--	0.00
	Construction Worker Commuting	0.00	--	0.01	0.00	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.03	0.00	--	--	--	--	--	0.00
	Fugitive Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>0.08</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.00</b>
<b>GRAND TOTAL</b>		<b>3.94</b>	<b>3.28</b>	<b>1.58</b>	<b>1.65</b>	<b>0.22</b>	<b>0.10</b>	<b>0.10</b>	<b>0.24</b>	<b>0.12</b>	<b>0.17</b>
<b>Yolo County Total</b>		<b>3.94</b>	<b>3.28</b>	<b>1.58</b>	<b>1.65</b>	<b>0.22</b>	<b>0.10</b>	<b>0.10</b>	<b>0.24</b>	<b>0.12</b>	<b>0.17</b>
<b>Sutter County Total</b>		<b>3.90</b>	<b>3.27</b>	<b>1.47</b>	<b>1.53</b>	<b>0.20</b>	<b>0.10</b>	<b>0.10</b>	<b>0.14</b>	<b>0.10</b>	<b>0.15</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-71. PM10 Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	0.99	1.06	0.94	0.90	0.82	1.40	1.29	1.43	1.29	0.99	1.43	2.17	2.42	3.02	2.89	1.76	2.23	0.11
	Construction Worker Commuting	2.20	1.74	4.03	1.60	1.56	1.33	2.93	2.66	2.70	2.38	2.02	3.21	3.94	4.22	5.32	5.13	3.03	4.17	1.56
	Haul Trucks	1.15	0.86	1.32	--	--	--	0.42	0.07	--	--	--	7.18	17.74	16.23	17.35	17.35	10.84	18.00	0.63
	Fugitive Dust	--	3.72	3.72	3.59	8.22	10.96	100.33	51.32	53.87	53.87	48.83	46.27	1.65	3.30	3.30	3.30	3.30	3.30	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.59</b>	<b>7.31</b>	<b>10.14</b>	<b>6.13</b>	<b>10.68</b>	<b>13.10</b>	<b>105.08</b>	<b>55.33</b>	<b>58.01</b>	<b>57.55</b>	<b>51.84</b>	<b>58.09</b>	<b>25.50</b>	<b>26.16</b>	<b>28.98</b>	<b>28.67</b>	<b>18.92</b>	<b>27.69</b>	<b>2.30</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.50	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.17</b>	<b>1.36</b>	<b>15.24</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.26	0.26	0.26	0.26	0.44	0.55	0.55	0.44	0.58	0.63	0.63	0.83	1.54	1.54	1.54	1.54	1.54	0.77
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	46.27	49.33	49.33	46.27	49.15	49.15	49.15	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.39</b>	<b>1.61</b>	<b>1.61</b>	<b>1.21</b>	<b>1.21</b>	<b>47.63</b>	<b>50.98</b>	<b>50.98</b>	<b>48.07</b>	<b>51.01</b>	<b>51.06</b>	<b>51.06</b>	<b>9.69</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>9.20</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>GRAND TOTAL</b>		<b>6.68</b>	<b>10.91</b>	<b>60.68</b>	<b>9.19</b>	<b>109.30</b>	<b>62.60</b>	<b>171.58</b>	<b>114.93</b>	<b>108.68</b>	<b>198.72</b>	<b>151.18</b>	<b>110.83</b>	<b>37.09</b>	<b>45.50</b>	<b>49.19</b>	<b>48.67</b>	<b>38.22</b>	<b>48.37</b>	<b>12.68</b>
<b>Yolo County Total</b>		<b>6.09</b>	<b>10.04</b>	<b>59.38</b>	<b>7.58</b>	<b>12.13</b>	<b>61.25</b>	<b>156.34</b>	<b>114.68</b>	<b>106.35</b>	<b>109.69</b>	<b>150.72</b>	<b>109.95</b>	<b>35.76</b>	<b>45.13</b>	<b>48.17</b>	<b>48.48</b>	<b>37.99</b>	<b>48.14</b>	<b>12.49</b>
<b>Sutter County Total</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.17</b>	<b>1.36</b>	<b>15.24</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>

**Table L1-71. PM10 Detailed Summary (Alternative 1) -**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.05	0.11	0.39	0.39	0.39	0.37	0.27	0.33	0.06	0.08
	Construction Worker Commuting	0.14	0.23	1.33	1.33	1.33	1.33	1.05	2.75	0.23	0.15
	Haul Trucks	--	0.00	--	--	--	--	--	2.10	0.10	0.25
	Fugitive Dust	--	--	--	--	--	--	--	0.21	--	1.06
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.19</b>	<b>0.34</b>	<b>1.72</b>	<b>1.72</b>	<b>1.72</b>	<b>1.70</b>	<b>1.32</b>	<b>5.39</b>	<b>0.38</b>	<b>1.53</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.04
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.04
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.75</b>	<b>0.38</b>	<b>0.10</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.06	0.06	0.06	0.21	0.06	--	--	--	--	0.04
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	1.03
<b>Downstream Channel Subtotal</b>		<b>0.24</b>	<b>0.24</b>	<b>1.00</b>	<b>2.75</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.33</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	0.00
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.07
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>
<b>GRAND TOTAL</b>		<b>0.92</b>	<b>0.59</b>	<b>4.60</b>	<b>4.66</b>	<b>1.91</b>	<b>1.70</b>	<b>1.32</b>	<b>8.14</b>	<b>0.77</b>	<b>3.06</b>
<b>Yolo County Total</b>		<b>0.92</b>	<b>0.59</b>	<b>4.60</b>	<b>4.66</b>	<b>1.91</b>	<b>1.70</b>	<b>1.32</b>	<b>5.39</b>	<b>0.38</b>	<b>2.96</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.75</b>	<b>0.38</b>	<b>0.10</b>

**Table L1-72. PM10 Detailed Summary (Alternative 2) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	0.99	1.05	0.94	1.49	1.30	2.43	2.28	2.28	2.14	1.25	1.91	4.03	3.71	3.52	3.78	3.32	3.29	3.10
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	3.99	3.99	3.67	2.57	3.30	7.10	6.51	6.23	6.60	5.68	5.59	5.55
	Haul Trucks	1.32	0.88	1.34	--	0.38	--	0.21	--	--	--	--	11.04	25.37	25.37	25.32	25.13	24.57	24.25	18.61
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	164.70	115.37	115.37	115.37	90.53	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.78</b>	<b>9.27</b>	<b>12.08</b>	<b>8.07</b>	<b>33.47</b>	<b>32.49</b>	<b>171.93</b>	<b>121.64</b>	<b>121.64</b>	<b>121.18</b>	<b>94.35</b>	<b>19.54</b>	<b>43.10</b>	<b>42.18</b>	<b>41.67</b>	<b>42.11</b>	<b>40.17</b>	<b>39.73</b>	<b>32.21</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.50	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.17</b>	<b>1.36</b>	<b>15.24</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.26	0.26	0.26	0.26	0.44	0.55	0.55	0.44	0.58	0.63	0.63	0.83	1.54	1.54	1.54	1.54	1.54	0.77
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	46.27	49.33	49.33	46.27	49.15	49.15	49.15	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.39</b>	<b>1.61</b>	<b>1.61</b>	<b>1.21</b>	<b>1.21</b>	<b>47.63</b>	<b>50.98</b>	<b>50.98</b>	<b>48.07</b>	<b>51.01</b>	<b>51.06</b>	<b>51.06</b>	<b>9.69</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>9.20</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.21	0.30	1.22	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Construction Worker Commuting	--	--	0.69	0.87	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	Haul Trucks	0.29	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.53	6.29	6.29	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	Marine Equipment Exhaust	1.01	--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
<b>River Grading Site Subtotal</b>		<b>2.04</b>	<b>6.68</b>	<b>8.71</b>	<b>2.73</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>
<b>GRAND TOTAL</b>		<b>9.90</b>	<b>19.55</b>	<b>71.34</b>	<b>13.86</b>	<b>134.63</b>	<b>84.53</b>	<b>240.98</b>	<b>183.79</b>	<b>174.86</b>	<b>264.90</b>	<b>196.23</b>	<b>74.83</b>	<b>57.22</b>	<b>64.06</b>	<b>64.43</b>	<b>64.66</b>	<b>62.01</b>	<b>62.95</b>	<b>45.13</b>
<b>Yolo County Total</b>		<b>9.31</b>	<b>18.68</b>	<b>70.03</b>	<b>12.25</b>	<b>37.46</b>	<b>83.18</b>	<b>225.74</b>	<b>183.54</b>	<b>172.53</b>	<b>175.87</b>	<b>195.77</b>	<b>73.94</b>	<b>55.89</b>	<b>63.68</b>	<b>63.41</b>	<b>64.47</b>	<b>61.78</b>	<b>62.72</b>	<b>44.94</b>
<b>Sutter County Total</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.17</b>	<b>1.36</b>	<b>15.24</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>

Table L1-72. PM10 Detailed Summary (Alternative 2) -

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1.65	0.17	0.23	0.39	0.39	0.37	0.37	0.32	0.06	0.13
	Construction Worker Commuting	2.93	2.66	0.87	1.33	1.33	1.33	1.33	2.75	0.23	0.23
	Haul Trucks	13.41	1.07	--	--	--	--	--	2.16	0.10	0.51
	Fugitive Dust	3.30	--	--	--	--	--	--	0.53	--	1.93
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>21.29</b>	<b>3.90</b>	<b>1.10</b>	<b>1.72</b>	<b>1.72</b>	<b>1.69</b>	<b>1.69</b>	<b>5.76</b>	<b>0.38</b>	<b>2.79</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.04
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.04
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.75</b>	<b>0.38</b>	<b>0.10</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.06	0.06	0.06	0.21	0.06	--	--	--	--	0.04
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	1.03
<b>Downstream Channel Subtotal</b>		<b>0.24</b>	<b>0.24</b>	<b>1.00</b>	<b>2.75</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.33</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	0.00
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.07
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	0.82	1.28	0.05	0.05	--	0.21	--	--	--	0.02
	Construction Worker Commuting	0.69	1.97	1.28	1.47	0.18	--	--	--	--	0.05
	Haul Trucks	--	5.45	5.45	5.45	--	0.29	--	--	--	0.05
	Fugitive Dust	0.53	6.29	--	--	--	0.53	--	--	--	0.01
	Marine Equipment Exhaust	0.51	0.51	--	--	--	--	--	--	--	0.07
<b>River Grading Site Subtotal</b>		<b>2.54</b>	<b>15.49</b>	<b>6.78</b>	<b>6.97</b>	<b>0.18</b>	<b>1.03</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.21</b>
<b>GRAND TOTAL</b>		<b>24.56</b>	<b>19.64</b>	<b>10.76</b>	<b>11.62</b>	<b>2.09</b>	<b>2.73</b>	<b>1.69</b>	<b>8.51</b>	<b>0.77</b>	<b>4.52</b>
<b>Yolo County Total</b>		<b>24.56</b>	<b>19.64</b>	<b>10.76</b>	<b>11.62</b>	<b>2.09</b>	<b>2.73</b>	<b>1.69</b>	<b>5.76</b>	<b>0.38</b>	<b>4.42</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.75</b>	<b>0.38</b>	<b>0.10</b>



**Table L1-73. PM10 Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	0.99	1.05	0.94	1.49	1.30	2.43	2.39	2.39	2.25	2.25	3.68	4.26	5.48	3.52	3.78	3.32	3.29	4.64
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	4.17	4.17	3.85	3.85	6.23	7.47	9.44	6.23	6.60	5.68	5.59	8.11
	Haul Trucks	1.32	0.87	1.33	--	0.38	--	0.21	--	--	--	--	11.10	12.19	23.14	23.12	22.93	22.37	22.05	28.18
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	164.70	118.43	118.43	118.43	118.43	118.67	118.67	121.97	6.60	6.60	6.60	6.60	8.24
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.78</b>	<b>9.26</b>	<b>12.07</b>	<b>8.07</b>	<b>33.48</b>	<b>32.49</b>	<b>171.93</b>	<b>125.00</b>	<b>125.00</b>	<b>124.54</b>	<b>124.54</b>	<b>139.68</b>	<b>142.60</b>	<b>160.03</b>	<b>39.47</b>	<b>39.91</b>	<b>37.97</b>	<b>37.53</b>	<b>49.18</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.55	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.21</b>	<b>1.36</b>	<b>15.06</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.26	0.26	0.26	0.26	0.44	0.55	0.55	0.44	0.58	0.63	0.63	0.83	1.54	1.54	1.54	1.54	1.54	0.77
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	46.27	49.33	49.33	46.27	49.15	49.15	49.15	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.39</b>	<b>1.61</b>	<b>1.61</b>	<b>1.21</b>	<b>1.21</b>	<b>47.63</b>	<b>50.98</b>	<b>50.98</b>	<b>48.07</b>	<b>51.01</b>	<b>51.06</b>	<b>51.06</b>	<b>9.69</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>9.20</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>GRAND TOTAL</b>		<b>7.86</b>	<b>12.86</b>	<b>62.62</b>	<b>11.13</b>	<b>132.14</b>	<b>81.99</b>	<b>238.25</b>	<b>184.60</b>	<b>175.67</b>	<b>265.71</b>	<b>223.87</b>	<b>192.42</b>	<b>154.18</b>	<b>179.37</b>	<b>59.69</b>	<b>59.91</b>	<b>57.26</b>	<b>58.21</b>	<b>59.56</b>
<b>Yolo County Total</b>		<b>7.86</b>	<b>12.86</b>	<b>62.62</b>	<b>11.13</b>	<b>132.14</b>	<b>81.99</b>	<b>238.25</b>	<b>184.60</b>	<b>175.67</b>	<b>265.71</b>	<b>223.87</b>	<b>192.42</b>	<b>154.18</b>	<b>179.37</b>	<b>59.69</b>	<b>59.91</b>	<b>57.26</b>	<b>58.21</b>	<b>59.56</b>
<b>Sutter County Total</b>		<b>4.78</b>	<b>9.26</b>	<b>12.07</b>	<b>8.07</b>	<b>33.48</b>	<b>32.49</b>	<b>171.93</b>	<b>125.00</b>	<b>125.00</b>	<b>124.54</b>	<b>124.54</b>	<b>139.68</b>	<b>142.60</b>	<b>160.03</b>	<b>39.47</b>	<b>39.91</b>	<b>37.97</b>	<b>37.53</b>	<b>49.18</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

171.93

**Table L1-73. PM10 Detailed Summary (Alternative 3) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	3.24	1.65	1.77	0.39	0.39	0.37	0.37	0.32	0.06	0.16
	Construction Worker Commuting	7.93	2.80	3.44	1.33	1.33	1.33	1.33	2.75	0.23	0.30
	Haul Trucks	23.26	11.01	10.95	--	--	--	--	2.16	0.10	0.62
	Fugitive Dust	6.60	3.30	3.30	--	--	--	--	0.53	--	3.11
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>41.03</b>	<b>18.75</b>	<b>19.45</b>	<b>1.72</b>	<b>1.72</b>	<b>1.69</b>	<b>1.69</b>	<b>5.77</b>	<b>0.38</b>	<b>4.19</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.05
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.74</b>	<b>0.38</b>	<b>0.12</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.06	0.06	0.06	0.21	0.06	--	--	--	--	0.04
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	1.03
<b>Downstream Channel Subtotal</b>		<b>0.24</b>	<b>0.24</b>	<b>1.00</b>	<b>2.75</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.33</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	0.00
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.07
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>
<b>GRAND TOTAL</b>		<b>41.76</b>	<b>19.00</b>	<b>22.33</b>	<b>4.65</b>	<b>1.90</b>	<b>1.69</b>	<b>1.69</b>	<b>8.51</b>	<b>0.77</b>	<b>5.73</b>
<b>Yolo County Total</b>		<b>41.76</b>	<b>19.00</b>	<b>22.33</b>	<b>4.65</b>	<b>1.90</b>	<b>1.69</b>	<b>1.69</b>	<b>8.51</b>	<b>0.77</b>	<b>5.73</b>
<b>Sutter County Total</b>		<b>41.03</b>	<b>18.75</b>	<b>19.45</b>	<b>1.72</b>	<b>1.72</b>	<b>1.69</b>	<b>1.69</b>	<b>5.77</b>	<b>0.38</b>	<b>4.19</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-74. PM10 Detailed Summary (Alternative 4) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	0.99	1.05	0.94	1.49	1.30	2.43	2.39	2.39	2.25	2.25	3.68	4.26	5.48	3.52	3.78	3.32	3.29	4.64
	Construction Worker Commuting	3.21	1.74	4.03	1.60	2.29	1.88	4.58	4.17	4.17	3.85	3.85	6.23	7.47	9.44	6.23	6.60	5.68	5.59	8.11
	Haul Trucks	1.32	0.87	1.33	--	0.38	--	0.21	--	--	--	--	11.10	12.19	23.14	23.12	22.93	22.37	22.05	28.18
	Fugitive Dust	--	5.66	5.66	5.53	29.31	29.31	164.70	118.43	118.43	118.43	118.43	118.67	118.67	121.97	6.60	6.60	6.60	6.60	8.24
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>4.78</b>	<b>9.26</b>	<b>12.07</b>	<b>8.07</b>	<b>33.48</b>	<b>32.49</b>	<b>171.93</b>	<b>125.00</b>	<b>125.00</b>	<b>124.54</b>	<b>124.54</b>	<b>139.68</b>	<b>142.60</b>	<b>160.03</b>	<b>39.47</b>	<b>39.91</b>	<b>37.97</b>	<b>37.53</b>	<b>49.18</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.55	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.21</b>	<b>1.36</b>	<b>15.06</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.26	0.26	0.26	0.26	0.44	0.55	0.55	0.44	0.58	0.63	0.63	0.83	1.54	1.54	1.54	1.54	1.54	0.77
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	46.27	49.33	49.33	46.27	49.15	49.15	49.15	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.39</b>	<b>1.61</b>	<b>1.61</b>	<b>1.21</b>	<b>1.21</b>	<b>47.63</b>	<b>50.98</b>	<b>50.98</b>	<b>48.07</b>	<b>51.01</b>	<b>51.06</b>	<b>51.06</b>	<b>9.69</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>9.20</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>Northern Water Control Structure Improvements</b>																				
5	Offroad Construction Equipment Exhaust	0.24	0.53	0.62	0.79	1.04	1.23	1.49	1.13	1.04	1.48	0.34	0.28	0.20	0.22	0.16	0.21	0.20	0.11	0.05
	Construction Worker Commuting	1.19	0.87	1.10	1.19	2.02	2.11	2.98	1.97	1.79	2.70	0.87	1.05	0.41	0.50	0.41	0.50	0.60	0.60	0.18
	Haul Trucks	0.52	0.31	0.41	12.12	12.62	12.12	12.33	12.12	12.12	15.76	0.10	0.62	--	0.45	--	0.04	--	0.25	--
	Fugitive Dust	--	5.00	5.00	22.00	22.00	68.27	56.68	10.41	10.41	56.68	--	--	--	--	--	--	--	--	--
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>1.95</b>	<b>6.72</b>	<b>7.13</b>	<b>36.09</b>	<b>37.68</b>	<b>83.72</b>	<b>73.48</b>	<b>25.62</b>	<b>25.35</b>	<b>76.62</b>	<b>1.30</b>	<b>1.95</b>	<b>0.62</b>	<b>1.17</b>	<b>0.57</b>	<b>0.76</b>	<b>0.80</b>	<b>0.95</b>	<b>0.23</b>
<b>Southern Water Control Structure Improvements</b>																				
6	Offroad Construction Equipment Exhaust	0.26	0.80	0.89	1.02	1.04	1.23	2.55	2.19	2.11	2.55	2.24	1.98	1.96	1.98	1.91	1.97	1.96	1.86	1.81
	Construction Worker Commuting	1.38	1.28	1.51	1.65	2.02	2.11	4.63	3.62	3.44	4.35	3.76	3.44	3.35	3.44	3.35	3.44	3.53	3.53	3.12
	Haul Trucks	0.63	0.79	0.89	16.94	17.44	16.94	17.15	16.94	16.94	28.85	28.85	29.20	28.85	29.30	28.85	28.89	28.85	29.10	28.85
	Fugitive Dust	--	5.53	5.53	15.41	22.00	68.27	64.86	18.59	18.59	64.86	18.59	10.94	10.94	10.94	10.94	10.94	10.94	10.94	10.94
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>2.27</b>	<b>8.40</b>	<b>8.82</b>	<b>35.02</b>	<b>42.50</b>	<b>88.55</b>	<b>89.20</b>	<b>41.35</b>	<b>41.07</b>	<b>100.61</b>	<b>53.44</b>	<b>45.56</b>	<b>45.10</b>	<b>45.65</b>	<b>45.05</b>	<b>45.24</b>	<b>45.28</b>	<b>45.43</b>	<b>44.71</b>
<b>GRAND TOTAL</b>		<b>12.08</b>	<b>27.98</b>	<b>78.56</b>	<b>82.25</b>	<b>212.32</b>	<b>254.26</b>	<b>400.93</b>	<b>251.56</b>	<b>242.09</b>	<b>442.95</b>	<b>278.62</b>	<b>239.93</b>	<b>199.90</b>	<b>226.20</b>	<b>105.30</b>	<b>105.91</b>	<b>103.34</b>	<b>104.59</b>	<b>104.50</b>
<b>Yolo County Total</b>		<b>12.08</b>	<b>27.98</b>	<b>78.56</b>	<b>82.25</b>	<b>212.32</b>	<b>254.26</b>	<b>400.93</b>	<b>251.56</b>	<b>242.09</b>	<b>442.95</b>	<b>278.62</b>	<b>239.93</b>	<b>199.90</b>	<b>226.20</b>	<b>105.30</b>	<b>105.91</b>	<b>103.34</b>	<b>104.59</b>	<b>104.50</b>
<b>Sutter County Total</b>		<b>4.78</b>	<b>9.26</b>	<b>12.07</b>	<b>8.07</b>	<b>33.48</b>	<b>32.49</b>	<b>171.93</b>	<b>125.00</b>	<b>125.00</b>	<b>124.54</b>	<b>124.54</b>	<b>139.68</b>	<b>142.60</b>	<b>160.03</b>	<b>39.47</b>	<b>39.91</b>	<b>37.97</b>	<b>37.53</b>	<b>49.18</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

171.93

**Table L1-74. PM10 Detailed Summary (Alternative 4) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	3.24	1.65	1.77	0.39	0.39	0.37	0.37	0.32	0.06	0.16
	Construction Worker Commuting	7.93	2.80	3.44	1.33	1.33	1.33	1.33	2.75	0.23	0.30
	Haul Trucks	23.26	11.01	10.95	--	--	--	--	2.16	0.10	0.62
	Fugitive Dust	6.60	3.30	3.30	--	--	--	--	0.53	--	3.11
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>41.03</b>	<b>18.75</b>	<b>19.45</b>	<b>1.72</b>	<b>1.72</b>	<b>1.70</b>	<b>1.70</b>	<b>5.77</b>	<b>0.38</b>	<b>4.19</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.05
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.74</b>	<b>0.38</b>	<b>0.12</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.06	0.06	0.06	0.21	0.06	--	--	--	--	0.04
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	1.03
<b>Downstream Channel Subtotal</b>		<b>0.24</b>	<b>0.24</b>	<b>1.00</b>	<b>2.75</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.33</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	0.00
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.07
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.09	0.09	0.26	0.06	--	--	--	--	--	0.03
	Construction Worker Commuting	0.37	0.37	0.46	0.09	--	--	--	--	--	0.06
	Haul Trucks	--	--	1.95	0.04	--	--	--	--	--	0.34
	Fugitive Dust	--	--	0.53	--	--	--	--	--	--	0.70
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.46</b>	<b>0.46</b>	<b>3.21</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.13</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	0.37	0.37	0.35	0.07	--	--	--	--	--	0.09
	Construction Worker Commuting	0.92	1.47	0.69	0.09	--	--	--	--	--	0.17
	Haul Trucks	16.94	17.32	2.14	0.04	--	--	--	--	--	1.25
	Fugitive Dust	9.88	9.88	0.53	--	--	--	--	--	--	1.03
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>28.11</b>	<b>29.04</b>	<b>3.71</b>	<b>0.20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.53</b>
<b>GRAND TOTAL</b>		<b>70.32</b>	<b>48.49</b>	<b>29.24</b>	<b>5.05</b>	<b>1.91</b>	<b>1.70</b>	<b>1.70</b>	<b>8.51</b>	<b>0.77</b>	<b>9.39</b>
<b>Yolo County Total</b>		<b>70.32</b>	<b>48.49</b>	<b>29.24</b>	<b>5.05</b>	<b>1.91</b>	<b>1.70</b>	<b>1.70</b>	<b>8.51</b>	<b>0.77</b>	<b>9.39</b>
<b>Sutter County Total</b>		<b>41.03</b>	<b>18.75</b>	<b>19.45</b>	<b>1.72</b>	<b>1.72</b>	<b>1.70</b>	<b>1.70</b>	<b>5.77</b>	<b>0.38</b>	<b>4.19</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-75. PM10 Detailed Summary (Alternative 5) - Mitigated**

#	Activity																			Ma
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.81	3.48	3.87	5.63	7.50	7.06	5.56	7.86	6.54	6.04	5.69	4.86	6.48	6.04	5.62	5.82	5.82	3.58	0.43
	Construction Worker Commuting	6.78	5.96	8.39	5.50	9.26	8.34	5.45	9.30	11.92	10.59	9.81	8.34	11.50	10.59	9.63	10.31	10.31	6.65	0.92
	Haul Trucks	3.30	1.21	1.15	--	0.38	0.38	0.38	19.89	39.12	38.91	38.91	38.91	38.91	38.91	38.91	41.19	41.19	21.86	--
	Fugitive Dust	0.40	10.17	87.66	314.61	360.88	314.61	310.14	315.08	56.17	9.89	9.89	9.89	56.17	9.89	9.89	9.89	9.89	4.95	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.29</b>	<b>20.82</b>	<b>101.08</b>	<b>325.74</b>	<b>378.02</b>	<b>330.39</b>	<b>321.53</b>	<b>352.15</b>	<b>113.74</b>	<b>65.43</b>	<b>64.30</b>	<b>62.01</b>	<b>113.06</b>	<b>65.43</b>	<b>64.05</b>	<b>67.22</b>	<b>67.22</b>	<b>37.03</b>	<b>1.35</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.84	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.50	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.17</b>	<b>1.36</b>	<b>15.24</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.21	0.30	1.22	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Construction Worker Commuting	--	--	0.69	0.87	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	Haul Trucks	0.29	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.53	6.29	6.29	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	Marine Equipment Exhaust	1.01	--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
<b>River Grading Site Subtotal</b>		<b>2.04</b>	<b>6.68</b>	<b>8.71</b>	<b>2.73</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>	<b>2.54</b>
<b>GRAND TOTAL</b>		<b>15.03</b>	<b>29.50</b>	<b>158.72</b>	<b>330.32</b>	<b>477.97</b>	<b>334.81</b>	<b>339.59</b>	<b>363.31</b>	<b>118.89</b>	<b>158.13</b>	<b>115.12</b>	<b>66.23</b>	<b>117.50</b>	<b>68.92</b>	<b>68.41</b>	<b>71.37</b>	<b>70.66</b>	<b>41.86</b>	<b>5.07</b>
Yolo County Total		14.44	28.62	157.41	328.71	380.81	333.45	324.35	363.06	116.57	69.11	114.66	65.35	116.17	68.54	67.40	71.18	70.43	41.62	4.88
Sutter County Total		0.59	0.88	1.31	1.61	97.17	1.36	15.24	0.24	2.32	89.03	0.46	0.88	1.33	0.38	1.02	0.19	0.23	0.23	0.19

Table L1-75. PM10 Detailed Summary (Alternative 5) -

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	0.22	0.22	1.33	1.21	0.06	0.26	0.00	0.00	0.12	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.94
	Construction Worker Commuting	0.55	0.46	0.46	7.15	2.61	4.72	0.60	0.00	0.00	0.18	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	2.15
	Haul Trucks	0.19	--	--	5.06	2.28	0.86	1.85	--	--	0.92	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.99</b>	<b>0.68</b>	<b>0.68</b>	<b>13.54</b>	<b>6.10</b>	<b>5.64</b>	<b>3.24</b>	<b>--</b>	<b>--</b>	<b>1.22</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>3.09</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	1.65	0.10	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.75</b>	<b>0.38</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.82	1.28	0.05	0.05	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.69	1.97	1.28	1.47	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	5.45	5.45	5.45	--	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.53	6.29	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--
	Marine Equipment Exhaust	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>2.54</b>	<b>15.49</b>	<b>6.78</b>	<b>6.97</b>	<b>0.18</b>	<b>1.03</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>4.02</b>	<b>16.17</b>	<b>9.34</b>	<b>20.70</b>	<b>6.29</b>	<b>6.67</b>	<b>3.24</b>	<b>2.75</b>	<b>0.38</b>	<b>1.22</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>2.87</b>	<b>3.09</b>
Yolo County Total		4.02	16.17	9.34	20.70	6.29	6.67	3.24	--	--	1.22	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	3.09
Sutter County Total		--	--	--	--	--	--	--	2.75	0.38	--	--	--	--	--	--	--	--	--	--

**Table L1-75. PM10 Detailed Summary (Alternative 5) -**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.27	0.12	--	0.46	0.44	0.02
	Construction Worker Commuting	1.05	0.18	--	0.50	0.44	0.06
	Haul Trucks	--	0.92	--	1.00	1.00	0.00
	Fugitive Dust	--	--	--	6.03	6.03	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.32</b>	<b>1.22</b>	<b>--</b>	<b>8.00</b>	<b>7.91</b>	<b>0.08</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.04	0.04	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	--	--	--	0.04	0.04	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.10</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	--
	Construction Worker Commuting	--	--	--	0.01	0.01	--
	Haul Trucks	--	--	--	0.01	0.01	--
	Fugitive Dust	--	--	--	0.07	0.07	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>	<b>0.10</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.02	0.02	--
	Construction Worker Commuting	--	--	--	0.05	0.05	--
	Haul Trucks	--	--	--	0.05	0.05	--
	Fugitive Dust	--	--	--	0.01	0.01	--
	Marine Equipment Exhaust	--	--	--	0.08	0.08	--
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.21</b>	<b>0.21</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>1.32</b>	<b>1.22</b>	<b>--</b>	<b>8.41</b>	<b>8.32</b>	<b>0.08</b>
Yolo County Total		1.32	1.22	--	8.31	8.22	0.08
Sutter County Total		--	--	--	0.10	0.10	--

**Table L1-76. PM10 Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.24	1.50	1.72	1.34	2.14	1.95	2.51	2.34	2.20	2.78	8.52	8.52	8.34	8.60	8.47	8.11	8.69	8.58	8.00
	Construction Worker Commuting	4.40	6.14	3.25	2.34	3.39	2.98	4.31	3.71	3.39	4.63	14.58	14.58	14.30	14.67	14.48	13.66	14.90	14.80	13.43
	Haul Trucks	1.82	2.06	1.35	1.15	0.38	--	0.21	--	--	1.15	40.00	40.00	39.91	39.72	40.04	38.85	40.00	40.19	38.91
	Fugitive Dust	--	6.33	6.33	6.06	83.86	83.86	36.18	33.12	33.12	33.12	181.47	181.47	181.47	181.47	181.47	181.47	181.47	181.47	181.47
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6.47</b>	<b>16.03</b>	<b>12.65</b>	<b>10.89</b>	<b>89.78</b>	<b>88.79</b>	<b>43.21</b>	<b>39.17</b>	<b>38.71</b>	<b>41.68</b>	<b>244.56</b>	<b>244.56</b>	<b>244.02</b>	<b>244.46</b>	<b>244.46</b>	<b>242.09</b>	<b>245.05</b>	<b>245.04</b>	<b>241.81</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.13	0.19	0.06	0.26	0.30	0.44	1.54	0.06	0.12	0.14	0.14	0.19	0.27	0.10	0.06	0.06	0.05	0.05	0.06
	Construction Worker Commuting	0.37	0.46	0.83	0.41	0.37	0.92	2.57	0.18	1.65	0.37	0.32	0.41	0.64	0.28	0.83	0.09	0.18	0.18	0.09
	Haul Trucks	0.10	0.10	0.42	0.40	--	--	7.66	--	0.56	--	--	0.28	0.42	--	0.13	0.04	--	--	0.04
	Fugitive Dust	--	0.13	--	0.53	96.55	--	3.30	--	--	88.52	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.59</b>	<b>0.88</b>	<b>1.31</b>	<b>1.61</b>	<b>97.21</b>	<b>1.36</b>	<b>15.06</b>	<b>0.24</b>	<b>2.32</b>	<b>89.03</b>	<b>0.46</b>	<b>0.88</b>	<b>1.33</b>	<b>0.38</b>	<b>1.02</b>	<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	<b>0.19</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.18	0.26	0.26	0.26	0.26	0.44	0.55	0.55	0.44	0.58	0.63	0.63	0.83	1.54	1.54	1.54	1.54	1.54	0.77
	Construction Worker Commuting	0.83	0.41	0.41	0.41	0.41	0.92	1.10	1.10	1.24	1.28	1.28	1.28	1.60	2.57	2.57	2.57	2.57	2.57	1.28
	Haul Trucks	0.38	0.40	0.40	--	--	--	--	--	0.12	--	--	--	5.61	11.00	11.00	11.00	11.00	11.00	5.50
	Fugitive Dust	--	0.53	0.53	0.53	0.53	46.27	49.33	49.33	46.27	49.15	49.15	49.15	1.65	3.30	3.30	3.30	3.30	3.30	1.65
<b>Downstream Channel Subtotal</b>		<b>1.39</b>	<b>1.61</b>	<b>1.61</b>	<b>1.21</b>	<b>1.21</b>	<b>47.63</b>	<b>50.98</b>	<b>50.98</b>	<b>48.07</b>	<b>51.01</b>	<b>51.06</b>	<b>51.06</b>	<b>9.69</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>18.40</b>	<b>9.20</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.18	0.19	0.44	0.06	0.06	0.06	0.09	0.11	0.09	0.06	0.49	0.24	0.15	0.15	0.25	0.33	0.11	0.38	0.19
	Construction Worker Commuting	0.69	0.41	0.92	0.18	0.18	0.46	0.14	0.18	0.14	0.83	1.05	0.55	0.41	0.41	0.55	0.96	0.37	1.42	0.41
	Haul Trucks	0.23	0.30	--	--	--	--	0.06	5.35	0.06	0.25	--	--	--	--	--	0.13	0.19	0.25	0.38
	Fugitive Dust	--	0.21	46.27	--	--	--	--	2.74	--	--	46.27	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>1.10</b>	<b>1.11</b>	<b>47.63</b>	<b>0.24</b>	<b>0.24</b>	<b>0.52</b>	<b>0.28</b>	<b>8.37</b>	<b>0.28</b>	<b>1.13</b>	<b>47.82</b>	<b>0.79</b>	<b>0.56</b>	<b>0.56</b>	<b>0.80</b>	<b>1.42</b>	<b>0.67</b>	<b>2.05</b>	<b>0.99</b>
<b>GRAND TOTAL</b>		<b>9.55</b>	<b>19.62</b>	<b>63.19</b>	<b>13.95</b>	<b>188.44</b>	<b>138.29</b>	<b>109.53</b>	<b>98.77</b>	<b>89.38</b>	<b>182.85</b>	<b>343.90</b>	<b>297.30</b>	<b>255.60</b>	<b>263.79</b>	<b>264.68</b>	<b>262.09</b>	<b>264.35</b>	<b>265.72</b>	<b>252.19</b>
<b>Yolo County Total</b>		<b>9.55</b>	<b>19.62</b>	<b>63.19</b>	<b>13.95</b>	<b>188.44</b>	<b>138.29</b>	<b>109.53</b>	<b>98.77</b>	<b>89.38</b>	<b>182.85</b>	<b>343.90</b>	<b>297.30</b>	<b>255.60</b>	<b>263.79</b>	<b>264.68</b>	<b>262.09</b>	<b>264.35</b>	<b>265.72</b>	<b>252.19</b>
<b>Sutter County Total</b>		<b>6.47</b>	<b>16.03</b>	<b>12.65</b>	<b>10.89</b>	<b>89.78</b>	<b>88.79</b>	<b>43.21</b>	<b>39.17</b>	<b>38.71</b>	<b>41.68</b>	<b>244.56</b>	<b>244.56</b>	<b>244.02</b>	<b>244.46</b>	<b>244.46</b>	<b>242.09</b>	<b>245.05</b>	<b>245.04</b>	<b>241.81</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.



**Table L1-76. PM10 Detailed Summary (Alternative 6) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	8.89	7.70	3.30	3.57	0.56	0.48	0.48	0.43	0.18	0.35
	Construction Worker Commuting	15.35	13.89	6.00	6.74	5.09	1.60	1.60	1.24	3.99	0.62
	Haul Trucks	44.19	44.19	22.19	22.19	1.46	--	--	1.65	0.92	1.50
	Fugitive Dust	183.12	150.00	6.60	6.60	--	--	--	0.53	--	6.59
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>251.55</b>	<b>215.77</b>	<b>38.09</b>	<b>39.09</b>	<b>7.10</b>	<b>2.08</b>	<b>2.08</b>	<b>3.85</b>	<b>5.09</b>	<b>9.06</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.21	0.06	0.01
	Construction Worker Commuting	--	--	--	--	--	--	--	0.37	0.23	0.06
	Haul Trucks	--	--	--	--	--	--	--	1.64	0.10	0.01
	Fugitive Dust	--	--	--	--	--	--	--	0.53	--	0.05
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.74</b>	<b>0.38</b>	<b>0.12</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.06	0.06	0.06	0.21	0.06	--	--	--	--	0.04
	Construction Worker Commuting	0.18	0.18	0.60	0.37	0.09	--	--	--	--	0.07
	Haul Trucks	--	--	0.35	1.65	0.04	--	--	--	--	0.19
	Fugitive Dust	--	--	--	0.53	--	--	--	--	--	1.03
<b>Downstream Channel Subtotal</b>		<b>0.24</b>	<b>0.24</b>	<b>1.00</b>	<b>2.75</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.33</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.17	--	0.26	0.06	--	--	--	--	--	0.00
	Construction Worker Commuting	0.32	--	0.60	0.09	--	--	--	--	--	0.01
	Haul Trucks	--	--	0.81	0.04	--	--	--	--	--	0.01
	Fugitive Dust	--	--	0.21	--	--	--	--	--	--	0.07
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.49</b>	<b>--</b>	<b>1.88</b>	<b>0.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.10</b>
<b>GRAND TOTAL</b>		<b>252.28</b>	<b>216.01</b>	<b>40.97</b>	<b>42.03</b>	<b>7.29</b>	<b>2.08</b>	<b>2.08</b>	<b>6.59</b>	<b>5.47</b>	<b>10.60</b>
<b>Yolo County Total</b>		<b>252.28</b>	<b>216.01</b>	<b>40.97</b>	<b>42.03</b>	<b>7.29</b>	<b>2.08</b>	<b>2.08</b>	<b>6.59</b>	<b>5.47</b>	<b>10.60</b>
<b>Sutter County Total</b>		<b>251.55</b>	<b>215.77</b>	<b>38.09</b>	<b>39.09</b>	<b>7.10</b>	<b>2.08</b>	<b>2.08</b>	<b>3.85</b>	<b>5.09</b>	<b>9.06</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-77. PM2.5 Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.12	0.62	3.65	0.59	0.55	6.13	6.42	0.75	4.58	4.50	4.29	0.76	1.02	1.12	1.44	1.34	0.82	1.05	0.06
	Construction Worker Commuting	0.59	0.47	1.08	0.43	0.42	0.36	0.79	0.71	0.73	0.64	0.54	0.86	1.06	1.13	1.43	1.38	0.81	1.12	0.42
	Haul Trucks	0.35	0.26	0.40	--	--	--	0.13	0.02	--	--	--	2.19	5.40	4.94	5.28	5.28	3.30	5.48	0.19
	Fugitive Dust	--	1.45	1.45	1.42	2.99	4.33	12.20	6.24	7.55	7.55	5.94	4.63	0.25	0.50	0.50	0.50	0.50	0.50	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.06</b>	<b>2.79</b>	<b>6.58</b>	<b>2.44</b>	<b>3.96</b>	<b>10.81</b>	<b>19.54</b>	<b>7.72</b>	<b>12.85</b>	<b>12.69</b>	<b>10.77</b>	<b>8.44</b>	<b>7.73</b>	<b>7.69</b>	<b>8.65</b>	<b>8.51</b>	<b>5.43</b>	<b>8.15</b>	<b>0.67</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.06	0.10	0.03	0.17	0.21	0.23	0.70	0.03	0.06	0.07	0.07	0.10	0.14	0.06	0.03	0.03	0.03	0.03	0.03
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	10.77	--	0.50	--	--	8.85	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.28</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.09	0.17	0.17	0.17	0.17	0.23	0.30	0.30	0.23	0.27	0.27	0.27	0.38	0.70	0.70	0.70	0.70	0.70	0.35
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	4.63	6.00	6.00	4.63	5.98	5.98	5.98	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.43</b>	<b>0.46</b>	<b>0.46</b>	<b>0.34</b>	<b>0.34</b>	<b>5.11</b>	<b>6.60</b>	<b>6.60</b>	<b>5.23</b>	<b>6.59</b>	<b>6.59</b>	<b>6.59</b>	<b>2.76</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>2.62</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.09	0.10	0.23	0.03	0.03	0.03	0.04	0.06	0.04	0.03	0.26	0.13	0.08	0.08	0.12	0.17	0.06	0.22	0.10
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	4.63	--	--	--	--	1.34	--	--	4.63	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.34</b>	<b>0.33</b>	<b>5.11</b>	<b>0.08</b>	<b>0.08</b>	<b>0.15</b>	<b>0.10</b>	<b>3.08</b>	<b>0.10</b>	<b>0.33</b>	<b>5.17</b>	<b>0.27</b>	<b>0.19</b>	<b>0.19</b>	<b>0.27</b>	<b>0.47</b>	<b>0.22</b>	<b>0.68</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>2.02</b>	<b>3.87</b>	<b>12.54</b>	<b>3.33</b>	<b>15.45</b>	<b>16.55</b>	<b>30.51</b>	<b>17.48</b>	<b>18.85</b>	<b>28.63</b>	<b>22.69</b>	<b>15.59</b>	<b>11.12</b>	<b>13.25</b>	<b>14.44</b>	<b>14.28</b>	<b>10.96</b>	<b>14.14</b>	<b>3.68</b>
<b>Yolo County Total</b>		<b>1.83</b>	<b>3.59</b>	<b>12.16</b>	<b>2.86</b>	<b>4.38</b>	<b>16.07</b>	<b>26.23</b>	<b>17.40</b>	<b>18.18</b>	<b>19.61</b>	<b>22.54</b>	<b>15.30</b>	<b>10.69</b>	<b>13.12</b>	<b>14.15</b>	<b>14.21</b>	<b>10.89</b>	<b>14.07</b>	<b>3.62</b>
<b>Sutter County Total</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.28</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>

**Table L1-77. PM2.5 Detailed Summary (Alternative 1) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.03	1.30	0.21	0.21	0.21	0.19	0.14	4.40	0.03	0.11
	Construction Worker Commuting	0.04	0.06	0.36	0.36	0.36	0.36	0.28	0.74	0.06	0.04
	Haul Trucks	--	0.00	--	--	--	--	--	0.64	0.03	0.08
	Fugitive Dust	--	--	--	--	--	--	--	0.02	--	0.15
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.07</b>	<b>1.37</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.55</b>	<b>0.42</b>	<b>5.80</b>	<b>0.12</b>	<b>0.38</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.01
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.00
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.02</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.09	0.03	--	--	--	--	0.02
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.12
<b>Downstream Channel Subtotal</b>		<b>0.08</b>	<b>0.08</b>	<b>0.29</b>	<b>0.75</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	0.00
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.01
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>0.32</b>	<b>1.45</b>	<b>1.41</b>	<b>1.38</b>	<b>0.63</b>	<b>0.55</b>	<b>0.42</b>	<b>6.56</b>	<b>0.24</b>	<b>0.63</b>
<b>Yolo County Total</b>		<b>0.32</b>	<b>1.45</b>	<b>1.41</b>	<b>1.38</b>	<b>0.63</b>	<b>0.55</b>	<b>0.42</b>	<b>5.80</b>	<b>0.12</b>	<b>0.61</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.02</b>

**Table L1-78. PM2.5 Detailed Summary (Alternative 2) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.12	0.62	0.65	0.59	0.97	0.87	1.46	1.39	1.39	1.32	0.69	0.92	1.92	1.73	1.63	1.79	1.54	1.52	1.46
	Construction Worker Commuting	0.86	0.47	1.08	0.43	0.62	0.50	1.23	1.07	1.07	0.99	0.69	0.89	1.91	1.75	1.67	1.77	1.53	1.50	1.49
	Haul Trucks	0.40	0.27	0.41	--	0.11	--	0.06	--	--	--	--	3.36	7.72	7.72	7.71	7.65	7.48	7.38	5.67
	Fugitive Dust	--	1.65	1.65	1.63	7.40	7.40	20.93	14.93	14.93	14.93	9.05	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.75
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.38</b>	<b>3.01</b>	<b>3.79</b>	<b>2.65</b>	<b>9.10</b>	<b>8.77</b>	<b>23.69</b>	<b>17.40</b>	<b>17.40</b>	<b>17.24</b>	<b>10.43</b>	<b>5.67</b>	<b>12.55</b>	<b>12.20</b>	<b>12.01</b>	<b>12.21</b>	<b>11.54</b>	<b>11.41</b>	<b>9.37</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.06	0.10	0.03	0.17	0.21	0.23	0.70	0.03	0.06	0.07	0.07	0.10	0.14	0.06	0.03	0.03	0.03	0.03	0.03
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	10.77	--	0.50	--	--	8.85	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.28</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.09	0.17	0.17	0.17	0.17	0.23	0.30	0.30	0.23	0.27	0.27	0.27	0.38	0.70	0.70	0.70	0.70	0.70	0.35
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	4.63	6.00	6.00	4.63	5.98	5.98	5.98	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.43</b>	<b>0.46</b>	<b>0.46</b>	<b>0.34</b>	<b>0.34</b>	<b>5.11</b>	<b>6.60</b>	<b>6.60</b>	<b>5.23</b>	<b>6.59</b>	<b>6.59</b>	<b>6.59</b>	<b>2.76</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>2.62</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.09	0.10	0.23	0.03	0.03	0.03	0.04	0.06	0.04	0.03	0.26	0.13	0.08	0.08	0.12	0.17	0.06	0.22	0.10
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	4.63	--	--	--	--	1.34	--	--	4.63	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.34</b>	<b>0.33</b>	<b>5.11</b>	<b>0.08</b>	<b>0.08</b>	<b>0.15</b>	<b>0.10</b>	<b>3.08</b>	<b>0.10</b>	<b>0.33</b>	<b>5.17</b>	<b>0.27</b>	<b>0.19</b>	<b>0.19</b>	<b>0.27</b>	<b>0.47</b>	<b>0.22</b>	<b>0.68</b>	<b>0.32</b>
<b>River Grading Site</b>																				
5	Offroad Construction Equipment Exhaust	0.17	0.20	0.62	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Construction Worker Commuting	--	--	0.18	0.23	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	Haul Trucks	0.09	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	2.75	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Marine Equipment Exhaust	0.93	--	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
<b>River Grading Site Subtotal</b>		<b>1.25</b>	<b>2.99</b>	<b>4.02</b>	<b>1.16</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>
<b>GRAND TOTAL</b>		<b>3.59</b>	<b>7.07</b>	<b>13.77</b>	<b>4.69</b>	<b>21.70</b>	<b>15.62</b>	<b>35.77</b>	<b>28.26</b>	<b>24.50</b>	<b>34.28</b>	<b>23.46</b>	<b>13.93</b>	<b>17.05</b>	<b>18.87</b>	<b>18.92</b>	<b>19.09</b>	<b>18.18</b>	<b>18.51</b>	<b>13.49</b>
<b>Yolo County Total</b>		<b>3.40</b>	<b>6.79</b>	<b>13.39</b>	<b>4.23</b>	<b>10.63</b>	<b>15.14</b>	<b>31.49</b>	<b>28.18</b>	<b>23.83</b>	<b>25.26</b>	<b>23.30</b>	<b>13.64</b>	<b>16.61</b>	<b>18.74</b>	<b>18.63</b>	<b>19.03</b>	<b>18.11</b>	<b>18.43</b>	<b>13.42</b>
<b>Sutter County Total</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.28</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>

**Table L1-78. PM2.5 Detailed Summary (Alternative 2) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	0.76	0.09	0.12	0.20	0.20	0.19	0.19	0.15	0.03	0.07
	Construction Worker Commuting	0.79	0.71	0.23	0.36	0.36	0.36	0.36	0.74	0.06	0.06
	Haul Trucks	4.08	0.33	--	--	--	--	--	0.66	0.03	0.15
	Fugitive Dust	0.50	--	--	--	--	--	--	0.06	--	0.28
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6.13</b>	<b>1.13</b>	<b>0.35</b>	<b>0.56</b>	<b>0.56</b>	<b>0.54</b>	<b>0.54</b>	<b>1.61</b>	<b>0.12</b>	<b>0.56</b>
<b>Supplemental Fish Passage West</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.01
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.00
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.02</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.09	0.03	--	--	--	--	0.02
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.12
<b>Downstream Channel Subtotal</b>		<b>0.08</b>	<b>0.08</b>	<b>0.29</b>	<b>0.75</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	0.00
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.01
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>River Grading Site</b>											
5	Offroad Construction Equipment Exhaust	0.40	0.65	0.03	0.03	--	0.17	--	--	--	0.01
	Construction Worker Commuting	0.18	0.53	0.34	0.39	0.05	--	--	--	--	0.01
	Haul Trucks	--	1.66	1.66	1.66	--	0.09	--	--	--	0.02
	Fugitive Dust	0.06	2.75	--	--	--	0.06	--	--	--	0.01
	Marine Equipment Exhaust	0.47	0.47	--	--	--	--	--	--	--	0.07
<b>River Grading Site Subtotal</b>		<b>1.11</b>	<b>6.05</b>	<b>2.03</b>	<b>2.08</b>	<b>0.05</b>	<b>0.32</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.13</b>
<b>GRAND TOTAL</b>		<b>7.49</b>	<b>7.26</b>	<b>3.23</b>	<b>3.45</b>	<b>0.67</b>	<b>0.86</b>	<b>0.54</b>	<b>2.36</b>	<b>0.24</b>	<b>0.94</b>
<b>Yolo County Total</b>		<b>7.49</b>	<b>7.26</b>	<b>3.23</b>	<b>3.45</b>	<b>0.67</b>	<b>0.86</b>	<b>0.54</b>	<b>1.61</b>	<b>0.12</b>	<b>0.92</b>
<b>Sutter County Total</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.02</b>

**Table L1-79. PM2.5 Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.12	0.62	0.65	0.59	0.97	0.87	1.46	1.46	1.46	1.39	1.39	2.03	2.32	2.84	1.63	1.79	1.54	1.52	2.17
	Construction Worker Commuting	0.86	0.47	1.08	0.43	0.62	0.50	1.23	1.12	1.12	1.03	1.03	1.67	2.01	2.54	1.67	1.77	1.53	1.50	2.18
	Haul Trucks	0.40	0.26	0.40	--	0.12	--	0.06	--	--	--	--	3.38	3.71	7.05	7.04	6.98	6.81	6.71	8.58
	Fugitive Dust	--	1.65	1.65	1.63	7.40	7.40	20.93	16.31	16.31	16.31	16.31	15.43	15.43	15.93	1.00	1.00	1.00	1.00	1.25
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.38</b>	<b>3.01</b>	<b>3.79</b>	<b>2.65</b>	<b>9.10</b>	<b>8.77</b>	<b>23.69</b>	<b>18.88</b>	<b>18.88</b>	<b>18.73</b>	<b>18.73</b>	<b>22.51</b>	<b>23.47</b>	<b>28.35</b>	<b>11.34</b>	<b>11.54</b>	<b>10.87</b>	<b>10.74</b>	<b>14.17</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.06	0.10	0.03	0.17	0.21	0.23	0.70	0.03	0.06	0.07	0.07	0.10	0.14	0.06	0.03	0.03	0.03	0.03	0.03
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.33	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	10.77	--	0.50	--	--	8.85	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.23</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.09	0.17	0.17	0.17	0.17	0.23	0.30	0.30	0.23	0.27	0.27	0.27	0.38	0.70	0.70	0.70	0.70	0.70	0.35
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	4.63	6.00	6.00	4.63	5.98	5.98	5.98	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.43</b>	<b>0.46</b>	<b>0.46</b>	<b>0.34</b>	<b>0.34</b>	<b>5.11</b>	<b>6.60</b>	<b>6.60</b>	<b>5.23</b>	<b>6.59</b>	<b>6.59</b>	<b>6.59</b>	<b>2.76</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>2.62</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.09	0.10	0.23	0.03	0.03	0.03	0.04	0.06	0.04	0.03	0.26	0.13	0.08	0.08	0.12	0.17	0.06	0.22	0.10
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	4.63	--	--	--	--	1.34	--	--	4.63	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.34</b>	<b>0.33</b>	<b>5.11</b>	<b>0.08</b>	<b>0.08</b>	<b>0.15</b>	<b>0.10</b>	<b>3.08</b>	<b>0.10</b>	<b>0.33</b>	<b>5.17</b>	<b>0.27</b>	<b>0.19</b>	<b>0.19</b>	<b>0.27</b>	<b>0.47</b>	<b>0.22</b>	<b>0.68</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>2.34</b>	<b>4.08</b>	<b>9.74</b>	<b>3.54</b>	<b>20.61</b>	<b>14.52</b>	<b>34.61</b>	<b>28.64</b>	<b>24.88</b>	<b>34.66</b>	<b>30.65</b>	<b>29.66</b>	<b>26.86</b>	<b>33.91</b>	<b>17.14</b>	<b>17.32</b>	<b>16.40</b>	<b>16.73</b>	<b>17.19</b>
<b>Yolo County Total</b>		<b>2.34</b>	<b>4.08</b>	<b>9.74</b>	<b>3.54</b>	<b>20.61</b>	<b>14.52</b>	<b>34.61</b>	<b>28.64</b>	<b>24.88</b>	<b>34.66</b>	<b>30.65</b>	<b>29.66</b>	<b>26.86</b>	<b>33.91</b>	<b>17.14</b>	<b>17.32</b>	<b>16.40</b>	<b>16.73</b>	<b>17.19</b>
<b>Sutter County Total</b>		<b>1.38</b>	<b>3.01</b>	<b>3.79</b>	<b>2.65</b>	<b>9.10</b>	<b>8.77</b>	<b>23.69</b>	<b>18.88</b>	<b>18.88</b>	<b>18.73</b>	<b>18.73</b>	<b>22.51</b>	<b>23.47</b>	<b>28.35</b>	<b>11.34</b>	<b>11.54</b>	<b>10.87</b>	<b>10.74</b>	<b>14.17</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-79. PM2.5 Detailed Summary (Alternative 3) -**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1.50	0.76	0.82	0.20	0.20	0.19	0.19	0.15	0.03	0.09
	Construction Worker Commuting	2.13	0.75	0.92	0.36	0.36	0.36	0.36	0.74	0.06	0.08
	Haul Trucks	7.08	3.35	3.33	--	--	--	--	0.66	0.03	0.19
	Fugitive Dust	1.00	0.50	0.50	--	--	--	--	0.06	--	0.45
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.71</b>	<b>5.37</b>	<b>5.58</b>	<b>0.56</b>	<b>0.56</b>	<b>0.54</b>	<b>0.54</b>	<b>1.61</b>	<b>0.12</b>	<b>0.80</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.09	0.03	--	--	--	--	0.02
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.12
<b>Downstream Channel Subtotal</b>		<b>0.08</b>	<b>0.08</b>	<b>0.29</b>	<b>0.75</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	0.00
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.01
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>11.96</b>	<b>5.45</b>	<b>6.43</b>	<b>1.37</b>	<b>0.62</b>	<b>0.54</b>	<b>0.54</b>	<b>2.36</b>	<b>0.24</b>	<b>1.06</b>
<b>Yolo County Total</b>		<b>11.96</b>	<b>5.45</b>	<b>6.43</b>	<b>1.37</b>	<b>0.62</b>	<b>0.54</b>	<b>0.54</b>	<b>2.36</b>	<b>0.24</b>	<b>1.06</b>
<b>Sutter County Total</b>		<b>11.71</b>	<b>5.37</b>	<b>5.58</b>	<b>0.56</b>	<b>0.56</b>	<b>0.54</b>	<b>0.54</b>	<b>1.61</b>	<b>0.12</b>	<b>0.80</b>

Note: Construction of the intake channel, headworks, and outlet channel would





**Table L1-80. PM2.5 Detailed Summary (Alternative 4) -**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	1.50	0.76	0.82	0.21	0.21	0.19	0.19	0.15	0.03	0.09
	Construction Worker Commuting	2.13	0.75	0.92	0.36	0.36	0.36	0.36	0.74	0.06	0.08
	Haul Trucks	7.08	3.35	3.33	--	--	--	--	0.66	0.03	0.19
	Fugitive Dust	1.00	0.50	0.50	--	--	--	--	0.06	--	0.45
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>11.71</b>	<b>5.37</b>	<b>5.58</b>	<b>0.56</b>	<b>0.56</b>	<b>0.55</b>	<b>0.55</b>	<b>1.61</b>	<b>0.12</b>	<b>0.80</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.09	0.03	--	--	--	--	0.02
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.12
<b>Downstream Channel Subtotal</b>		<b>0.08</b>	<b>0.08</b>	<b>0.29</b>	<b>0.75</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	0.00
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.01
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>Northern Water Control Structure Improvements</b>											
5	Offroad Construction Equipment Exhaust	0.04	0.04	0.12	0.03	--	--	--	--	--	0.02
	Construction Worker Commuting	0.10	0.10	0.12	0.02	--	--	--	--	--	0.02
	Haul Trucks	--	--	0.60	0.01	--	--	--	--	--	0.10
	Fugitive Dust	--	--	0.06	--	--	--	--	--	--	0.15
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>0.14</b>	<b>0.14</b>	<b>0.90</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.29</b>
<b>Southern Water Control Structure Improvements</b>											
6	Offroad Construction Equipment Exhaust	0.20	0.20	0.17	0.04	--	--	--	--	--	0.05
	Construction Worker Commuting	0.25	0.39	0.18	0.02	--	--	--	--	--	0.04
	Haul Trucks	5.16	5.27	0.65	0.01	--	--	--	--	--	0.38
	Fugitive Dust	3.32	3.32	0.06	--	--	--	--	--	--	0.25
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>8.93</b>	<b>9.19</b>	<b>1.06</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.72</b>
<b>GRAND TOTAL</b>		<b>21.03</b>	<b>14.78</b>	<b>8.38</b>	<b>1.52</b>	<b>0.63</b>	<b>0.55</b>	<b>0.55</b>	<b>2.36</b>	<b>0.24</b>	<b>2.06</b>
<b>Yolo County Total</b>		<b>21.03</b>	<b>14.78</b>	<b>8.38</b>	<b>1.52</b>	<b>0.63</b>	<b>0.55</b>	<b>0.55</b>	<b>2.36</b>	<b>0.24</b>	<b>2.06</b>
<b>Sutter County Total</b>		<b>11.71</b>	<b>5.37</b>	<b>5.58</b>	<b>0.56</b>	<b>0.56</b>	<b>0.55</b>	<b>0.55</b>	<b>1.61</b>	<b>0.12</b>	<b>0.80</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-81. PM2.5 Detailed Summary (Alternative 5) - Mitigated**

#	Activity	Ma																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.43	2.22	2.63	3.56	4.60	4.37	3.49	4.55	3.19	2.92	2.74	2.25	3.16	2.92	2.71	2.73	2.73	1.70	0.25
	Construction Worker Commuting	1.82	1.60	2.25	1.48	2.49	2.24	1.47	2.50	3.20	2.84	2.64	2.24	3.09	2.84	2.59	2.77	2.77	1.79	0.25
	Haul Trucks	1.01	0.37	0.35	--	0.11	0.11	0.11	0.11	0.06	11.85	11.85	11.85	11.85	11.85	11.85	12.54	12.54	6.66	--
	Fugitive Dust	0.06	2.15	21.17	43.84	48.47	43.84	42.32	43.07	6.13	1.50	1.50	1.50	6.13	1.50	1.50	1.50	1.50	0.75	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3.32</b>	<b>6.34</b>	<b>26.40</b>	<b>48.88</b>	<b>55.67</b>	<b>50.56</b>	<b>47.39</b>	<b>50.23</b>	<b>12.58</b>	<b>19.11</b>	<b>18.72</b>	<b>17.83</b>	<b>24.22</b>	<b>19.11</b>	<b>18.64</b>	<b>19.54</b>	<b>19.54</b>	<b>10.89</b>	<b>0.50</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	0.06	0.10	0.03	0.17	0.21	0.23	0.70	0.03	0.06	0.07	0.07	0.10	0.14	0.06	0.03	0.03	0.03	0.03	0.03
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.39	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	10.77	--	0.50	--	--	8.85	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.28</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.09	0.10	0.23	0.03	0.03	0.03	0.04	0.06	0.04	0.03	0.26	0.13	0.08	0.08	0.12	0.17	0.06	0.22	0.10
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	0.04	0.06	0.08	0.12	--
	Fugitive Dust	--	0.02	4.63	--	--	--	--	1.34	--	--	4.63	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.34</b>	<b>0.33</b>	<b>5.11</b>	<b>0.08</b>	<b>0.08</b>	<b>0.15</b>	<b>0.10</b>	<b>3.08</b>	<b>0.10</b>	<b>0.33</b>	<b>5.17</b>	<b>0.27</b>	<b>0.19</b>	<b>0.19</b>	<b>0.27</b>	<b>0.47</b>	<b>0.22</b>	<b>0.68</b>	<b>0.32</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.17	0.20	0.62	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Construction Worker Commuting	--	--	0.18	0.23	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	Haul Trucks	0.09	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	2.75	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Marine Equipment Exhaust	0.93	--	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
<b>River Grading Site Subtotal</b>		<b>1.25</b>	<b>2.99</b>	<b>4.02</b>	<b>1.16</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>
<b>GRAND TOTAL</b>		<b>5.09</b>	<b>9.93</b>	<b>35.91</b>	<b>50.58</b>	<b>67.93</b>	<b>52.30</b>	<b>52.87</b>	<b>54.50</b>	<b>14.45</b>	<b>29.57</b>	<b>25.16</b>	<b>19.51</b>	<b>25.95</b>	<b>20.54</b>	<b>20.30</b>	<b>21.17</b>	<b>20.93</b>	<b>12.74</b>	<b>1.99</b>
Yolo County Total		4.91	9.66	35.53	50.12	56.86	51.82	48.59	54.42	13.78	20.55	25.00	19.21	25.52	20.41	20.01	21.11	20.86	12.67	1.93
Sutter County Total		0.19	0.28	0.38	0.46	11.08	0.48	4.28	0.08	0.67	9.02	0.16	0.29	0.44	0.13	0.29	0.07	0.07	0.07	0.07

Table L1-81. PM2.5 Detailed Summary (Alternative 5) -

#	Activity	Maximum Daily Emissions, lbs/day																		
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.13	0.11	0.11	0.67	0.61	0.03	0.12	0.00	0.00	0.06	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.48
	Construction Worker Commuting	0.15	0.12	0.12	1.92	0.70	1.27	0.16	0.00	0.00	0.05	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.58
	Haul Trucks	0.06	--	--	1.54	0.69	0.26	0.56	--	--	0.28	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.33</b>	<b>0.24</b>	<b>0.24</b>	<b>4.13</b>	<b>2.01</b>	<b>1.56</b>	<b>0.90</b>	<b>--</b>	<b>--</b>	<b>0.39</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>1.06</b>
<b>Supplemental Fish Passage West</b>																				
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Agricultural Crossing 1</b>																				
3	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>River Grading Site</b>																				
4	Offroad Construction Equipment Exhaust	0.40	0.65	0.03	0.03	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
	Construction Worker Commuting	0.18	0.53	0.34	0.39	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Haul Trucks	--	1.66	1.66	1.66	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fugitive Dust	0.06	2.75	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
	Marine Equipment Exhaust	0.47	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>River Grading Site Subtotal</b>		<b>1.11</b>	<b>6.05</b>	<b>2.03</b>	<b>2.08</b>	<b>0.05</b>	<b>0.32</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>1.61</b>	<b>6.29</b>	<b>2.82</b>	<b>6.27</b>	<b>2.06</b>	<b>1.88</b>	<b>0.90</b>	<b>0.75</b>	<b>0.12</b>	<b>0.39</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>	<b>1.06</b>
Yolo County Total		1.61	6.29	2.82	6.27	2.06	1.88	0.90	--	--	0.39	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.06
Sutter County Total		--	--	--	--	--	--	--	0.75	0.12	--	--	--	--	--	--	--	--	--	--

**Table L1-81. PM2.5 Detailed Summary (Alternative 5) -**

#	Activity	24-Jun	1-Jul	8-Jul	Annual Emissions, tpy	Year 1, tpy	Year 2, tpy
<b>Intake Channel, Headworks, and Outlet Channel</b>							
1	Offroad Construction Equipment Exhaust	0.14	0.06	--	0.27	0.25	0.01
	Construction Worker Commuting	0.28	0.05	--	0.13	0.12	0.02
	Haul Trucks	--	0.28	--	0.31	0.31	0.00
	Fugitive Dust	--	--	--	1.11	1.11	--
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>0.42</b>	<b>0.39</b>	<b>--</b>	<b>1.81</b>	<b>1.78</b>	<b>0.03</b>
<b>Supplemental Fish Passage West</b>							
2	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	0.00
	Construction Worker Commuting	--	--	--	0.01	0.01	0.00
	Haul Trucks	--	--	--	0.00	0.00	0.00
	Fugitive Dust	--	--	--	0.00	0.00	0.00
<b>Supplemental Fish Passage West Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>	<b>0.02</b>	<b>--</b>
<b>Agricultural Crossing 1</b>							
3	Offroad Construction Equipment Exhaust	--	--	--	0.00	0.00	0.00
	Construction Worker Commuting	--	--	--	0.00	0.00	0.00
	Haul Trucks	--	--	--	0.00	0.00	0.00
	Fugitive Dust	--	--	--	0.01	0.01	0.00
<b>Agricultural Crossing 1 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>	<b>0.02</b>	<b>--</b>
<b>River Grading Site</b>							
4	Offroad Construction Equipment Exhaust	--	--	--	0.01	0.01	0.00
	Construction Worker Commuting	--	--	--	0.01	0.01	0.00
	Haul Trucks	--	--	--	0.02	0.02	0.00
	Fugitive Dust	--	--	--	0.01	0.01	0.00
	Marine Equipment Exhaust	--	--	--	0.07	0.07	0.00
<b>River Grading Site Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>0.13</b>	<b>0.13</b>	<b>--</b>
<b>GRAND TOTAL</b>		<b>0.42</b>	<b>0.39</b>	<b>--</b>	<b>1.98</b>	<b>1.95</b>	<b>0.03</b>
Yolo County Total		0.42	0.39	--	1.95	1.93	0.03
Sutter County Total		--	--	--	0.02	0.02	--

**Table L1-82. PM2.5 Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>Intake Channel, Headworks, and Outlet Channel</b>																				
1	Offroad Construction Equipment Exhaust	0.12	0.93	1.04	0.83	1.37	1.28	1.61	1.51	1.44	1.73	4.34	4.34	4.24	4.40	4.31	4.13	4.42	4.37	4.08
	Construction Worker Commuting	1.18	1.65	0.87	0.63	0.91	0.80	1.16	1.00	0.91	1.24	3.92	3.92	3.84	3.94	3.89	3.67	4.00	3.98	3.61
	Haul Trucks	0.55	0.63	0.41	0.35	0.12	--	0.06	--	--	0.35	12.18	12.18	12.15	12.09	12.19	11.83	12.18	12.24	11.85
	Fugitive Dust	--	1.73	1.73	1.69	13.98	13.98	9.21	7.83	7.83	7.83	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>1.85</b>	<b>4.93</b>	<b>4.06</b>	<b>3.50</b>	<b>16.39</b>	<b>16.06</b>	<b>12.04</b>	<b>10.35</b>	<b>10.19</b>	<b>11.16</b>	<b>43.70</b>	<b>43.70</b>	<b>43.50</b>	<b>43.70</b>	<b>43.65</b>	<b>42.90</b>	<b>43.87</b>	<b>43.85</b>	<b>42.80</b>
<b>Supplemental Fish Passage East</b>																				
2	Offroad Construction Equipment Exhaust	0.06	0.10	0.03	0.17	0.21	0.23	0.70	0.03	0.06	0.07	0.07	0.10	0.14	0.06	0.03	0.03	0.03	0.03	0.03
	Construction Worker Commuting	0.10	0.12	0.22	0.11	0.10	0.25	0.69	0.05	0.44	0.10	0.09	0.11	0.17	0.07	0.22	0.02	0.05	0.05	0.02
	Haul Trucks	0.03	0.03	0.13	0.12	--	--	2.33	--	0.17	--	--	0.08	0.13	--	0.04	0.01	--	--	0.01
	Fugitive Dust	--	0.02	--	0.06	10.77	--	0.50	--	--	8.85	--	--	--	--	--	--	--	--	--
<b>Supplemental Fish Passage East Subtotal</b>		<b>0.19</b>	<b>0.28</b>	<b>0.38</b>	<b>0.46</b>	<b>11.08</b>	<b>0.48</b>	<b>4.23</b>	<b>0.08</b>	<b>0.67</b>	<b>9.02</b>	<b>0.16</b>	<b>0.29</b>	<b>0.44</b>	<b>0.13</b>	<b>0.29</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>
<b>Downstream Channel</b>																				
3	Offroad Construction Equipment Exhaust	0.09	0.17	0.17	0.17	0.17	0.23	0.30	0.30	0.23	0.27	0.27	0.27	0.38	0.70	0.70	0.70	0.70	0.70	0.35
	Construction Worker Commuting	0.22	0.11	0.11	0.11	0.11	0.25	0.30	0.30	0.33	0.34	0.34	0.34	0.43	0.69	0.69	0.69	0.69	0.69	0.34
	Haul Trucks	0.12	0.12	0.12	--	--	--	--	--	0.04	--	--	--	1.71	3.35	3.35	3.35	3.35	3.35	1.67
	Fugitive Dust	--	0.06	0.06	0.06	0.06	4.63	6.00	6.00	4.63	5.98	5.98	5.98	0.25	0.50	0.50	0.50	0.50	0.50	0.25
<b>Downstream Channel Subtotal</b>		<b>0.43</b>	<b>0.46</b>	<b>0.46</b>	<b>0.34</b>	<b>0.34</b>	<b>5.11</b>	<b>6.60</b>	<b>6.60</b>	<b>5.23</b>	<b>6.59</b>	<b>6.59</b>	<b>6.59</b>	<b>2.76</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>5.24</b>	<b>2.62</b>
<b>Agricultural Crossing 1</b>																				
4	Offroad Construction Equipment Exhaust	0.09	0.10	0.23	0.03	0.03	0.03	0.04	0.06	0.04	0.03	0.26	0.13	0.08	0.08	0.12	0.17	0.06	0.22	0.10
	Construction Worker Commuting	0.18	0.11	0.25	0.05	0.05	0.12	0.04	0.05	0.04	0.22	0.28	0.15	0.11	0.11	0.15	0.26	0.10	0.38	0.11
	Haul Trucks	0.07	0.09	--	--	--	--	0.02	1.63	0.02	0.08	--	--	--	--	--	0.04	0.06	0.08	0.12
	Fugitive Dust	--	0.02	4.63	--	--	--	--	1.34	--	--	4.63	--	--	--	--	--	--	--	--
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.34</b>	<b>0.33</b>	<b>5.11</b>	<b>0.08</b>	<b>0.08</b>	<b>0.15</b>	<b>0.10</b>	<b>3.08</b>	<b>0.10</b>	<b>0.33</b>	<b>5.17</b>	<b>0.27</b>	<b>0.19</b>	<b>0.19</b>	<b>0.27</b>	<b>0.47</b>	<b>0.22</b>	<b>0.68</b>	<b>0.32</b>
<b>GRAND TOTAL</b>		<b>2.81</b>	<b>6.00</b>	<b>10.01</b>	<b>4.39</b>	<b>27.89</b>	<b>21.80</b>	<b>22.96</b>	<b>20.11</b>	<b>16.19</b>	<b>27.10</b>	<b>55.62</b>	<b>50.85</b>	<b>46.89</b>	<b>49.26</b>	<b>49.45</b>	<b>48.67</b>	<b>49.40</b>	<b>49.84</b>	<b>45.81</b>
<b>Yolo County Total</b>		<b>2.81</b>	<b>6.00</b>	<b>10.01</b>	<b>4.39</b>	<b>27.89</b>	<b>21.80</b>	<b>22.96</b>	<b>20.11</b>	<b>16.19</b>	<b>27.10</b>	<b>55.62</b>	<b>50.85</b>	<b>46.89</b>	<b>49.26</b>	<b>49.45</b>	<b>48.67</b>	<b>49.40</b>	<b>49.84</b>	<b>45.81</b>
<b>Sutter County Total</b>		<b>1.85</b>	<b>4.93</b>	<b>4.06</b>	<b>3.50</b>	<b>16.39</b>	<b>16.06</b>	<b>12.04</b>	<b>10.35</b>	<b>10.19</b>	<b>11.16</b>	<b>43.70</b>	<b>43.70</b>	<b>43.50</b>	<b>43.70</b>	<b>43.65</b>	<b>42.90</b>	<b>43.87</b>	<b>43.85</b>	<b>42.80</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

Table L1-82. PM2.5 Detailed Summary (Alternative 6) -

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>Intake Channel, Headworks, and Outlet Channel</b>											
1	Offroad Construction Equipment Exhaust	4.49	3.64	1.53	1.67	0.29	0.25	0.25	0.21	0.09	0.18
	Construction Worker Commuting	4.13	3.73	1.61	1.81	1.37	0.43	0.43	0.33	1.07	0.17
	Haul Trucks	13.45	13.45	6.75	6.75	0.44	--	--	0.50	0.28	0.46
	Fugitive Dust	23.51	15.68	1.00	1.00	--	--	--	0.06	--	0.91
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>45.58</b>	<b>36.51</b>	<b>10.89</b>	<b>11.24</b>	<b>2.10</b>	<b>0.68</b>	<b>0.68</b>	<b>1.10</b>	<b>1.44</b>	<b>1.71</b>
<b>Supplemental Fish Passage East</b>											
2	Offroad Construction Equipment Exhaust	--	--	--	--	--	--	--	0.09	0.03	0.00
	Construction Worker Commuting	--	--	--	--	--	--	--	0.10	0.06	0.02
	Haul Trucks	--	--	--	--	--	--	--	0.50	0.03	0.00
	Fugitive Dust	--	--	--	--	--	--	--	0.06	--	0.01
<b>Supplemental Fish Passage East Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.75</b>	<b>0.12</b>	<b>0.03</b>
<b>Downstream Channel</b>											
3	Offroad Construction Equipment Exhaust	0.03	0.03	0.03	0.09	0.03	--	--	--	--	0.02
	Construction Worker Commuting	0.05	0.05	0.16	0.10	0.02	--	--	--	--	0.02
	Haul Trucks	--	--	0.11	0.50	0.01	--	--	--	--	0.06
	Fugitive Dust	--	--	--	0.06	--	--	--	--	--	0.12
<b>Downstream Channel Subtotal</b>		<b>0.08</b>	<b>0.08</b>	<b>0.29</b>	<b>0.75</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.22</b>
<b>Agricultural Crossing 1</b>											
4	Offroad Construction Equipment Exhaust	0.09	--	0.12	0.03	--	--	--	--	--	0.00
	Construction Worker Commuting	0.09	--	0.16	0.02	--	--	--	--	--	0.00
	Haul Trucks	--	--	0.25	0.01	--	--	--	--	--	0.00
	Fugitive Dust	--	--	0.02	--	--	--	--	--	--	0.01
<b>Agricultural Crossing 1 Subtotal</b>		<b>0.17</b>	<b>--</b>	<b>0.55</b>	<b>0.07</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>45.83</b>	<b>36.59</b>	<b>11.74</b>	<b>12.05</b>	<b>2.17</b>	<b>0.68</b>	<b>0.68</b>	<b>1.85</b>	<b>1.56</b>	<b>1.97</b>
<b>Yolo County Total</b>		<b>45.83</b>	<b>36.59</b>	<b>11.74</b>	<b>12.05</b>	<b>2.17</b>	<b>0.68</b>	<b>0.68</b>	<b>1.85</b>	<b>1.56</b>	<b>1.97</b>
<b>Sutter County Total</b>		<b>45.58</b>	<b>36.51</b>	<b>10.89</b>	<b>11.24</b>	<b>2.10</b>	<b>0.68</b>	<b>0.68</b>	<b>1.10</b>	<b>1.44</b>	<b>1.71</b>

Note: Construction of the intake channel, headworks, and outlet channel would

**Table L1-83. GHG Detailed Summary (Alternative 1) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	1,827.82
	Construction Worker Commuting	118.77
	Haul Trucks	876.88
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>2,823.47</b>
<b>Supplemental Fish Passage West</b>		
2	Offroad Construction Equipment Exhaust	91.45
	Construction Worker Commuting	7.97
	Haul Trucks	34.64
	Fugitive Dust	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>134.05</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	57.20
	Haul Trucks	662.50
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>719.87</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>GRAND TOTAL</b>		<b>3,813.10</b>
<b>Yolo County Total</b>		<b>3,679.04</b>
<b>Sutter County Total</b>		<b>134.05</b>

**Table L1-84. GHG Detailed Summary (Alternative 2) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	3,253.59
	Construction Worker Commuting	182.51
	Haul Trucks	1,780.25
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>5,216.36</b>
<b>Supplemental Fish Passage West</b>		
2	Offroad Construction Equipment Exhaust	91.45
	Construction Worker Commuting	7.97
	Haul Trucks	34.64
	Fugitive Dust	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>134.05</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	57.20
	Haul Trucks	662.50
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>719.87</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>River Grading Site</b>		
5	Offroad Construction Equipment Exhaust	408.77
	Construction Worker Commuting	45.18
	Haul Trucks	173.89
	Fugitive Dust	n/a
	Marine Equipment Exhaust	1,984.78
<b>River Grading Site Subtotal</b>		<b>2,612.62</b>
<b>GRAND TOTAL</b>		<b>8,818.61</b>
<b>Yolo County Total</b>		<b>8,684.55</b>
<b>Sutter County Total</b>		<b>134.05</b>



**Table L1-85. GHG Detailed Summary (Alternative 3) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	4,459.50
	Construction Worker Commuting	232.85
	Haul Trucks	2,169.97
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>6,862.32</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	10.07
	Haul Trucks	45.31
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>55.55</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	57.20
	Haul Trucks	662.50
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>719.87</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>GRAND TOTAL</b>		<b>7,773.45</b>
<b>Yolo County Total</b>		<b>7,773.45</b>
<b>Sutter County Total</b>		<b>6,862.32</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-86. GHG Detailed Summary (Alternative 4) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	0.59
	Construction Worker Commuting	232.85
	Haul Trucks	2,169.97
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>2,403.41</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	10.07
	Haul Trucks	45.31
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>55.55</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	57.20
	Haul Trucks	662.50
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>719.87</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>Northern Water Control Structure Improvements</b>		
5	Offroad Construction Equipment Exhaust	906.84
	Construction Worker Commuting	50.53
	Haul Trucks	1,179.77
	Fugitive Dust	n/a
<b>Northern Water Control Structure Improvements Subtotal</b>		<b>2,137.14</b>
<b>Southern Water Control Structure Improvements</b>		
6	Offroad Construction Equipment Exhaust	2,301.49
	Construction Worker Commuting	130.59
	Haul Trucks	4,385.31
	Fugitive Dust	n/a
<b>Southern Water Control Structure Improvements Subtotal</b>		<b>6,817.39</b>
<b>GRAND TOTAL</b>		<b>12,269.07</b>
<b>Yolo County Total</b>		<b>12,269.07</b>
<b>Sutter County Total</b>		<b>2,403.41</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

**Table L1-87. GHG Detailed Summary (Alternative 5) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	3.56
	Construction Worker Commuting	392.31
	Haul Trucks	3,526.21
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>3922.09</b>
<b>Supplemental Fish Passage West</b>		
2	Offroad Construction Equipment Exhaust	91.45
	Construction Worker Commuting	7.97
	Haul Trucks	34.64
	Fugitive Dust	n/a
<b>Supplemental Fish Passage West Subtotal</b>		<b>134.05</b>
<b>Agricultural Crossing 1</b>		
3	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>River Grading Site</b>		
4	Offroad Construction Equipment Exhaust	408.77
	Construction Worker Commuting	45.18
	Haul Trucks	173.89
	Fugitive Dust	n/a
	Marine Equipment Exhaust	1,984.78
<b>River Grading Site Subtotal</b>		<b>2,612.62</b>
<b>GRAND TOTAL</b>		<b>6,804.47</b>
<b>Yolo County Total</b>		<b>6,670.42</b>
<b>Sutter County Total</b>		<b>134.05</b>

**Table L1-88. GHG Detailed Summary (Alternative 6) - Mitigated**

#	Activity	Emissions , MTCO <sub>2</sub> e/ project
<b>Intake Channel, Headworks, and Outlet Channel</b>		
1	Offroad Construction Equipment Exhaust	0.83
	Construction Worker Commuting	485.45
	Haul Trucks	5,261.49
	Fugitive Dust	n/a
<b>Intake Channel, Headworks, and Outlet Channel Subtotal</b>		<b>5,747.77</b>
<b>Supplemental Fish Passage East</b>		
2	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	10.07
	Haul Trucks	45.31
	Fugitive Dust	n/a
<b>Supplemental Fish Passage East Subtotal</b>		<b>55.55</b>
<b>Downstream Channel</b>		
3	Offroad Construction Equipment Exhaust	0.17
	Construction Worker Commuting	57.20
	Haul Trucks	662.50
	Fugitive Dust	n/a
<b>Downstream Channel Subtotal</b>		<b>719.87</b>
<b>Agricultural Crossing 1</b>		
4	Offroad Construction Equipment Exhaust	93.19
	Construction Worker Commuting	8.75
	Haul Trucks	33.77
	Fugitive Dust	n/a
<b>Agricultural Crossing 1 Subtotal</b>		<b>135.71</b>
<b>GRAND TOTAL</b>		<b>6,658.89</b>
<b>Yolo County Total</b>		<b>6,658.89</b>
<b>Sutter County Total</b>		<b>5,747.77</b>

Note: Construction of the intake channel, headworks, and outlet channel would be located in both counties. To provide a worst-case estimate of emissions by county, 100% of these emissions were added to each county total.

## Offroad Exhaust Emissions Summary

**Table L1-89. Maximum Daily Offroad Construction Equipment Emissions (Alternative 1)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	1.07	20.99	14.88	0.05	0.57	0.45
09 - Channels and Canals	22.44	226.37	85.82	0.43	5.22	4.54
11 - Levees and Floodwalls	2.10	23.35	19.36	0.07	1.00	0.88
15 - Floodway Control and Diversion Structures	4.93	59.98	44.88	0.17	2.56	1.99
08 - Roads, Railroads, and Bridges	2.29	25.87	22.55	0.10	1.16	0.96
19 - Buildings, Grounds, and Utilities	3.67	42.91	39.08	0.11	2.11	1.78
20 -Permanent Operating Equipment	0.60	3.68	11.36	0.03	0.35	1.43
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>26.65</b>	<b>261.69</b>	<b>128.72</b>	<b>0.56</b>	<b>7.44</b>	<b>6.41</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-90. Annual Offroad Construction Equipment Emissions (Alternative 1)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.01	0.12	0.11	0.00	0.00	0.00	40.24
09 - Channels and Canals	0.48	5.12	2.80	0.01	0.14	0.11	1,231.61
11 - Levees and Floodwalls	0.01	0.15	0.13	0.00	0.01	0.01	47.01
15 - Floodway Control and Diversion Structures	0.10	1.02	0.93	0.00	0.05	0.04	353.39
08 - Roads, Railroads, and Bridges	0.00	0.05	0.04	0.00	0.00	0.00	16.44
19 - Buildings, Grounds, and Utilities	0.05	0.56	0.51	0.00	0.03	0.02	132.61
20 -Permanent Operating Equipment	0.01	0.06	0.17	0.00	0.01	0.00	45.37
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.66</b>	<b>7.09</b>	<b>4.69</b>	<b>0.02</b>	<b>0.24</b>	<b>0.19</b>	<b>1,866.66</b>

Notes:

Total may not add exactly because of rounding.

**Table L1-91. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0451 0.1035 0.0901 3.1225 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.1131 3.1225 1.4797 6.9998	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	3.1225 1.4797	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.2384 0.0754 72.5631 3.1225 1.4797 6.9998	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0451 0.1608 0.1035 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.1608 0.1193 0.1131 3.1225 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.1608 3.1225 0.0598 1.4797	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.29</b>	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.18</b>	--
6	Clearing and Grubbing	--	0.93	0.93	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	20.48	20.48	20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.31	0.31	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.34	0.34	0.34	0.34	0.34	0.34	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.70	1.70	1.70	1.70	1.70	1.70	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.60	0.60	0.60	0.60	0.60	0.60	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.11	1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>3.94</b>	<b>3.94</b>	<b>3.94</b>	<b>3.94</b>	<b>3.94</b>	<b>3.94</b>	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.85	0.85	0.85	0.85	0.85	0.85	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	3.42	3.42	3.42	3.42	3.42	3.42	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>4.89</b>	<b>4.89</b>	<b>4.89</b>	<b>4.89</b>	<b>4.89</b>	<b>4.89</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	0.85	0.85	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>1.15</b>	<b>1.15</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>										
1	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	0.10	0.0001
		--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--
								<b>0.18</b>	<b>0.0002</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0007
									0.0009	
									<b>0.0064</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	0.37	--	0.0007
		--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	0.03	--	0.0001
		--	--	--	--	--	--	0.62	--	0.0012
								<b>1.07</b>	--	
									<b>0.0021</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
									<b>0.0001</b>	
								<b>1.07</b>	<b>0.18</b>	<b>0.0088</b>
<b>09 - Channels and Canals</b>										
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
									<b>0.0002</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	0.0074
		--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.1638
		--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0025
									0.0020	
									<b>0.1796</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	--	--	0.0298
		--	--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	--	0.0194
		--	--	--	--	--	--	--	--	0.0032
									<b>0.0689</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	0.0145
		--	--	--	--	--	--	--	--	0.0582
		--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0031
									<b>0.0831</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0004
									<b>0.0052</b>	



**Table L1-91. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0451 0.1004 6.9998 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0451 0.1004 6.9998 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0451 0.1004 1.4797 6.9998	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0901 1.4797	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0451 0.1608 0.0451 6.9998 0.3705 0.2640 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	3.1225 0.0550 1.4797	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.2640 1.4797	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0451 0.1608 0.1035 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.53	0.53	0.53	0.53	0.53	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.84	2.84	2.84	2.84	2.84	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.53	0.53	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.84	2.84	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	<b>3.91</b>	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	--	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	<b>4.89</b>	<b>6.04</b>	<b>9.97</b>	<b>8.82</b>	<b>8.82</b>	<b>8.82</b>	<b>3.94</b>	<b>3.94</b>	<b>7.82</b>	<b>11.73</b>	<b>11.73</b>	<b>11.73</b>	<b>7.82</b>	<b>7.82</b>	<b>0.18</b>	--
<b>11 - Levees and Floodwalls</b>																					
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.10	--	--	--	0.10	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.03	--	--	--	0.03	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.18</b>	--	--	--	<b>0.18</b>	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.34	0.34	0.34	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.85	0.85	0.85	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>2.10</b>	<b>2.10</b>	<b>2.10</b>	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.18</b>	<b>2.10</b>	<b>2.10</b>	<b>2.10</b>	<b>0.18</b>	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																					
16	Mobilization and Demobilization	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.43</b>	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
		--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
		--	--	--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>3.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity										Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0051
		--	--	--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	--	--	0.0355
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	<b>0.0489</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0142
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	<b>0.0195</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	--	--	0.0101
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	0.0539
		--	--	--	--	--	--	--	--	<b>0.0743</b>	
13	Erosion Control Seeding	--	0.15	0.15	0.15	--	--	--	--	--	0.0012
		--	0.10	0.10	0.10	--	--	--	--	--	0.0008
		--	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	--	--	--	--	--	<b>0.0021</b>
		--	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	--	--	--	--	<b>0.4816</b>	
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	<b>0.0137</b>	
		--	--	--	--	--	--	--	--	<b>0.0138</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	0.06	--	--	0.0001
		--	--	--	--	--	--	0.10	--	--	0.0001
		--	--	--	--	--	--	0.03	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	<b>0.0038</b>	
18	Construction Site Dewatering (Pumping)	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	0.0235
		0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	0.0047
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	--	<b>0.0282</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	<b>0.0079</b>	

**Table L1-91. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	3.1225 0.0550 1.4797	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0703 0.0550 0.2640 3.1225 0.0901 0.0710 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.2640 0.2845 3.1225 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.2845 3.1225 1.4797	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0703 6.9998 1.4797	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0703 0.0550 0.2640 3.1225 0.0901 0.0710 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.2640 0.2845 3.1225 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0703 3.1225 1.4797	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
20	Sheet Pile Wall	--	--	--	--	--	--	--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.79	0.79	0.79	0.79	0.79	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	--	--	--	--	--	--	--	--
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	0.12	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.33	0.33	--	--	--	--	0.33	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.55	0.55	--	--	--	--	0.55	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>2.17</b>	<b>2.17</b>	--	--	--	--	<b>2.17</b>	--	--
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.61</b>	<b>0.61</b>	--	--	--	--	--
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.18	0.43	0.43	0.43	4.41	3.19	3.19	2.76	2.76	4.93	2.64	0.47	1.08	1.08	0.47	2.64	0.47	0.47
<b>08 - Roads, Railroads, and Bridges</b>																					
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	0.10	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	0.03	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.18</b>	--	--	--	<b>0.18</b>	--	--
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.79	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.29</b>	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.72</b>	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.80</b>	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.18</b>	<b>2.29</b>	<b>0.72</b>	<b>0.80</b>	<b>0.18</b>	--	--

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	<b>0.0015</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	0.0110
22	Headworks Structure	--	--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	--	<b>0.0321</b>
		--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	0.0011
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	--	<b>0.0196</b>
		--	--	--	--	--	--	--	--	0.0004
24	Hinged Bottom Gates	--	0.56	0.56	0.56	0.56	--	--	--	0.0011
		--	0.12	0.12	0.12	0.12	--	--	--	0.0016
		--	0.10	0.10	0.10	0.10	--	--	--	0.0031
		--	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	--	--	--	<b>0.0059</b>
		<b>0.47</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>0.47</b>	<b>0.18</b>	--	<b>0.1021</b>
<b>08 - Roads, Railroads, and Bridges</b>										
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0002</b>
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0008
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0004</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	<b>0.0012</b>
		--	--	--	--	--	--	--	--	<b>0.0040</b>

**Table L1-91. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
29	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.2258 0.1193 0.1131 0.1096 3.1225 0.0598 1.4797 0.2640 0.2845 0.0580 3.1225	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	4	0.2640 0.2845 3.1225 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
32	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.0580 1.4797	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.0580 1.4797	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.4797	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.4797	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.4797	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>19 - Buildings, Grounds, and Utilities</b>																					
29	Mobilization and Demobilization	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.72</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>3.67</b>	<b>2.95</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																					
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		<b>0.66</b>	<b>26.47</b>	<b>26.65</b>	<b>25.82</b>	<b>8.99</b>	<b>9.41</b>	<b>14.56</b>	<b>12.19</b>	<b>14.11</b>	<b>13.68</b>	<b>8.80</b>	<b>9.05</b>	<b>10.46</b>	<b>12.38</b>	<b>15.11</b>	<b>13.54</b>	<b>9.09</b>	<b>10.65</b>	<b>0.65</b>	<b>0.47</b>



Table L1-91. ROG Exhaust Emissions from Offroad Co

#	Activity									Annual Emissions, tpy	
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0099
		--	--	--	--	--	--	--	--	--	0.0116
		--	--	--	--	--	--	--	--	--	0.0056
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	<b>0.0442</b>
31	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.0014</b>
		--	--	--	--	--	--	--	--	--	<b>0.0459</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	0.06	--	--	--	--	--	0.06	--	--	0.0001
		0.10	--	--	--	--	--	0.10	--	--	0.0001
		0.03	--	--	--	--	--	0.03	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	<b>0.18</b>	--	--	<b>0.0002</b>
33	Mechanical Hydraulic Cylinders & Housing	--	0.10	0.10	0.10	0.10	0.10	--	--	--	0.0015
		--	0.08	0.08	0.08	0.08	0.08	--	--	--	0.0012
		--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	--	<b>0.0027</b>
34	CMU Building Mechanical Equipment	--	0.10	0.10	0.10	0.10	0.10	--	--	--	0.0015
		--	0.08	0.08	0.08	0.08	0.08	--	--	--	0.0012
		--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	--	<b>0.0027</b>
35	Electrical Control Equipment CMU Building	--	0.08	0.08	0.08	0.08	0.08	--	--	--	0.0012
		--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	--	<b>0.0012</b>
36	Electrical Power Equipment CMU Building	--	0.08	0.08	0.08	0.08	0.08	--	--	--	0.0012
		--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	--	<b>0.0012</b>
37	Communication Equipment	--	--	--	--	0.08	0.08	--	--	--	0.0005
		--	--	--	--	<b>0.08</b>	<b>0.08</b>	--	--	--	<b>0.0005</b>
		<b>0.18</b>	<b>0.52</b>	<b>0.52</b>	<b>0.52</b>	<b>0.60</b>	<b>0.60</b>	<b>0.18</b>	--	--	<b>0.0084</b>
<b>GRAND TOTAL</b>		<b>0.65</b>	<b>2.03</b>	<b>2.03</b>	<b>2.03</b>	<b>1.85</b>	<b>1.07</b>	<b>1.44</b>	<b>0.18</b>	--	<b>0.6648</b>

**Table L1-92. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr	1.30 1.62 0.03 --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.95</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.5086 1.1284 1.1037 73.7154 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	1.7907 73.7154 1.6515 155.9699	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	73.7154 1.6515	g/hr g/hr	1.30 0.06
<b>Temporary Electrical Power Subtotal</b>														<b>1.36</b>
<b>02 - Relocations Total</b>														<b>4.31</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr	1.30 1.62 0.03 --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.95</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	2.4260 0.7727 1.2873 73.7154 1.6515 155.9699	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.5086 2.0086 1.1284 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	2.0086 1.6618 1.7907 73.7154 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	2.0086 73.7154 0.7943 1.6515	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-92. NOx Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	3.22	3.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.26	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.89	1.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.75	2.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>	--
6	Clearing and Grubbing	9.41	9.41	9.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.60	2.60	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.50	5.50	5.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	3.85	3.85	3.85	3.85	3.85	3.85	--	--	--	--	--	--	--	--
		--	--	--	--	--	21.25	21.25	21.25	21.25	21.25	21.25	--	--	--	--	--	--	--	--
		--	--	--	--	--	6.53	6.53	6.53	6.53	6.53	6.53	--	--	--	--	--	--	--	--
		--	--	--	--	--	24.76	24.76	24.76	24.76	24.76	24.76	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.20	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>56.59</b>	<b>56.59</b>	<b>56.59</b>	<b>56.59</b>	<b>56.59</b>	<b>56.59</b>	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	10.63	10.63	10.63	10.63	10.63	10.63	--	--	--	--	--	--	--	--	--	--
		--	--	--	47.71	47.71	47.71	47.71	47.71	47.71	--	--	--	--	--	--	--	--	--	--
		--	--	--	5.91	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.30	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.20	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>65.75</b>	<b>65.75</b>	<b>65.75</b>	<b>65.75</b>	<b>65.75</b>	<b>65.75</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	10.63	10.63	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	2.20	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>14.21</b>	<b>14.21</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-92. NOx Exhaust Emissions from Offroad**

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	1.30	0.0013
		--	--	--	--	--	--	1.62	0.0016
		--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	2.95	<b>0.0029</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0193
		--	--	--	--	--	--	--	0.0196
		--	--	--	--	--	--	--	0.0113
		--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	0.0165
		--	--	--	--	--	--	0.0010	
		--	--	--	--	--	--	<b>0.0756</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	5.91	--	0.0118
		--	--	--	--	--	1.30	--	0.0026
		--	--	--	--	--	0.03	--	0.0001
		--	--	--	--	--	13.75	--	0.0275
		--	--	--	--	--	20.99	--	<b>0.0420</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0007</b>
		--	--	--	--	--	20.99	2.95	<b>0.1212</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0029</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0753
		--	--	--	--	--	--	--	0.0305
		--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	0.0208
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	0.0440	
		--	--	--	--	--	--	--	<b>0.1763</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0673
		--	--	--	--	--	--	--	0.3720
		--	--	--	--	--	--	--	0.1142
		--	--	--	--	--	--	--	0.4332
		--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	<b>0.9904</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.1807
		--	--	--	--	--	--	--	0.8111
		--	--	--	--	--	--	--	0.1004
		--	--	--	--	--	--	--	0.0221
		--	--	--	--	--	--	0.0035	
		--	--	--	--	--	--	--	<b>1.1178</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0478
		--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	0.0099
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.0640</b>	

**Table L1-92. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.5086 1.4049 155.9699 1.6515	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.5086 1.4049 155.9699 1.6515	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.5086 1.4049 1.6515 155.9699	g/hp-hr g/hp-hr g/hr g/hr	--
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	1.1037 1.6515	g/hp-hr g/hr	--
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														<b>2.95</b>
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.5086 2.0086 0.5086 155.9699 2.3200 2.2288 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	73.7154 0.7794 1.6515	g/hr g/hp-hr g/hr	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.2288 1.6515	g/hp-hr g/hr	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.5086 2.0086 1.1284 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--
<b>Excavation (Wet Conditions) Subtotal</b>														--

Table L1-92. NOx Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																			
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	4.61	4.61	4.61	4.61	4.61	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	7.43	7.43	7.43	7.43	7.43	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	63.27	63.27	63.27	63.27	63.27	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>75.46</b>	<b>75.46</b>	<b>75.46</b>	<b>75.46</b>	<b>75.46</b>	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.61	4.61	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.43	7.43	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63.27	63.27	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>75.46</b>	<b>75.46</b>	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>65.75</b>	<b>79.97</b>	<b>136.56</b>	<b>122.34</b>	<b>122.34</b>	<b>122.34</b>	<b>56.59</b>	<b>56.59</b>	<b>150.92</b>	<b>226.37</b>	<b>226.37</b>	<b>226.37</b>	<b>150.92</b>	<b>150.92</b>	<b>2.95</b>	--	--
<b>11 - Levees and Floodwalls</b>																					
14	Mobilization and Demobilization	--	--	--	--	--	--	1.30	--	--	--	1.30	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.62	--	--	--	1.62	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.03	--	--	--	0.03	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.95</b>	--	--	--	<b>2.95</b>	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	3.85	3.85	3.85	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	10.63	10.63	10.63	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	2.31	2.31	2.31	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	2.75	2.75	2.75	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>23.35</b>	<b>23.35</b>	<b>23.35</b>	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.95</b>	<b>23.35</b>	<b>23.35</b>	<b>23.35</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																					
16	Mobilization and Demobilization	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	3.04	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>4.51</b>	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
		--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
		--	--	--	--	--	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	3.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	21.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	6.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	24.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>56.59</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-92. NOx Exhaust Emissions from Offroad**

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0576
		--	--	--	--	--	--	--	0.0929
		--	--	--	--	--	--	--	0.7909
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	<b>0.9432</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0231
		--	--	--	--	--	--	--	0.0372
		--	--	--	--	--	--	--	0.3163
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	<b>0.3773</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0876
		--	--	--	--	--	--	--	0.1412
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	1.2021
		--	--	--	--	--	--	<b>1.4337</b>	
13	Erosion Control Seeding	1.89	1.89	1.89	--	--	--	--	0.0151
		0.12	0.12	0.12	--	--	--	--	0.0009
		<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	--	--	--	--	<b>0.0160</b>
		<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	--	--	--	<b>5.1216</b>	
<b>11 - Levees and Floodwalls</b>									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0029</b>	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	0.0250
		--	--	--	--	--	--	--	0.0691
		--	--	--	--	--	--	--	0.0150
		--	--	--	--	--	--	--	0.0179
		--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	0.0215
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	<b>0.1518</b>	
		--	--	--	--	--	--	<b>0.1547</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
16	Mobilization and Demobilization	--	--	--	--	--	1.30	--	0.0013
		--	--	--	--	--	1.62	--	0.0016
		--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	<b>2.95</b>	--	<b>0.0029</b>	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	0.0117
		--	--	--	--	--	--	--	0.0273
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	<b>0.0406</b>	
18	Construction Site Dewatering (Pumping)	3.30	3.30	3.30	3.30	3.30	--	--	0.1981
		0.09	0.09	0.09	0.09	0.09	--	--	0.0052
		<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	--	--	<b>0.2034</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0077
		--	--	--	--	--	--	--	0.0425
		--	--	--	--	--	--	--	0.0131
		--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.1132</b>	

**Table L1-92. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	73.7154 0.7794 1.6515	g/hr g/hp-hr g/hr	--
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.9918 0.7794 2.2288 73.7154 1.1037 0.7461 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.2288 1.7814 73.7154 1.6515	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.7814 73.7154 1.6515	g/hp-hr g/hr g/hr	--
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.9918 155.9699 1.6515	g/hp-hr g/hr g/hr	--
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.9918 0.7794 2.2288 73.7154 1.1037 0.7461 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.2288 1.7814 73.7154 1.6515	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.9918 73.7154 1.6515	g/hp-hr g/hr g/hr	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--



Table L1-92. NOx Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																			
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Sheet Pile Wall	--	--	--	--	--	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	5.25	5.25	5.25	5.25	5.25	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.04	3.04	3.04	3.04	3.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.89	1.89	1.89	1.89	1.89	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	8.26	8.26	8.26	8.26	8.26	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.23	0.23	0.23	0.23	0.23	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	--	--	--	--	--	--	--	--	--
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	9.91	9.91	--	--	--	--	9.91	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75	--	--	--
		--	--	--	--	--	--	--	--	--	--	7.80	7.80	--	--	--	--	7.80	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	--	0.61	--	--	--
		--	--	--	--	--	--	--	--	--	--	<b>19.07</b>	<b>19.07</b>	--	--	--	--	<b>19.07</b>	--	--	--
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	5.20	5.20	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.35	0.35	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>6.05</b>	<b>6.05</b>	--	--	--	--	--	--
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.95	4.51	4.51	4.51	59.98	33.77	33.77	29.26	29.26	48.33	22.46	3.39	9.44	9.44	3.39	22.46	3.39	3.39	3.39
<b>08 - Roads, Railroads, and Bridges</b>																					
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	1.30	--	--	--	1.30	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.62	--	--	--	1.62	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	0.03	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>	--	--	--	<b>2.95</b>	--	--	--
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	5.25	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	3.04	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.89	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	8.26	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>25.87</b>	--	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	2.60	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>6.36</b>	--	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	7.87	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	2.60	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>10.62</b>	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	2.95	<b>25.87</b>	<b>6.36</b>	<b>10.62</b>	<b>2.95</b>	--	--	--	--

**Table L1-92. NOx Exhaust Emissions from Offroad**

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	<b>0.0158</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0735
		--	--	--	--	--	--	--	0.0425
		--	--	--	--	--	--	--	0.0462
		--	--	--	--	--	--	--	0.0546
		--	--	--	--	--	--	--	0.0264
		--	--	--	--	--	--	--	0.1157
		--	--	--	--	--	--	0.0033	
		--	--	--	--	--	--	<b>0.3622</b>	
22	Headworks Structure	--	--	--	--	--	--	--	0.0892
		--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	0.0702
		--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	<b>0.1716</b>	
23	Headworks Channel Transition	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	0.0260
		--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	<b>0.0303</b>	
24	Hinged Bottom Gates	7.87	7.87	7.87	7.87	--	--	--	0.0590
		2.75	2.75	2.75	2.75	--	--	--	0.0206
		0.12	0.12	0.12	0.12	--	--	--	0.0009
		<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	--	--	<b>0.0805</b>	
		<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>3.39</b>	<b>2.95</b>	<b>1.0206</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0029</b>	
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	0.0083
		--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	<b>0.0259</b>	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0032</b>	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0118
		--	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0159</b>	
		--	--	--	--	--	--	<b>0.0479</b>	

**Table L1-92. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	73.7154	g/hr	1.30
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.9187	g/hp-hr	1.62
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				1.6515	g/hr	0.03
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>2.95</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.6843	g/hp-hr	--
				Scraper	Scrapers	1	367	-				1.6618	g/hp-hr	--
				Motor Grader	Graders	1	187	-				1.7907	g/hp-hr	--
				Compactor	Rollers	1	80	-				1.3466	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				73.7154	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				0.7943	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				1.6515	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				2.2288	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.7814	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.9187	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				73.7154	g/hr	--
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	2.2288	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.7814	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				73.7154	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				1.6515	g/hr	--
<b>Concrete Duct Banc Subtotal</b>														<b>--</b>
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>2.95</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	73.7154	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.9187	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				1.6515	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.9187	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				1.6515	g/hr	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.9187	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				1.6515	g/hr	--
<b>CMU Building Mechanical Equipment Subtotal</b>														<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.6515	g/hr	--
<b>Electrical Control Equipment CMU Building Subtotal</b>														<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.6515	g/hr	--
<b>Electrical Power Equipment CMU Building Subtotal</b>														<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.6515	g/hr	--
<b>Communication Equipment Subtotal</b>														<b>--</b>
<b>20 -Permanent Operating Equipment Total</b>														<b>--</b>
<b>GRAND TOTAL</b>														<b>10.21</b>

Table L1-92. NOx Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																			
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																					
29	Mobilization and Demobilization	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	2.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	7.81	7.81	7.81	7.81	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10.76	10.76	10.76	10.76	10.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.90	1.90	1.90	1.90	1.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	1.62	1.62	1.62	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>6.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>42.91</b>	<b>36.55</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																					
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>
<b>GRAND TOTAL</b>		<b>71.19</b>	<b>74.14</b>	<b>63.11</b>	<b>113.17</b>	<b>121.03</b>	<b>199.49</b>	<b>159.07</b>	<b>179.46</b>	<b>174.95</b>	<b>109.20</b>	<b>107.87</b>	<b>173.38</b>	<b>232.71</b>	<b>261.69</b>	<b>242.17</b>	<b>164.92</b>	<b>176.33</b>	<b>6.34</b>	<b>3.39</b>	<b>6.34</b>

Table L1-92. NOx Exhaust Emissions from Offroad

#	Activity								Annual Emissions, tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>										
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0029</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	0.1172
		--	--	--	--	--	--	--	--	0.1613
		--	--	--	--	--	--	--	--	0.0886
		--	--	--	--	--	--	--	--	0.0285
		--	--	--	--	--	--	--	--	0.0195
		--	--	--	--	--	--	--	--	0.0330
		--	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	0.0243
		--	--	--	--	--	--	--	--	0.0195
		--	--	--	--	--	--	--	--	<b>0.5483</b>
31	Concrete Duct Banc	--	--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	<b>0.0127</b>
		--	--	--	--	--	--	--	--	<b>0.5639</b>
<b>20 -Permanent Operating Equipment</b>										
32	Mobilization and Demobilization	--	--	--	--	--	1.30	--	--	0.0013
		--	--	--	--	--	1.62	--	--	0.0016
		--	--	--	--	--	0.03	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.95</b>	--	--	<b>0.0029</b>
33	Mechanical Hydraulic Cylinders & Housing	1.62	1.62	1.62	1.62	1.62	--	--	--	0.0243
		0.09	0.09	0.09	0.09	0.09	--	--	--	0.0013
		<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	--	<b>0.0256</b>
34	CMU Building Mechanical Equipment	1.62	1.62	1.62	1.62	1.62	--	--	--	0.0243
		0.09	0.09	0.09	0.09	0.09	--	--	--	0.0013
		<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	--	<b>0.0256</b>
35	Electrical Control Equipment CMU Building	0.09	0.09	0.09	0.09	0.09	--	--	--	0.0013
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	--	<b>0.0013</b>
36	Electrical Power Equipment CMU Building	0.09	0.09	0.09	0.09	0.09	--	--	--	0.0013
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	--	<b>0.0013</b>
37	Communication Equipment	--	--	--	0.09	0.09	--	--	--	0.0005
		--	--	--	<b>0.09</b>	<b>0.09</b>	--	--	--	<b>0.0005</b>
		<b>3.59</b>	<b>3.59</b>	<b>3.59</b>	<b>3.68</b>	<b>3.68</b>	<b>2.95</b>	--	--	<b>0.0573</b>
<b>GRAND TOTAL</b>		<b>19.72</b>	<b>19.72</b>	<b>19.72</b>	<b>17.81</b>	<b>7.07</b>	<b>26.89</b>	<b>2.95</b>	--	<b>7.0873</b>

**Table L1-93. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.6321 1.7927 2.0507 12.0888 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.7344 12.0888 12.8680 34.6908	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	12.0888 12.8680	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	2.5463 1.1116 146.1720 12.0888 12.8680 34.6908	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.6321 1.1166 1.7927 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	1.1166 1.0393 0.7344 12.0888 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	1.1166 12.0888 1.7974 12.8680	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	4.00	4.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	5.19	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	3.51	3.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.61	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.67</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>5.09</b>	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	--	9.88	9.88	9.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.43	0.43	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	2.72	2.72	2.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.22	1.22	1.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	4.78	4.78	4.78	4.78	4.78	4.78	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	11.82	11.82	11.82	11.82	11.82	11.82	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	10.37	10.37	10.37	10.37	10.37	10.37	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	5.51	5.51	5.51	5.51	5.51	5.51	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.59	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>34.06</b>	<b>34.06</b>	<b>34.06</b>	<b>34.06</b>	<b>34.06</b>	<b>34.06</b>	--	--	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	5.91	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	29.84	29.84	29.84	29.84	29.84	29.84	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	2.42	2.42	2.42	2.42	2.42	2.42	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.59	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>39.97</b>	<b>39.97</b>	<b>39.97</b>	<b>39.97</b>	<b>39.97</b>	<b>39.97</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill	--	--	--	--	--	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	4.98	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.68	0.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>11.78</b>	<b>11.78</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	--	--	--	--	0.21	0.0002
		--	--	--	--	3.98	0.0040
		--	--	--	--	0.23	0.0002
		--	--	--	--	--	--
		--	--	--	--	<b>4.42</b>	<b>0.0044</b>
2	Fremont Weir Demo	--	--	--	--	--	0.0240
		--	--	--	--	--	0.0311
		--	--	--	--	--	0.0210
		--	--	--	--	--	0.0013
		--	--	--	--	--	0.0037
		--	--	--	--	0.0082	<b>0.0893</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	2.42	--	0.0048
		--	--	--	0.21	--	0.0004
		--	--	--	0.23	--	0.0005
		--	--	--	3.06	--	0.0061
		--	--	--	<b>5.92</b>	--	<b>0.0118</b>
4	Temporary Electrical Power	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0003</b>
		--	--	--	<b>5.92</b>	<b>4.42</b>	<b>0.1059</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0040
		--	--	--	--	--	0.0002
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0044</b>
6	Clearing and Grubbing	--	--	--	--	--	0.0790
		--	--	--	--	--	0.0439
		--	--	--	--	--	0.3300
		--	--	--	--	--	0.0034
		--	--	--	--	--	0.0218
		--	--	--	--	0.0098	<b>0.4879</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	0.0837
		--	--	--	--	--	0.2068
		--	--	--	--	--	0.1815
		--	--	--	--	--	0.0964
		--	--	--	--	0.0278	<b>0.5961</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	0.1004
		--	--	--	--	--	0.5073
		--	--	--	--	--	0.0412
		--	--	--	--	--	0.0036
		--	--	--	--	0.0270	<b>0.6795</b>
9	Earthen Backfill	--	--	--	--	--	0.0266
		--	--	--	--	--	0.0010
		--	--	--	--	--	0.0224
		--	--	--	--	0.0031	<b>0.0530</b>



**Table L1-93. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.6321 0.9049 34.6908 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.6321 0.9049 34.6908 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.6321 0.9049 12.8680 34.6908	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	2.0507 12.8680	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.6321 1.1166 0.6321 34.6908 1.9432 2.5278 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	12.0888 0.7762 12.8680	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.5278 12.8680	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.6321 1.1166 1.7927 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	12.0888 0.7762 12.8680	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73	5.73	5.73	5.73	5.73	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.79	4.79	4.79	4.79	4.79	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	14.07	14.07	14.07	14.07	14.07	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	1.13	1.13	1.13	1.13	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>25.72</b>	<b>25.72</b>	<b>25.72</b>	<b>25.72</b>	<b>25.72</b>	--	--	--	--	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73	5.73	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.79	4.79	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.07	14.07	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	1.13	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>25.72</b>	<b>25.72</b>	--	--	--	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	--	--	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.51	3.51	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.91	0.91	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.42</b>	<b>4.42</b>	--	
		<b>4.42</b>	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	<b>39.97</b>	<b>51.75</b>	<b>85.82</b>	<b>74.04</b>	<b>74.04</b>	<b>74.04</b>	<b>34.06</b>	<b>34.06</b>	<b>51.45</b>	<b>77.17</b>	<b>77.17</b>	<b>77.17</b>	<b>51.45</b>	<b>51.45</b>	<b>4.42</b>	--	--	<b>4.42</b>	<b>4.42</b>	
<b>11 - Levees and Floodwalls</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.21	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.98	--	--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.23	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>4.42</b>	--	--	--	<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	4.78	4.78	4.78	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	2.87	2.87	2.87	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.61	0.61	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.31	0.31	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	1.13	1.13	1.13	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>19.36</b>	<b>19.36</b>	<b>19.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>4.42</b>	<b>19.36</b>	<b>19.36</b>	<b>19.36</b>	<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																									
16	Mobilization and Demobilization	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	1.36	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74		
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68		
		--	--	--	--	--	--	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>		
19	Excavation (Wet Conditions)	--	--	--	--	--	--	4.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	11.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	10.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	5.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	<b>34.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
20	Sheet Pile Wall	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	<b>4.60</b>	<b>4.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	0.0716
		--	--	--	--	--	0.0598
		--	--	--	--	--	0.1759
		--	--	--	--	--	0.0142
		--	--	--	--	--	<b>0.3216</b>
11	Riprap - Class 3	--	--	--	--	--	0.0287
		--	--	--	--	--	0.0239
		--	--	--	--	--	0.0704
		--	--	--	--	--	0.0057
		--	--	--	--	--	<b>0.1286</b>
12	RSP Bedding Material	--	--	--	--	--	0.1089
		--	--	--	--	--	0.0910
		--	--	--	--	--	0.0216
		--	--	--	--	--	0.2674
		--	--	--	--	--	<b>0.4888</b>
13	Erosion Control Seeding	3.51	--	--	--	--	0.0281
		0.91	--	--	--	--	0.0073
		<b>4.42</b>	--	--	--	--	<b>0.0353</b>
		<b>4.42</b>	--	--	--	--	<b>2.7953</b>
<b>11 - Levees and Floodwalls</b>							
14	Mobilization and Demobilization	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0040
		--	--	--	--	--	0.0002
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0044</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	0.0311
		--	--	--	--	--	0.0384
		--	--	--	--	--	0.0186
		--	--	--	--	--	0.0040
		--	--	--	--	--	0.0020
		--	--	--	--	--	0.0243
		--	--	--	--	--	0.0074
		--	--	--	--	--	<b>0.1258</b>
		--	--	--	--	--	<b>0.1302</b>
<b>15 - Floodway Control and Diversion Structures</b>							
16	Mobilization and Demobilization	--	--	--	0.21	--	0.0002
		--	--	--	3.98	--	0.0040
		--	--	--	0.23	--	0.0002
		--	--	--	--	--	--
		--	--	--	<b>4.42</b>	--	<b>0.0044</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	0.0019
		--	--	--	--	--	0.0272
		--	--	--	--	--	0.0123
		--	--	--	--	--	<b>0.0414</b>
18	Construction Site Dewatering (Pumping)	3.74	3.74	3.74	--	--	0.2247
		0.68	0.68	0.68	--	--	0.0409
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	--	--	<b>0.2655</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.0096
		--	--	--	--	--	0.0236
		--	--	--	--	--	0.0207
		--	--	--	--	--	0.0110
		--	--	--	--	--	0.0032
		--	--	--	--	--	<b>0.0681</b>
20	Sheet Pile Wall	--	--	--	--	--	0.0007
		--	--	--	--	--	0.0106
		--	--	--	--	--	0.0048
		--	--	--	--	--	<b>0.0161</b>

**Table L1-93. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	28	0.5082	g/hp-hr
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					0.7762	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.5278	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT					12.0888	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					2.0507	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314					0.6431	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2					12.8680	g/hr
				<b>Headworks Structure Concrete Piles Subtotal</b>									
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	2.5278	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.4921	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.8680	g/hr
<b>Headworks Structure Subtotal</b>													
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	1.4921	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	6	LDT2					12.8680	g/hr
<b>Headworks Channel Transition Subtotal</b>													
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	0.2	1	0.2	15	0.5082	g/hp-hr
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT					34.6908	g/hr
				Pickup Truck Conventional	n/a - onroad	4	LDT2					12.8680	g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
25	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.0888	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					12.8680	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
				<b>Mobilization and Demobilization Subtotal</b>									
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	2	0.5082	g/hp-hr
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					0.7762	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.5278	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT					12.0888	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					2.0507	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314					0.6431	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2					12.8680	g/hr
				<b>Pedestrian Bridge Concrete Piles Subtotal</b>									
27	Pedestrian Bridge Concrete Abutments and Wingwall	24	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	2.5278	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.4921	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.8680	g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	3	0.5082	g/hp-hr
				Flatbed Truck	n/a - onroad	2	MHDT					12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	5	LDT2					12.8680	g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.0888	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					12.8680	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
				<b>Mobilization and Demobilization Subtotal</b>									

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	2.69	2.69	2.69	2.69	2.69	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.03	3.03	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.51	3.51	3.51	3.51	3.51	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	7.12	7.12	7.12	7.12	7.12	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	1.82	1.82	1.82	1.82	1.82	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	--	--	--	--	--	--	--	--	--	--		
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	11.23	11.23	--	--	--	--	11.23	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	1.28	1.28	--	--	--	--	1.28	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	4.77	4.77	--	--	--	--	4.77	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>17.91</b>	<b>17.91</b>	--	--	--	--	<b>17.91</b>	--	--	--	--			
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.85	0.85	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.72	2.72	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.00</b>	<b>4.00</b>	--	--	--	--	--	--	--			
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.03	4.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.91	0.91		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.55</b>	<b>5.55</b>			
		--	--	<b>4.42</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>38.49</b>	<b>31.57</b>	<b>31.57</b>	<b>26.97</b>	<b>26.97</b>	<b>44.88</b>	<b>22.34</b>	<b>4.43</b>	<b>8.42</b>	<b>8.42</b>	<b>4.43</b>	<b>22.34</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>9.98</b>	<b>9.98</b>	
<b>08 - Roads, Railroads, and Bridges</b>																									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	0.21	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	--	--	--	3.98	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	0.23	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.42</b>	--	--	--	<b>4.42</b>	--	--	--	--			
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.69	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.03	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.64	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.51	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.12	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.82	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>22.55</b>	--	--	--	--	--	--	--			
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.59	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.97</b>	--	--	--	--			
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.03	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.59</b>	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.42</b>	<b>22.55</b>	<b>5.97</b>	<b>5.59</b>	<b>4.42</b>	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>																									
29	Mobilization and Demobilization	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		3.98	--	--	--	--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.23	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>4.42</b>	--	--	--	--	<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
21	Headworks Structure Concrete Piles	--	--	--	--	--	0.0376
		--	--	--	--	--	0.0424
		--	--	--	--	--	0.0524
		--	--	--	--	--	0.0090
		--	--	--	--	--	0.0491
		--	--	--	--	--	0.0997
		--	--	--	--	--	0.0254
		--	--	--	--	--	<b>0.3156</b>
22	Headworks Structure	--	--	--	--	--	0.1011
		--	--	--	--	--	0.0057
		--	--	--	--	--	0.0115
		--	--	--	--	--	0.0429
		--	--	--	--	--	<b>0.1612</b>
23	Headworks Channel Transition	--	--	--	--	--	0.0021
		--	--	--	--	--	0.0043
		--	--	--	--	--	0.0136
		--	--	--	--	--	<b>0.0200</b>
24	Hinged Bottom Gates	4.03	4.03	--	--	--	0.0303
		0.61	0.61	--	--	--	0.0046
		0.91	0.91	--	--	--	0.0068
		<b>5.55</b>	<b>5.55</b>	--	--	--	<b>0.0416</b>
		<b>9.98</b>	<b>9.98</b>	<b>4.43</b>	<b>4.42</b>	--	<b>0.9341</b>
<b>08 - Roads, Railroads, and Bridges</b>							
25	Mobilization and Demobilization	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0040
		--	--	--	--	--	0.0002
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0044</b>
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	0.0027
		--	--	--	--	--	0.0030
		--	--	--	--	--	0.0037
		--	--	--	--	--	0.0006
		--	--	--	--	--	0.0035
		--	--	--	--	--	0.0071
		--	--	--	--	--	0.0018
		--	--	--	--	--	<b>0.0225</b>
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	0.0019
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0008
		--	--	--	--	--	<b>0.0030</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	0.0061
		--	--	--	--	--	0.0006
		--	--	--	--	--	0.0017
		--	--	--	--	--	<b>0.0084</b>
		--	--	--	--	--	<b>0.0383</b>
<b>19 - Buildings, Grounds, and Utilities</b>							
29	Mobilization and Demobilization	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0040
		--	--	--	--	--	0.0002
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0044</b>

**Table L1-93. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.0968	g/hp-hr
				Scraper	Scrapers	1	367					1.0393	g/hp-hr
				Motor Grader	Graders	1	187					0.7344	g/hp-hr
				Compactor	Rollers	1	80					2.0792	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					12.0888	g/hr
				10 TN Smooth Roller	Rollers	1	157					1.7974	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.8680	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.5278	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.4921	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.2556	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					12.0888	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	2.5278	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.4921	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.8680	g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.0888	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					12.8680	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.8680	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.8680	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.8680	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.8680	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.8680	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-93. CO Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
30	CMU Building and Earthwork Pad Construction	--	6.10	6.10	6.10	6.10	6.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	6.73	6.73	6.73	6.73	6.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	2.42	2.42	2.42	2.42	2.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	2.93	2.93	2.93	2.93	2.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	3.98	3.98	3.98	3.98	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	33.11	33.11	33.11	33.11	33.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Concrete Duct Banc	--	--	--	--	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		4.42	33.11	33.11	33.11	39.08	33.11	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																									
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	--			
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	3.98		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.66	4.66		
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	3.98	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.66	4.66		
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68		
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.68		
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	10.68		
<b>GRAND TOTAL</b>		13.92	108.98	113.40	98.70	83.65	89.46	128.72	110.03	124.96	120.36	80.39	83.37	73.79	86.02	108.14	91.57	61.47	78.21	8.84	4.43	8.84	25.07		



Table L1-93. CO Exhaust Emissions from Offroad

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	0.0915
		--	--	--	--	--	0.1009
		--	--	--	--	--	0.0363
		--	--	--	--	--	0.0440
		--	--	--	--	--	0.0032
		--	--	--	--	--	0.0747
		--	--	--	--	--	0.0238
		--	--	--	--	--	0.0562
		--	--	--	--	--	0.0032
		--	--	--	--	--	0.0597
		--	--	--	--	--	0.0032
		--	--	--	--	--	<b>0.4967</b>
31	Concrete Duct Banc	--	--	--	--	--	0.0075
		--	--	--	--	--	0.0004
		--	--	--	--	--	0.0009
		--	--	--	--	--	0.0032
		--	--	--	--	--	<b>0.0119</b>
		--	--	--	--	--	<b>0.5130</b>
<b>20 -Permanent Operating Equipment</b>							
32	Mobilization and Demobilization	--	--	--	0.21	--	0.0002
		--	--	--	3.98	--	0.0040
		--	--	--	0.23	--	0.0002
		--	--	--	--	--	--
		--	--	--	<b>4.42</b>	--	<b>0.0044</b>
33	Mechanical Hydraulic Cylinders & Housing	3.98	3.98	3.98	--	--	0.0597
		0.68	0.68	0.68	--	--	0.0102
		<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
34	CMU Building Mechanical Equipment	3.98	3.98	3.98	--	--	0.0597
		0.68	0.68	0.68	--	--	0.0102
		<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
35	Electrical Control Equipment CMU Building	0.68	0.68	0.68	--	--	0.0102
		<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
36	Electrical Power Equipment CMU Building	0.68	0.68	0.68	--	--	0.0102
		<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
37	Communication Equipment	--	0.68	0.68	--	--	0.0041
		--	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0041</b>
		<b>10.68</b>	<b>11.36</b>	<b>11.36</b>	<b>4.42</b>	--	<b>0.1687</b>
<b>GRAND TOTAL</b>		<b>25.07</b>	<b>21.34</b>	<b>15.79</b>	<b>14.76</b>	<b>4.42</b>	<b>4.6855</b>

**Table L1-94. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0032 0.0035 0.0037 0.1721 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0039 0.1721 0.0474 0.2281	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.1721 0.0474	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.0043 0.0026 0.0163 0.1721 0.0474 0.2281	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0032 0.0033 0.0035 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0033 0.0040 0.0039 0.1721 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0033 0.1721 0.0036 0.0474	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-94. SO2 Exhaust Emissions from Offroa

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	--	
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-94. SO2 Exhaust Emissions from Offroad

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	--	--	--	--	0.00	0.0000
		--	--	--	--	0.01	0.0000
		--	--	--	--	0.00	0.0000
		--	--	--	--	--	--
					<b>0.01</b>	<b>0.0000</b>	
2	Fremont Weir Demo	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
						<b>0.0003</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	0.01	--	0.0000
		--	--	--	0.00	--	0.0000
		--	--	--	0.00	--	0.0000
		--	--	--	0.02	--	0.0000
					<b>0.04</b>	<b>0.0001</b>	
4	Temporary Electrical Power	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
						<b>0.0000</b>	
					<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
						<b>0.0000</b>	
6	Clearing and Grubbing	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
						<b>0.0005</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	0.0004
		--	--	--	--	--	0.0006
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0006
						<b>0.0021</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	0.0003
		--	--	--	--	--	0.0020
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
						<b>0.0026</b>	
9	Earthen Backfill	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
						<b>0.0001</b>	

**Table L1-94. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0032 0.0036 0.2281 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0032 0.0036 0.2281 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0032 0.0036 0.0474 0.2281	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0037 0.0474	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0032 0.0033 0.0032 0.2281 0.0050 0.0049 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.1721 0.0048 0.0474	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0049 0.0474	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0032 0.0033 0.0035 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.1721 0.0048 0.0474	g/hr g/hp-hr g/hr

Table L1-94. SO2 Exhaust Emissions from Offroa

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	
															<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	
																	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--		
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	
														<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	
																						<b>0.01</b>	<b>0.01</b>	--	
		<b>0.01</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.15</b>	<b>0.19</b>	<b>0.31</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.12</b>	<b>0.12</b>	<b>0.29</b>	<b>0.43</b>	<b>0.43</b>	<b>0.43</b>	<b>0.29</b>	<b>0.29</b>	<b>0.01</b>	--	--	--	<b>0.01</b>	
<b>11 - Levees and Floodwalls</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	
									<b>0.01</b>	--	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
									<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	
									<b>0.01</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																									
16	Mobilization and Demobilization	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
				<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
					<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
		--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
							<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>		
19	Excavation (Wet Conditions)	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
							<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	Sheet Pile Wall	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-94. SO2 Exhaust Emissions from Offroad**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	0.0004
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0012
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0018</b>
11	Riprap - Class 3	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0007</b>
12	RSP Bedding Material	--	--	--	--	--	0.0005
		--	--	--	--	--	0.0004
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0018
		--	--	--	--	--	<b>0.0027</b>
13	Erosion Control Seeding	0.01	--	--	--	--	0.0001
		0.00	--	--	--	--	0.0000
		<b>0.01</b>	--	--	--	--	<b>0.0001</b>
		<b>0.01</b>	--	--	--	--	<b>0.0107</b>
<b>11 - Levees and Floodwalls</b>							
14	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0005</b>
		--	--	--	--	--	<b>0.0005</b>
<b>15 - Floodway Control and Diversion Structures</b>							
16	Mobilization and Demobilization	--	--	--	0.00	--	0.0000
		--	--	--	0.01	--	0.0000
		--	--	--	0.00	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>0.01</b>	--	<b>0.0000</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0002</b>
18	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	--	--	0.0004
		0.00	0.00	0.00	--	--	0.0002
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0006</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0002</b>
20	Sheet Pile Wall	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000

**Table L1-94. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
												Sheet Pile Wall Subtotal	



Table L1-94. SO2 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
		-	-	-	-	-	-	-	0.03	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Table L1-94. SO2 Exhaust Emissions from Offroa**

#	Activity	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
		--	--	--	--	--	
		--	--	--	--	--	0.0001

**Table L1-94. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	28	0.0024	g/hp-hr	
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221						0.0048	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						0.0049	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT						0.1721	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97						0.0037	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314						0.0032	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2						0.0474	g/hr
				<b>Headworks Structure Concrete Piles Subtotal</b>										
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	0.0049	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0038	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						0.1721	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.0474	g/hr
<b>Headworks Structure Subtotal</b>														
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	0.0038	g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT						0.1721	g/hr
				Pickup Truck Conventional	n/a - onroad	6	LDT2						0.0474	g/hr
<b>Headworks Channel Transition Subtotal</b>														
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	0.2	1	0.2	15	0.0024	g/hp-hr	
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT						0.2281	g/hr
				Pickup Truck Conventional	n/a - onroad	4	LDT2						0.0474	g/hr
<b>Hinged Bottom Gates Subtotal</b>														
<b>15 - Floodway Control and Diversion Structures Total</b>														
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1721	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0040	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						0.0474	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	2	0.0024	g/hp-hr	
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221						0.0048	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						0.0049	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT						0.1721	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97						0.0037	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314						0.0032	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2						0.0474	g/hr
				<b>Pedestrian Bridge Concrete Piles Subtotal</b>										
27	Pedestrian Bridge Concrete Abutments and Wingwall	24	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	0.0049	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0038	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						0.1721	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.0474	g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	3	0.0024	g/hp-hr	
				Flatbed Truck	n/a - onroad	2	MHDT						0.1721	g/hr
				Pickup Truck Conventional	n/a - onroad	5	LDT2						0.0474	g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>														
<b>08 - Roads, Railroads, and Bridges Total</b>														
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1721	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0040	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						0.0474	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														

Table L1-94. SO2 Exhaust Emissions from Offroa

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--		
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	--	--	--			
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--			
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>			
<b>08 - Roads, Railroads, and Bridges</b>		--	--	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.11</b>	<b>0.11</b>	<b>0.17</b>	<b>0.07</b>	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	<b>0.07</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	<b>0.01</b>	--	--	--	--	
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	--	--			
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	--			
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.03</b>	<b>0.01</b>	--	--	--	--		
29	Mobilization and Demobilization	0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.01</b>	--	--	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

Table L1-94. SO2 Exhaust Emissions from Offroad

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
21	Headworks Structure Concrete Piles	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0013</b>
22	Headworks Structure	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0005</b>
23	Headworks Channel Transition	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0001</b>
24	Hinged Bottom Gates	0.02	0.02	--	--	--	0.0001
		0.00	0.00	--	--	--	0.0000
		0.00	0.00	--	--	--	0.0000
		<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0002</b>
		<b>0.04</b>	<b>0.04</b>	<b>0.01</b>	<b>0.01</b>	--	<b>0.0034</b>
<b>08 - Roads, Railroads, and Bridges</b>							
25	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0001</b>
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0000</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	<b>0.0002</b>
<b>19 - Buildings, Grounds, and Utilities</b>							
29	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>

**Table L1-94. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units						
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.0038	g/hp-hr						
				Scraper	Scrapers	1	367					0.0040	g/hp-hr						
				Motor Grader	Graders	1	187					0.0039	g/hp-hr						
				Compactor	Rollers	1	80					0.0037	g/hp-hr						
				4000 gallon Water Truck	n/a - onroad	1	MHDT					0.1721	g/hr						
				10 TN Smooth Roller	Rollers	1	157					0.0036	g/hp-hr						
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.0474	g/hr						
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.0049	g/hp-hr						
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0038	g/hp-hr						
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0040	g/hp-hr						
				Concrete Mixer Truck	n/a - onroad	1	MHDT					0.1721	g/hr						
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>															
				31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted				Pumps	1	84	60	1	60	4	0.0049
2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0038	g/hp-hr										
Concrete Mixer Truck	n/a - onroad	2	MHDT					0.1721	g/hr										
Pickup Truck Conventional	n/a - onroad	7	LDT2					0.0474	g/hr										
<b>Concrete Duct Banc Subtotal</b>																			
<b>19 - Buildings, Grounds, and Utilities Total</b>																			
<b>20 -Permanent Operating Equipment</b>																			
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1721	g/hr						
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0040	g/hp-hr						
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.0474	g/hr						
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr						
<b>Mobilization and Demobilization Subtotal</b>																			
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr						
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.0474	g/hr						
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>																			
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr						
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.0474	g/hr						
<b>CMU Building Mechanical Equipment Subtotal</b>																			
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0474	g/hr						
<b>Electrical Control Equipment CMU Building Subtotal</b>																			
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0474	g/hr						
<b>Electrical Power Equipment CMU Building Subtotal</b>																			
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.0474	g/hr						
<b>Communication Equipment Subtotal</b>																			
<b>20 -Permanent Operating Equipment Total</b>																			
<b>GRAND TOTAL</b>																			

Table L1-94. SO2 Exhaust Emissions from Offroa

#	Activity	Maximum Daily Emissions, lbs/day																								
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep		
30	CMU Building and Earthwork Pad Construction	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Concrete Duct Banc	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>		<b>0.01</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.09</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--			
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01		
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01		
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00		
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>		<b>0.04</b>	<b>0.20</b>	<b>0.21</b>	<b>0.18</b>	<b>0.29</b>	<b>0.31</b>	<b>0.45</b>	<b>0.42</b>	<b>0.48</b>	<b>0.45</b>	<b>0.30</b>	<b>0.30</b>	<b>0.36</b>	<b>0.45</b>	<b>0.56</b>	<b>0.49</b>	<b>0.33</b>	<b>0.37</b>	<b>0.02</b>	<b>0.01</b>	<b>0.02</b>	<b>0.07</b>	<b>0.07</b>		

Table L1-94. SO2 Exhaust Emissions from Offroa

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0004
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0014</b>
31	Concrete Duct Banc	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>							
32	Mobilization and Demobilization	--	--	--	0.00	--	0.0000
		--	--	--	0.01	--	0.0000
		--	--	--	0.00	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>0.01</b>	--	<b>0.0000</b>
33	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
34	CMU Building Mechanical Equipment	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
35	Electrical Control Equipment CMU Building	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
36	Electrical Power Equipment CMU Building	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
37	Communication Equipment	--	0.00	0.00	--	--	0.0000
		--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.07</b>	<b>0.06</b>	<b>0.04</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0169</b>



**Table L1-95. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0170 0.0617 0.0651 2.4742 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0567 2.4742 0.8623 1.8973	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.4742 0.8623	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.1997 0.0303 0.2300 2.4742 0.8623 1.8973	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0170 0.0917 0.0617 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0917 0.0647 0.0567 2.4742 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0917 2.4742 0.0365 0.8623	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.20</b>	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>	--	--	--	
6	Clearing and Grubbing	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.97	0.97	0.97	0.97	0.97	0.97	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.36	0.36	0.36	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.86</b>	<b>1.86</b>	<b>1.86</b>	<b>1.86</b>	<b>1.86</b>	<b>1.86</b>	--	--	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.49	0.49	0.49	0.49	0.49	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.86	1.86	1.86	1.86	1.86	1.86	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>2.68</b>	<b>2.68</b>	<b>2.68</b>	<b>2.68</b>	<b>2.68</b>	<b>2.68</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill	--	--	--	--	--	0.49	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>0.68</b>	<b>0.68</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	--	--	--	--	0.04	0.0000
		--	--	--	--	0.06	0.0001
		--	--	--	--	0.02	0.0000
		--	--	--	--	--	--
		--	--	--	--	<b>0.12</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	0.0006
		--	--	--	--	--	0.0011
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0002
		--	--	--	--	0.0005	
		--	--	--	--	--	<b>0.0034</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	0.19	--	0.0004
		--	--	--	0.04	--	0.0001
		--	--	--	0.02	--	0.0000
		--	--	--	0.17	--	0.0003
		--	--	--	<b>0.41</b>	--	<b>0.0008</b>
4	Temporary Electrical Power	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0000</b>
		--	--	--	<b>0.41</b>	<b>0.12</b>	<b>0.0044</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	--	--	0.0062
		--	--	--	--	--	0.0012
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0015
		--	--	--	--	0.0005	
		--	--	--	--	--	<b>0.0106</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	0.0023
		--	--	--	--	--	0.0170
		--	--	--	--	--	0.0062
		--	--	--	--	--	0.0053
		--	--	--	--	0.0019	
		--	--	--	--	--	<b>0.0326</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	0.0083
		--	--	--	--	--	0.0316
		--	--	--	--	--	0.0032
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0018
		--	--	--	--	--	<b>0.0455</b>
9	Earthen Backfill	--	--	--	--	--	0.0022
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0030</b>

**Table L1-95. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0170 0.0553 1.8973 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0170 0.0553 1.8973 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0170 0.0553 0.8623 1.8973	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0651 0.8623	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0170 0.0917 0.0170 1.8973 0.0906 0.1259 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.4742 0.0236 0.8623	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.1259 0.8623	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0170 0.0917 0.0617 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.4742 0.0236 0.8623	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.29</b>	<b>1.29</b>	<b>1.29</b>	<b>1.29</b>	<b>1.29</b>	--	--	--	--	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.77	0.77	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.29</b>	<b>1.29</b>	--	--	--	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	--	--	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.17</b>	<b>0.17</b>		
		<b>0.12</b>	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	<b>2.68</b>	<b>3.35</b>	<b>5.22</b>	<b>4.54</b>	<b>4.54</b>	<b>4.54</b>	<b>1.86</b>	<b>1.86</b>	<b>2.59</b>	<b>3.88</b>	<b>3.88</b>	<b>3.88</b>	<b>2.59</b>	<b>2.59</b>	<b>0.12</b>	--	--	<b>0.17</b>	<b>0.17</b>	
<b>11 - Levees and Floodwalls</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.12</b>	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.49	0.49	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.12</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																									
16	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19		
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>		
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.86</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	Sheet Pile Wall	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-95. PM10 Exhaust Emissions from Offro**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	0.0019
		--	--	--	--	--	0.0037
		--	--	--	--	--	0.0096
		--	--	--	--	--	0.0010
		--	--	--	--	--	<b>0.0162</b>
11	Riprap - Class 3	--	--	--	--	--	0.0008
		--	--	--	--	--	0.0015
		--	--	--	--	--	0.0038
		--	--	--	--	--	0.0004
		--	--	--	--	--	<b>0.0065</b>
12	RSP Bedding Material	--	--	--	--	--	0.0029
		--	--	--	--	--	0.0056
		--	--	--	--	--	0.0014
		--	--	--	--	--	0.0146
		--	--	--	--	--	<b>0.0246</b>
13	Erosion Control Seeding	0.11	--	--	--	--	0.0009
		0.06	--	--	--	--	0.0005
		<b>0.17</b>	--	--	--	--	<b>0.0014</b>
		<b>0.17</b>	--	--	--	--	<b>0.1405</b>
<b>11 - Levees and Floodwalls</b>							
14	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	0.0008
		--	--	--	--	--	0.0032
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0012
		--	--	--	--	--	0.0005
		--	--	--	--	--	<b>0.0065</b>
		--	--	--	--	--	<b>0.0066</b>
<b>15 - Floodway Control and Diversion Structures</b>							
16	Mobilization and Demobilization	--	--	--	0.04	--	0.0000
		--	--	--	0.06	--	0.0001
		--	--	--	0.02	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>0.12</b>	--	<b>0.0001</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	0.0004
		--	--	--	--	--	0.0008
		--	--	--	--	--	0.0008
		--	--	--	--	--	<b>0.0020</b>
18	Construction Site Dewatering (Pumping)	0.19	0.19	0.19	--	--	0.0112
		0.05	0.05	0.05	--	--	0.0027
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	<b>0.0139</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.0003
		--	--	--	--	--	0.0019
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0006
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0037</b>
20	Sheet Pile Wall	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0003
		--	--	--	--	--	<b>0.0008</b>

**Table L1-95. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	28	0.0399	g/hp-hr
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					0.0236	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.1259	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT					2.4742	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					0.0651	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314					0.0274	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2					0.8623	g/hr
				<b>Headworks Structure Concrete Piles Subtotal</b>									
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	0.1259	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0696	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.8623	g/hr
<b>Headworks Structure Subtotal</b>													
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	0.0696	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	6	LDT2					0.8623	g/hr
<b>Headworks Channel Transition Subtotal</b>													
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	0.2	1	0.2	15	0.0399	g/hp-hr
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT					1.8973	g/hr
				Pickup Truck Conventional	n/a - onroad	4	LDT2					0.8623	g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
25	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.4742	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.8623	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
				<b>Mobilization and Demobilization Subtotal</b>									
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	2	0.0399	g/hp-hr
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					0.0236	g/hp-hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.1259	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	3	MHDT					2.4742	g/hr
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					0.0651	g/hp-hr
				24 TN Truck End Dump	Off-Highway Trucks	2	314					0.0274	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	8	LDT2					0.8623	g/hr
				<b>Pedestrian Bridge Concrete Piles Subtotal</b>									
27	Pedestrian Bridge Concrete Abutments and Wingwall	24	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	0.1259	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0696	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.8623	g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	3	0.0399	g/hp-hr
				Flatbed Truck	n/a - onroad	2	MHDT					2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	5	LDT2					0.8623	g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.4742	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.8623	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
				<b>Mobilization and Demobilization Subtotal</b>									

Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	--	--	--	--	--	--	--	--	--	--		
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	--	--	--	--	0.56	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	0.26	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.32	0.32	--	--	--	--	0.32	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>1.17</b>	<b>1.17</b>	--	--	--	--	<b>1.17</b>	--	--	--	--			
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.38</b>	<b>0.38</b>	--	--	--	--	--	--			
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	0.32		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.41</b>	<b>0.41</b>		
		--	--	<b>0.12</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>2.10</b>	<b>1.62</b>	<b>1.62</b>	<b>1.39</b>	<b>1.39</b>	<b>2.56</b>	<b>1.40</b>	<b>0.23</b>	<b>0.61</b>	<b>0.61</b>	<b>0.23</b>	<b>1.40</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.64</b>	<b>0.64</b>	
<b>08 - Roads, Railroads, and Bridges</b>																									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	0.04	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>	--	--	--	<b>0.12</b>	--	--	--	--		
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.16</b>	--	--	--	--	--	--	--			
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.39</b>	--	--	--	--	--	--	--			
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.48</b>	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>	<b>1.16</b>	<b>0.39</b>	<b>0.48</b>	<b>0.12</b>	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities</b>																									
29	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			



Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
21	Headworks Structure Concrete Piles	--	--	--	--	--	0.0030
		--	--	--	--	--	0.0013
		--	--	--	--	--	0.0026
		--	--	--	--	--	0.0018
		--	--	--	--	--	0.0016
		--	--	--	--	--	0.0042
		--	--	--	--	--	0.0017
		--	--	--	--	--	<b>0.0162</b>
22	Headworks Structure	--	--	--	--	--	0.0050
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0024
		--	--	--	--	--	0.0029
		--	--	--	--	--	<b>0.0105</b>
23	Headworks Channel Transition	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0009
		--	--	--	--	--	0.0009
		--	--	--	--	--	<b>0.0019</b>
24	Hinged Bottom Gates	0.32	0.32	--	--	--	0.0024
		0.03	0.03	--	--	--	0.0003
		0.06	0.06	--	--	--	0.0005
		<b>0.41</b>	<b>0.41</b>	--	--	--	<b>0.0031</b>
		<b>0.64</b>	<b>0.64</b>	<b>0.23</b>	<b>0.12</b>	--	<b>0.0523</b>
<b>08 - Roads, Railroads, and Bridges</b>							
25	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0012</b>
27	Pedestrian Bridge Concrete Abutments and Wingwall	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0002</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	0.0005
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0007</b>
		--	--	--	--	--	<b>0.0022</b>
<b>19 - Buildings, Grounds, and Utilities</b>							
29	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>

**Table L1-95. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.1527	g/hp-hr
				Scraper	Scrapers	1	367					0.0647	g/hp-hr
				Motor Grader	Graders	1	187					0.0567	g/hp-hr
				Compactor	Rollers	1	80					0.0823	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					2.4742	g/hr
				10 TN Smooth Roller	Rollers	1	157					0.0365	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.8623	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.1259	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0696	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0356	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					2.4742	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.1259	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0696	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.8623	g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.4742	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.8623	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.8623	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.8623	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.8623	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.8623	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.8623	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-95. PM10 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
30	CMU Building and Earthwork Pad Construction	--	0.44	0.44	0.44	0.44	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.42	0.42	0.42	0.42	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Concrete Duct Banc	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>		<b>0.12</b>	<b>1.72</b>	<b>1.72</b>	<b>1.72</b>	<b>2.11</b>	<b>1.72</b>	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>	--			
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	<b>0.11</b>		
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	<b>0.11</b>		
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.05</b>	<b>0.05</b>		
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.05</b>	<b>0.05</b>		
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>	<b>0.31</b>		
<b>GRAND TOTAL</b>		<b>0.44</b>	<b>3.61</b>	<b>3.73</b>	<b>3.27</b>	<b>5.02</b>	<b>5.30</b>	<b>7.44</b>	<b>6.28</b>	<b>7.16</b>	<b>6.93</b>	<b>4.25</b>	<b>4.55</b>	<b>3.99</b>	<b>4.23</b>	<b>5.64</b>	<b>4.88</b>	<b>3.30</b>	<b>4.11</b>	<b>0.35</b>	<b>0.23</b>	<b>0.35</b>	<b>1.12</b>		

**Table L1-95. PM10 Exhaust Emissions from Offro**

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	0.0067
		--	--	--	--	--	0.0063
		--	--	--	--	--	0.0028
		--	--	--	--	--	0.0017
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0015
		--	--	--	--	--	0.0016
		--	--	--	--	--	0.0028
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0009
		--	--	--	--	0.0007	
		--	--	--	--	<b>0.0258</b>	
31	Concrete Duct Banc	--	--	--	--	--	0.0004
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0002
		--	--	--	--	<b>0.0008</b>	
		--	--	--	--	<b>0.0267</b>	
<b>20 -Permanent Operating Equipment</b>							
32	Mobilization and Demobilization	--	--	--	0.04	--	0.0000
		--	--	--	0.06	--	0.0001
		--	--	--	0.02	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>0.12</b>	--	<b>0.0001</b>
33	Mechanical Hydraulic Cylinders & Housing	0.06	0.06	0.06	--	--	0.0009
		0.05	0.05	0.05	--	--	0.0007
		<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>
34	CMU Building Mechanical Equipment	0.06	0.06	0.06	--	--	0.0009
		0.05	0.05	0.05	--	--	0.0007
		<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>
35	Electrical Control Equipment CMU Building	0.05	0.05	0.05	--	--	0.0007
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
36	Electrical Power Equipment CMU Building	0.05	0.05	0.05	--	--	0.0007
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
37	Communication Equipment	--	0.05	0.05	--	--	0.0003
		--	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0003</b>
		<b>0.31</b>	<b>0.35</b>	<b>0.35</b>	<b>0.12</b>	--	<b>0.0050</b>
<b>GRAND TOTAL</b>		<b>1.12</b>	<b>1.00</b>	<b>0.59</b>	<b>0.66</b>	<b>0.12</b>	<b>0.2377</b>

**Table L1-96. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0157 0.0568 0.0599 1.2073 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0522 1.2073 0.4490 0.9593	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	1.2073 0.4490	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.1837 0.0279 0.2116 1.2073 0.4490 0.9593	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0157 0.0844 0.0568 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0844 0.0595 0.0522 1.2073 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0844 1.2073 0.0336 0.4490	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-96. PM2.5 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	0.10	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.16	0.16 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.10	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.05	0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	--	
6	Clearing and Grubbing	--	0.71	0.71 --	0.71 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.14	0.14 --	0.14 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06 --	0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04 --	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.10	0.10 --	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.03	0.03 --	0.03 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.89	0.89	0.89	0.89	0.89	0.89	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.33	0.33	0.33	0.33	0.33	0.33	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	--	--	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.45	0.45	0.45	0.45	0.45	0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.71	1.71	1.71	1.71	1.71	1.71	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill	--	--	--	--	--	--	0.45	0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-96. PM2.5 Exhaust Emissions from Offro

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	--	--	--	--	0.02	0.0000
		--	--	--	--	0.06	0.0001
		--	--	--	--	0.01	0.0000
		--	--	--	--	--	--
					<b>0.09</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	0.0006
		--	--	--	--	--	0.0010
		--	--	--	--	--	0.0006
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0003
						<b>0.0027</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	0.17	--	0.0003
		--	--	--	0.02	--	0.0000
		--	--	--	0.01	--	0.0000
		--	--	--	0.08	--	0.0002
					<b>0.29</b>	<b>0.0006</b>	
4	Temporary Electrical Power	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
						<b>0.0000</b>	
					<b>0.29</b>	<b>0.09</b>	<b>0.0034</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
						<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	0.0057
		--	--	--	--	--	0.0011
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0008
		--	--	--	--	--	0.0003
						<b>0.0087</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	0.0021
		--	--	--	--	--	0.0156
		--	--	--	--	--	0.0057
		--	--	--	--	--	0.0027
		--	--	--	--	--	0.0010
						<b>0.0271</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	0.0076
		--	--	--	--	--	0.0290
		--	--	--	--	--	0.0029
		--	--	--	--	--	0.0004
		--	--	--	--	--	0.0009
						<b>0.0409</b>	
9	Earthen Backfill	--	--	--	--	--	0.0020
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0004
						0.0001	
						<b>0.0026</b>	

**Table L1-96. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0157 0.0509 0.9593 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0157 0.0509 0.9593 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0157 0.0509 0.4490 0.9593	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0599 0.4490	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0157 0.0844 0.0157 0.9593 0.0833 0.1159 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	1.2073 0.0217 0.4490	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.1159 0.4490	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0157 0.0844 0.0568 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	1.2073 0.0217 0.4490	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													



Table L1-96. PM2.5 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	0.14	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	0.27	0.27	0.27	0.27	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	--	--	--	--	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	0.14	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	0.27	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	0.39	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	--	--	--	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	--	--	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.13</b>	<b>0.13</b>		
		<b>0.09</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>2.40</b>	<b>2.99</b>	<b>4.54</b>	<b>3.95</b>	<b>3.95</b>	<b>3.95</b>	<b>1.55</b>	<b>1.55</b>	<b>1.68</b>	<b>2.52</b>	<b>2.52</b>	<b>2.52</b>	<b>1.68</b>	<b>1.68</b>	<b>0.09</b>	--	--	<b>0.13</b>	<b>0.13</b>	
<b>11 - Levees and Floodwalls</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.45	0.45	0.45	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.09</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																									
16	Mobilization and Demobilization	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17		
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02		
		--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>		
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	Sheet Pile Wall	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-96. PM2.5 Exhaust Emissions from Offro**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	0.0018
		--	--	--	--	--	0.0034
		--	--	--	--	--	0.0049
		--	--	--	--	--	0.0005
		--	--	--	--	--	<b>0.0105</b>
11	Riprap - Class 3	--	--	--	--	--	0.0007
		--	--	--	--	--	0.0013
		--	--	--	--	--	0.0019
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0042</b>
12	RSP Bedding Material	--	--	--	--	--	0.0027
		--	--	--	--	--	0.0051
		--	--	--	--	--	0.0008
		--	--	--	--	--	0.0074
		--	--	--	--	--	<b>0.0160</b>
13	Erosion Control Seeding	0.10	--	--	--	--	0.0008
		0.03	--	--	--	--	0.0003
		<b>0.13</b>	--	--	--	--	<b>0.0011</b>
		<b>0.13</b>	--	--	--	--	<b>0.1110</b>
<b>11 - Levees and Floodwalls</b>							
14	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	0.0008
		--	--	--	--	--	0.0029
		--	--	--	--	--	0.0005
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0011
		--	--	--	--	--	0.0003
		--	--	--	--	--	<b>0.0057</b>
		--	--	--	--	--	<b>0.0058</b>
<b>15 - Floodway Control and Diversion Structures</b>							
16	Mobilization and Demobilization	--	--	--	0.02	--	0.0000
		--	--	--	0.06	--	0.0001
		--	--	--	0.01	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>0.09</b>	--	<b>0.0001</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0008
		--	--	--	--	--	0.0004
		--	--	--	--	--	<b>0.0014</b>
18	Construction Site Dewatering (Pumping)	0.17	0.17	0.17	--	--	0.0103
		0.02	0.02	0.02	--	--	0.0014
		<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	--	--	<b>0.0117</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0018
		--	--	--	--	--	0.0007
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0031</b>
20	Sheet Pile Wall	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0005</b>

**Table L1-96. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0367 0.0217 0.1159 1.2073 0.0599 0.0252 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.1159 0.0640 1.2073 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0640 1.2073 0.4490	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0367 0.9593 0.4490	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0367 0.0217 0.1159 1.2073 0.0599 0.0252 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.1159 0.0640 1.2073 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0367 1.2073 0.4490	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
29	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0595 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-96. PM2.5 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	--	--	--	--	--	--	--	--	--	--		
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	0.13	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	0.17	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	--	--	--	--	<b>0.84</b>	--	--	--	--			
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	--	--	--	--	--	--			
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.34</b>	<b>0.34</b>			
<b>08 - Roads, Railroads, and Bridges</b>		--	--	<b>0.09</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>1.74</b>	<b>1.31</b>	<b>1.31</b>	<b>1.15</b>	<b>1.15</b>	<b>1.99</b>	<b>1.03</b>	<b>0.20</b>	<b>0.39</b>	<b>0.39</b>	<b>0.20</b>	<b>1.03</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.54</b>	<b>0.54</b>	
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	0.06	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	<b>0.09</b>	--	--	--	--			
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>	--	--	--	--	--	--	--			
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	--	--	--	--	--	--	--			
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.37</b>	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.96</b>	<b>0.28</b>	<b>0.37</b>	<b>0.09</b>	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>																									
29	Mobilization and Demobilization	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.10	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.13</b>	--	--	--	--	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

**Table L1-96. PM2.5 Exhaust Emissions from Offro**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
21	Headworks Structure Concrete Piles	--	--	--	--	--	0.0027
		--	--	--	--	--	0.0012
		--	--	--	--	--	0.0024
		--	--	--	--	--	0.0009
		--	--	--	--	--	0.0014
		--	--	--	--	--	0.0039
		--	--	--	--	--	0.0009
		--	--	--	--	--	<b>0.0134</b>
22	Headworks Structure	--	--	--	--	--	0.0046
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0011
		--	--	--	--	--	0.0015
		--	--	--	--	--	<b>0.0075</b>
23	Headworks Channel Transition	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0004
		--	--	--	--	--	0.0005
		--	--	--	--	--	<b>0.0010</b>
24	Hinged Bottom Gates	0.29	0.29	--	--	--	0.0022
		0.02	0.02	--	--	--	0.0001
		0.03	0.03	--	--	--	0.0002
		<b>0.34</b>	<b>0.34</b>	--	--	--	<b>0.0025</b>
		<b>0.54</b>	<b>0.54</b>	<b>0.20</b>	<b>0.09</b>	--	<b>0.0413</b>
<b>08 - Roads, Railroads, and Bridges</b>							
25	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0002
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0010</b>
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0001</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	0.0004
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0006</b>
		--	--	--	--	--	<b>0.0017</b>
<b>19 - Buildings, Grounds, and Utilities</b>							
29	Mobilization and Demobilization	--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0000
		--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>

**Table L1-96. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.1405	g/hp-hr
				Scraper	Scrapers	1	367					0.0595	g/hp-hr
				Motor Grader	Graders	1	187					0.0522	g/hp-hr
				Compactor	Rollers	1	80					0.0757	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					1.2073	g/hr
				10 TN Smooth Roller	Rollers	1	157					0.0336	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.4490	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.1159	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0640	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.0327	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					1.2073	g/hr
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>									
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.1159	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.0640	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					1.2073	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.4490	g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	1.2073	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.7933	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.4490	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0327	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.4490	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0327	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.4490	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.4490	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.4490	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.4490	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-96. PM2.5 Exhaust Emissions from Offro

#	Activity	Maximum Daily Emissions, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
30	CMU Building and Earthwork Pad Construction	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.38	0.38	0.38	0.38	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>1.50</b>	<b>1.50</b>	<b>1.50</b>	<b>1.50</b>	<b>1.50</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Concrete Duct Banc	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.28</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.13</b>	<b>1.50</b>	<b>1.50</b>	<b>1.50</b>	<b>1.78</b>	<b>1.50</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																									
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.40	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.43</b>	--	--	
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.08</b>	<b>0.08</b>	
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.08</b>	<b>0.08</b>	
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.43</b>	<b>0.21</b>	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.21</b>	<b>0.21</b>	
<b>GRAND TOTAL</b>		<b>0.35</b>	<b>3.04</b>	<b>3.12</b>	<b>2.74</b>	<b>4.34</b>	<b>4.64</b>	<b>6.41</b>	<b>5.35</b>	<b>6.14</b>	<b>5.98</b>	<b>3.58</b>	<b>3.63</b>	<b>2.71</b>	<b>2.80</b>	<b>3.87</b>	<b>3.19</b>	<b>2.25</b>	<b>2.80</b>	<b>0.28</b>	<b>0.20</b>	<b>1.62</b>	<b>0.88</b>	<b>0.88</b>	

**Table L1-96. PM2.5 Exhaust Emissions from Offro**

#	Activity						Annual Emissions , tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	0.0061
		--	--	--	--	--	0.0058
		--	--	--	--	--	0.0026
		--	--	--	--	--	0.0016
		--	--	--	--	--	0.0003
		--	--	--	--	--	0.0014
		--	--	--	--	--	0.0008
		--	--	--	--	--	0.0026
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0009
		--	--	--	--	--	0.0003
		--	--	--	--	<b>0.0225</b>	
31	Concrete Duct Banc	--	--	--	--	--	0.0003
		--	--	--	--	--	0.0000
		--	--	--	--	--	0.0001
		--	--	--	--	--	0.0001
		--	--	--	--	<b>0.0006</b>	
		--	--	--	--	<b>0.0232</b>	
<b>20 -Permanent Operating Equipment</b>							
32	Mobilization and Demobilization	--	--	--	0.02	--	0.0000
		--	--	--	1.40	--	0.0014
		--	--	--	0.01	--	0.0000
		--	--	--	--	--	--
		--	--	--	<b>1.43</b>	--	<b>0.0014</b>
33	Mechanical Hydraulic Cylinders & Housing	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
34	CMU Building Mechanical Equipment	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
35	Electrical Control Equipment CMU Building	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
36	Electrical Power Equipment CMU Building	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
37	Communication Equipment	--	0.02	0.02	--	--	0.0001
		--	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0001</b>
		<b>0.21</b>	<b>0.23</b>	<b>0.23</b>	<b>1.43</b>	--	<b>0.0047</b>
<b>GRAND TOTAL</b>		<b>0.88</b>	<b>0.77</b>	<b>0.43</b>	<b>1.80</b>	<b>0.09</b>	<b>0.1912</b>



**Table L1-97. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.9857 8716.749 0	0 0.022723 0 0	0 0 0 0	24743.4 341.5538 8716.749 0	g/hr g/hp-hr g/hr g/hr	0.40 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>			
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	323.9364 306.8872 312.5702 24743.4 36496.53 8716.749	0.014208 0.018567 0.018542 0 0 0	0 0 0 0 0 0	324.2916 307.3513 313.0337 24743.4 36496.53 8716.749	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	11.18 4.84 2.91 2.38 3.50 5.02
												<b>Fremont Weir Demo Subtotal</b>		<b>29.83</b>			
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	346.6688 24743.4 8716.749 36496.53	0.017223 0 0 0	0 0 0 0	347.0993 24743.4 8716.749 36496.53	g/hp-hr g/hr g/hr g/hr	2.08 0.79 0.28 5.84
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>		<b>8.99</b>			
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	24743.4 8716.749	0 0	0 0	24743.4 8716.749	g/hr g/hr	0.20 0.14
												<b>Temporary Electrical Power Subtotal</b>		<b>0.34</b>			
												<b>02 - Relocations Total</b>		<b>40.24</b>			
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.9857 8716.749 0	0 0.022723 0 0	0 0 0 0	24743.4 341.5538 8716.749 0	g/hr g/hp-hr g/hr g/hr	0.40 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>			
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	363.718 227.3238 395.0912 24743.4 8716.749 36496.53	0.038979 0.0068 0 0 0 0	0 0 0 0 0 0	364.6925 227.4937 395.0912 24743.4 8716.749 36496.53	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	10.27 8.15 0.81 6.33 13.39 9.34
												<b>Clearing and Grubbing Subtotal</b>		<b>48.30</b>			
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	323.9364 335.3025 306.8872 36496.53 8716.749	0.014208 0.024926 0.018567 0 0	0 0 0 0 0	324.2916 335.9257 307.3513 36496.53 8716.749	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	38.95 56.44 28.23 91.97 17.08
												<b>Excavation (Wet Conditions) Subtotal</b>		<b>232.67</b>			
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	335.3025 409.1827 346.6688 24743.4 8716.749	0.024926 0.024151 0.017223 0 0	0 0 0 0 0	335.9257 409.7865 347.0993 24743.4 8716.749	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	27.41 181.46 17.65 6.73 16.60
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>		<b>249.85</b>			
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	335.3025 24743.4 318.2533 8716.749	0.024926 0 0.019107 0	0 0 0 0	335.9257 24743.4 318.731 8716.749	g/hp-hr g/hr g/hp-hr g/hr	7.26 1.78 3.60 1.88
												<b>Earthen Backfill Subtotal</b>		<b>14.52</b>			
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	323.9364 363.718 36496.53 8716.749	0.014208 0.021139 0 0	0 0 0 0	324.2916 364.2464 36496.53 8716.749	g/hp-hr g/hp-hr g/hr g/hr	33.34 21.85 167.88 8.72
												<b>Riprap - Class 2 Subtotal</b>		<b>231.79</b>			

Table L1-97. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated

Table with 16 columns: #, Activity, Quantity, Unit, Crew / Equipment, OFFROAD Name, Equipment Quantity per Crew, Size (hp), Crew Daily Output, No. of Crews, Total Daily Output, Estimated Duration, Days, CO2, CH4, N2O, CO2e, Units, Annual Emissions, MTCO2e/yr. Includes subtotals for Riprap - Class 3, RSP Bedding Material, Erosion Control Seeding, 11 - Levees and Floodwalls, 15 - Floodway Control and Diversion Structures, and Headworks Structure Concrete Piles.

**Table L1-97. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr					
												CO2	CH4	N2O	CO2e	Units						
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	420.549	0.023822	0	421.1446	g/hp-hr	15.28					
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.3731	0.025667	0	245.0148	g/hp-hr	0.85					
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24743.4	0	0	24743.4	g/hr	21.38					
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8716.749	0	0	8716.749	g/hr	26.36					
															<b>Headworks Structure Subtotal</b>			<b>63.87</b>				
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	244.3731	0.025667	0	245.0148	g/hp-hr	0.31					
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24743.4	0	0	24743.4	g/hr	7.92					
				Pickup Truck Conventional	n/a - onroad	6	LDT2					8716.749	0	0	8716.749	g/hr	8.37					
											<b>Headworks Channel Transition Subtotal</b>			<b>16.60</b>								
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	0.2	1	0.2	15	244.373	0.012663	0	244.6896	g/hp-hr	13.21					
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT					36496.53	0	0	36496.53	g/hr	4.38					
				Pickup Truck Conventional	n/a - onroad	4	LDT2					8716.749	0	0	8716.749	g/hr	4.18					
											<b>Hinged Bottom Gates Subtotal</b>			<b>21.78</b>								
											<b>15 - Floodway Control and Diversion Structures Total</b>			<b>353.39</b>								
<b>08 - Roads, Railroads, and Bridges</b>																						
25	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40					
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.9857	0.022723	0	341.5538	g/hp-hr	0.55					
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8716.749	0	0	8716.749	g/hr	0.14					
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00					
															<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>				
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	2	244.373	0.012663	0	244.6896	g/hp-hr	1.17					
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					426.2321	0.009312	0	426.4649	g/hp-hr	1.51					
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.549	0.023822	0	421.1446	g/hp-hr	0.57					
				Concrete Mixer Truck	n/a - onroad	3	MHDT					24743.4	0	0	24743.4	g/hr	1.19					
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					312.5702	0.018542	0	313.0337	g/hp-hr	0.49					
				24 TN Truck End Dump	Off-Highway Trucks	2	314					323.9364	0.015181	0	324.3159	g/hp-hr	3.26					
				Pickup Truck Conventional	n/a - onroad	8	LDT2					8716.749	0	0	8716.749	g/hr	1.12					
															<b>Pedestrian Bridge Concrete Piles Subtotal</b>			<b>9.30</b>				
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	420.549	0.023822	0	421.1446	g/hp-hr	0.28					
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.3731	0.025667	0	245.0148	g/hp-hr	0.02					
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24743.4	0	0	24743.4	g/hr	0.40					
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8716.749	0	0	8716.749	g/hr	0.49					
															<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>			<b>1.18</b>				
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	3	244.373	0.012663	0	244.6896	g/hp-hr	2.64					
				Flatbed Truck	n/a - onroad	2	MHDT					24743.4	0	0	24743.4	g/hr	1.19					
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8716.749	0	0	8716.749	g/hr	1.05					
											<b>Pedestrian Bridge Span Installation Subtotal</b>			<b>4.88</b>								
											<b>08 - Roads, Railroads, and Bridges Total</b>			<b>16.44</b>								
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40					
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.9857	0.022723	0	341.5538	g/hp-hr	0.55					
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8716.749	0	0	8716.749	g/hr	0.14					
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00					
															<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>				
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	335.3026	0.033526	0	336.1408	g/hp-hr	13.31					
				Scraper	Scrapers	1	367					409.1827	0.024151	0	409.7865	g/hp-hr	36.09					
				Motor Grader	Graders	1	187					346.6688	0.017223	0	347.0993	g/hp-hr	15.58					
				Compactor	Rollers	1	80					318.2532	0.025783	0	318.8977	g/hp-hr	6.12					
				4000 gallon Water Truck	n/a - onroad	1	MHDT					24743.4	0	0	24743.4	g/hr	5.94					
				10 TN Smooth Roller	Rollers	1	157					318.2533	0.019107	0	318.731	g/hp-hr	12.01					
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8716.749	0	0	8716.749	g/hr	14.64					
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.549	0.023822	0	421.1446	g/hp-hr	8.49					
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.3731	0.025667	0	245.0148	g/hp-hr	0.47					
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.9857	0.022723	0	341.5538	g/hp-hr	8.20					
				Concrete Mixer Truck	n/a - onroad	1	MHDT					24743.4	0	0	24743.4	g/hr	5.94					
															<b>CMU Building and Earthwork Pad Construction Subtotal</b>			<b>126.79</b>				

**Table L1-97. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr			
												CO2	CH4	N2O	CO2e	Units				
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	420.549	0.023822	0	421.1446	g/hp-hr	1.13			
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8								244.3731	0.025667	0	245.0148	g/hp-hr	0.06
				Concrete Mixer Truck	n/a - onroad	2	MHDT								24743.4	0	0	24743.4	g/hr	1.58
				Pickup Truck Conventional	n/a - onroad	7	LDT2								8716.749	0	0	8716.749	g/hr	1.95
												<b>Concrete Duct Banc Subtotal</b>					<b>4.73</b>			
												<b>19 - Buildings, Grounds, and Utilities Total</b>					<b>132.61</b>			
<b>20 -Permanent Operating Equipment</b>																				
32	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40			
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100								340.9857	0.022723	0	341.5538	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	3	LDT2								8716.749	0	0	8716.749	g/hr	0.42
				Temp. Mobile Office Building	n/a - onroad	1	n/a								0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.36</b>			
33	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.9857	0.022723	0	341.5538	g/hp-hr	8.20			
				Pickup Truck Conventional	n/a - onroad	3	LDT2							8716.749	0	0	8716.749	g/hr	6.28	
												<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>					<b>14.47</b>			
34	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.9857	0.022723	0	341.5538	g/hp-hr	8.20			
				Pickup Truck Conventional	n/a - onroad	3	LDT2							8716.749	0	0	8716.749	g/hr	6.28	
												<b>CMU Building Mechanical Equipment Subtotal</b>					<b>14.47</b>			
35	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.749	0	0	8716.749	g/hr	6.28			
												<b>Electrical Control Equipment CMU Building Subtotal</b>					<b>6.28</b>			
36	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.749	0	0	8716.749	g/hr	6.28			
												<b>Electrical Power Equipment CMU Building Subtotal</b>					<b>6.28</b>			
37	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	8716.749	0	0	8716.749	g/hr	2.51			
												<b>Communication Equipment Subtotal</b>					<b>2.51</b>			
												<b>20 -Permanent Operating Equipment Total</b>					<b>45.37</b>			
<b>GRAND TOTAL</b>																	<b>1,866.66</b>			

## Construction Worker Commuting Exhaust Emissions Summary

**Table L1-98. Maximum Daily Construction Worker Commuting Emissions (Alternative 1)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.02	0.10	1.03	0.00	0.46	0.12
09 - Channels and Canals	0.17	0.86	8.62	0.03	3.85	1.03
11 - Levees and Floodwalls	0.02	0.08	0.82	0.00	0.37	0.10
15 - Floodway Control and Diversion Structures	0.10	0.51	5.13	0.02	2.29	0.62
08 - Roads, Railroads, and Bridges	0.03	0.13	1.33	0.01	0.60	0.16
19 - Buildings, Grounds, and Utilities	0.04	0.19	1.95	0.01	0.87	0.23
20 -Permanent Operating Equipment	0.04	0.20	2.05	0.01	0.92	0.25
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>0.24</b>	<b>1.18</b>	<b>11.90</b>	<b>0.05</b>	<b>5.32</b>	<b>1.43</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-99. Annual Construction Worker Commuting Emissions (Alternative 1)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.00	0.01	0.00	0.00	0.00	2.98
09 - Channels and Canals	0.00	0.02	0.18	0.00	0.08	0.02	62.66
11 - Levees and Floodwalls	0.00	0.00	0.01	0.00	0.00	0.00	2.13
15 - Floodway Control and Diversion Structures	0.00	0.01	0.10	0.00	0.04	0.01	33.79
08 - Roads, Railroads, and Bridges	0.00	0.00	0.00	0.00	0.00	0.00	1.19
19 - Buildings, Grounds, and Utilities	0.00	0.00	0.02	0.00	0.01	0.00	6.40
20 -Permanent Operating Equipment	0.00	0.00	0.03	0.00	0.01	0.00	9.62
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.01</b>	<b>0.03</b>	<b>0.34</b>	<b>0.00</b>	<b>0.15</b>	<b>0.04</b>	<b>118.77</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.



Table L1-100. ROG Emissions from C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0102	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0001
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0164	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0164</b>	<b>0.0102</b>	<b>0.0002</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0003
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0007
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0003
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0007
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0011
13	Erosion Control Seeding	--	--	0.0082	0.0082	0.0082	--	--	--	--	0.0001
	<b>09 - Cha</b>	--	--	<b>0.0082</b>	<b>0.0082</b>	<b>0.0082</b>	--	--	--	--	<b>0.0036</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0001
	<b>11 - Levee</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>15 - Floodway Control and Diversion Structure</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	0.1025	--	0.0001
17	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0001
18	Construction Site Dewatering (Pumping)	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	--	--	0.0004
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0001
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0005
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0002
24	Hinged Bottom Gates	--	--	0.0123	0.0123	0.0123	0.0123	--	--	--	0.0001
	<b>15 - Floodway Control and Div</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0061</b>	<b>0.1025</b>	--	<b>0.0019</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	0.0000
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0000
	<b>08 - Roads, Railro</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0003
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0004</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.0041	--	--	--	--	--	0.0041	--	0.0000
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
34	CMU Building Mechanical Equipment	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
35	Electrical Control Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
36	Electrical Power Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
37	Communication Equipment	--	--	--	--	--	0.0082	0.0082	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0041</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0410</b>	<b>0.0410</b>	<b>0.0041</b>	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		<b>0.0061</b>	<b>0.0102</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0471</b>	<b>0.1229</b>	<b>0.0102</b>	<b>0.0067</b>





Table L1-101. NOx Emissions from Cc

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0510	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0816	--	0.0002
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0816</b>	<b>0.0510</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0015
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0036
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0014
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0002
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0036
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0014
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0054
13	Erosion Control Seeding	--	--	0.0408	0.0408	0.0408	--	--	--	--	0.0003
	<b>09 - Cha</b>	--	--	<b>0.0408</b>	<b>0.0408</b>	<b>0.0408</b>	--	--	--	--	<b>0.0177</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0005
	<b>11 - Levee</b>	--	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>15 - Floodway Control and Diversion Structure</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	0.5101	--	0.0005
17	Construction Site Dewatering (Temporary Cc)	--	--	--	--	--	--	--	--	--	0.0006
18	Construction Site Dewatering (Pumping)	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	--	--	0.0018
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0019
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0025
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0008
24	Hinged Bottom Gates	--	--	0.0612	0.0612	0.0612	0.0612	--	--	--	0.0007
	<b>15 - Floodway Control and Div</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0306</b>	<b>0.5101</b>	--	<b>0.0095</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	0.0001
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
	<b>08 - Roads, Railro</b>	--	--	--	--	--	--	--	--	--	<b>0.0003</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0015
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0002
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0018</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.0204	--	--	--	--	--	0.0204	--	0.0000
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
34	CMU Building Mechanical Equipment	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
35	Electrical Control Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
36	Electrical Power Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
37	Communication Equipment	--	--	--	--	--	0.0408	0.0408	--	--	0.0002
	<b>20 -Permanent Ope</b>	--	<b>0.0204</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.2040</b>	<b>0.2040</b>	<b>0.0204</b>	--	<b>0.0027</b>
<b>GRAND TOTAL</b>		<b>0.0306</b>	<b>0.0510</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2346</b>	<b>0.6121</b>	<b>0.0510</b>	<b>0.0335</b>

Table L1-102. CO Emissions from Construction Worker Commuting (Alternative 1)

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	2	7.76E-01	0.5129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	7.76E-01	--	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	4	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	7.76E-01	0.3078	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.8207</b>	<b>1.0259</b>	<b>1.0259</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	2	7.76E-01	3.1802	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.1802	
6	Clearing and Grubbing	16	7.76E-01	--	1.8465	1.8465	1.8465	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	35	7.76E-01	--	--	--	--	--	2.0517	2.0517	2.0517	2.0517	2.0517	2.0517	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	34	7.76E-01	--	--	--	--	0.8207	0.8207	0.8207	0.8207	0.8207	0.8207	--	--	--	--	--	--	--	--	
9	Earthen Backfill	9	7.76E-01	--	--	--	--	--	0.4103	0.4103	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	25	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	2.8724	2.8724	2.8724	2.8724	2.8724	--	
11	Riprap - Class 3	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8724	2.8724	--	
12	RSP Bedding Material	19	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	5.7448	5.7448	5.7448	5.7448	--	--	
13	Erosion Control Seeding	16	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>3.1802</b>	<b>1.8465</b>	<b>1.8465</b>	<b>1.8465</b>	<b>0.8207</b>	<b>1.2310</b>	<b>3.2827</b>	<b>2.8724</b>	<b>2.8724</b>	<b>2.8724</b>	<b>2.0517</b>	<b>2.0517</b>	<b>5.7448</b>	<b>8.6172</b>	<b>8.6172</b>	<b>8.6172</b>	<b>5.7448</b>	<b>5.7448</b>	<b>3.1802</b>
<b>11 - Levees and Floodwalls</b>																						
14	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	0.7181	--	--	--	0.7181	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	13	7.76E-01	--	--	--	--	--	--	--	0.8207	0.8207	0.8207	--	--	--	--	--	--	--	--	
<b>11 - Levees and Floodwalls Total</b>				--	--	--	--	--	--	<b>0.7181</b>	<b>0.8207</b>	<b>0.8207</b>	<b>0.8207</b>	<b>0.7181</b>	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																						
16	Mobilization and Demobilization	2	7.76E-01	--	--	5.1293	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary C)	18	7.76E-01	--	--	--	0.7181	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	120	7.76E-01	--	--	--	--	--	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	
19	Excavation (Wet Conditions)	4	7.76E-01	--	--	--	--	--	2.0517	--	--	--	--	--	--	--	--	--	--	--	--	
20	Sheet Pile Wall	7	7.76E-01	--	--	--	--	--	--	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	
21	Headworks Structure Concrete Piles	28	7.76E-01	--	--	--	--	--	--	1.3336	1.3336	1.3336	1.3336	1.3336	--	--	--	--	--	--	--	
22	Headworks Structure	18	7.76E-01	--	--	--	--	--	--	--	--	--	--	2.7698	2.7698	--	--	--	--	2.7698	--	
23	Headworks Channel Transition	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6414	1.6414	--	--	--	
24	Hinged Bottom Gates	24	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				--	--	<b>5.1293</b>	<b>0.7181</b>	<b>0.7181</b>	<b>0.7181</b>	<b>2.3595</b>	<b>2.3595</b>	<b>2.3595</b>	<b>1.6414</b>	<b>1.6414</b>	<b>4.4112</b>	<b>3.0776</b>	<b>0.3078</b>	<b>1.9491</b>	<b>1.9491</b>	<b>0.3078</b>	<b>3.0776</b>	<b>0.3078</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
25	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	0.5129	--	--	--	0.5129	--	
26	Pedestrian Bridge Concrete Piles	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3336	--	--	--	--	
27	Pedestrian Bridge Concrete Abutments and	1	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9233	--	--	--	
28	Pedestrian Bridge Span Installation	3	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7181	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.5129</b>	<b>1.3336</b>	<b>0.9233</b>	<b>0.7181</b>	<b>0.5129</b>	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	2	7.76E-01	0.9233	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	
30	CMU Building and Earthwork Pad Constructi	30	7.76E-01	--	1.0259	1.0259	1.0259	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	
31	Concrete Duct Bank	4	7.76E-01	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.9233</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.9491</b>	<b>1.0259</b>	<b>0.9233</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Mechanical Hydraulic Cylinders & Housing	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	CMU Building Mechanical Equipment	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Electrical Control Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
36	Electrical Power Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
37	Communication Equipment	12	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>4.9241</b>	<b>3.8983</b>	<b>9.0276</b>	<b>3.5905</b>	<b>3.4879</b>	<b>2.9750</b>	<b>6.5655</b>	<b>5.9500</b>	<b>6.0526</b>	<b>5.3345</b>	<b>4.5138</b>	<b>7.1810</b>	<b>8.8224</b>	<b>9.4379</b>	<b>11.9000</b>	<b>11.4896</b>	<b>6.7707</b>	<b>9.3353</b>	<b>3.4879</b>

Table L1-102. CO Emissions from Cor

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.5129	0.0005
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0062
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.8207	--	0.0016
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.8207</b>	<b>0.5129</b>	<b>0.0085</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0032
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0148
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0359
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0140
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0018
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0359
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0144
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0546
13	Erosion Control Seeding	--	--	0.4103	0.4103	0.4103	--	--	--	--	0.0033
	<b>09 - Cha</b>	--	--	<b>0.4103</b>	<b>0.4103</b>	<b>0.4103</b>	--	--	--	--	<b>0.1778</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0007
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0053
	<b>11 - Levee</b>	--	--	--	--	--	--	--	--	--	<b>0.0061</b>
<b>15 - Floodway Control and Diversion Structure</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	5.1293	--	0.0051
17	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0065
18	Construction Site Dewatering (Pumping)	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	--	--	0.0185
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0041
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0025
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0187
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0249
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0082
24	Hinged Bottom Gates	--	--	0.6155	0.6155	0.6155	0.6155	--	--	--	0.0074
	<b>15 - Floodway Control and Div</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.3078</b>	<b>5.1293</b>	--	<b>0.0959</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0005
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0013
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0005
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0011
	<b>08 - Roads, Railro</b>	--	--	--	--	--	--	--	--	--	<b>0.0034</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0009
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0154
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0018
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0182</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.2052	--	--	--	--	--	0.2052	--	0.0002
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
34	CMU Building Mechanical Equipment	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
35	Electrical Control Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
36	Electrical Power Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
37	Communication Equipment	--	--	--	--	--	0.4103	0.4103	--	--	0.0025
	<b>20 -Permanent Ope</b>	--	<b>0.2052</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>2.0517</b>	<b>2.0517</b>	<b>0.2052</b>	--	<b>0.0273</b>
<b>GRAND TOTAL</b>		<b>0.3078</b>	<b>0.5129</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.3595</b>	<b>6.1552</b>	<b>0.5129</b>	<b>0.3370</b>



Table L1-103. SOx Emissions from Cc

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0020	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0032	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0032</b>	<b>0.0020</b>	<b>0.0000</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0001
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0001
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0001
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0001
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0001
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0002
13	Erosion Control Seeding	--	--	0.0016	0.0016	0.0016	--	--	--	--	0.0000
	<b>09 - Cha</b>	--	--	<b>0.0016</b>	<b>0.0016</b>	<b>0.0016</b>	--	--	--	--	<b>0.0007</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0000
	<b>11 - Levee</b>	--	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>15 - Floodway Control and Diversion Structure</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0200	--	0.0000
17	Construction Site Dewatering (Temporary Cc)	--	--	--	--	--	--	--	--	--	0.0000
18	Construction Site Dewatering (Pumping)	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	--	--	0.0001
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0000
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0000
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0001
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0000
24	Hinged Bottom Gates	--	--	0.0024	0.0024	0.0024	0.0024	--	--	--	0.0000
	<b>15 - Floodway Control and Div</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0012</b>	<b>0.0200</b>	--	<b>0.0004</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0000
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0000
	<b>08 - Roads, Railro</b>	--	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0001
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.0008	--	--	--	--	--	0.0008	--	0.0000
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
34	CMU Building Mechanical Equipment	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
35	Electrical Control Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
36	Electrical Power Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
37	Communication Equipment	--	--	--	--	--	0.0016	0.0016	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0008</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0080</b>	<b>0.0080</b>	<b>0.0008</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>0.0012</b>	<b>0.0020</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0092</b>	<b>0.0240</b>	<b>0.0020</b>	<b>0.0013</b>

Table L1-104. PM10 Emissions from Construction Worker Commuting (Alternative 1)

Table with 22 columns: #, Activity, Estimated Duration, Emission Factor (g/mi), and 19 dates from 15-Apr to 19-Aug. It details PM10 emissions for various construction activities across different project categories including Relocations, Channels and Canals, Levees and Floodwalls, Floodway Control, Roads/Railroads/Bridges, Buildings/Grounds/Utilities, and Permanent Operating Equipment. Includes sub-totals for each category and a final GRAND TOTAL row.

Table L1-104. PM10 Emissions from C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.2292	0.0002
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0028
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.3667	--	0.0007
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.3667</b>	<b>0.2292</b>	<b>0.0038</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0014
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0066
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0160
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0062
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0008
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0160
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0064
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0244
13	Erosion Control Seeding	--	--	0.1833	0.1833	0.1833	--	--	--	--	0.0015
	<b>09 - C</b>	--	--	<b>0.1833</b>	<b>0.1833</b>	<b>0.1833</b>	--	--	--	--	<b>0.0794</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0003
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0024
	<b>11 - Levees and Floodwalls</b>	--	--	--	--	--	--	--	--	--	<b>0.0027</b>
<b>15 - Floodway Control and Diversion Structures</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	2.2917	--	0.0023
17	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0029
18	Construction Site Dewatering (Pumping)	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	--	--	0.0083
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0018
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0011
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0083
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0111
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0037
24	Hinged Bottom Gates	--	--	0.2750	0.2750	0.2750	0.2750	--	--	--	0.0033
	<b>15 - Floodway Control and Diversion Structures</b>	<b>0.1375</b>	<b>0.1375</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.1375</b>	<b>2.2917</b>	--	<b>0.0428</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0006
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0002
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0005
	<b>08 - Roads, Railroads, and Bridges</b>	--	--	--	--	--	--	--	--	--	<b>0.0015</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0004
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0069
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0008
	<b>19 - Buildings, Grounds, and Utilities</b>	--	--	--	--	--	--	--	--	--	<b>0.0081</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.0917	--	--	--	--	--	0.0917	--	0.0001
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
34	CMU Building Mechanical Equipment	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
35	Electrical Control Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
36	Electrical Power Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
37	Communication Equipment	--	--	--	--	--	0.1833	0.1833	--	--	0.0011
	<b>20 -Permanent Operating Equipment</b>	--	<b>0.0917</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.9167</b>	<b>0.9167</b>	<b>0.0917</b>	--	<b>0.0122</b>
<b>GRAND TOTAL</b>		<b>0.1375</b>	<b>0.2292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.0542</b>	<b>2.7500</b>	<b>0.2292</b>	<b>0.1506</b>





Table L1-105. PM2.5 Emissions from (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0616	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0007
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0985	--	0.0002
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0985</b>	<b>0.0616</b>	<b>0.0010</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0004
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0018
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0043
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0017
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0002
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.0043
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0017
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0066
13	Erosion Control Seeding	--	--	0.0493	0.0493	0.0493	--	--	--	--	0.0004
	<b>09 - Cha</b>	--	--	<b>0.0493</b>	<b>0.0493</b>	<b>0.0493</b>	--	--	--	--	<b>0.0213</b>
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	0.0006
	<b>11 - Levee</b>	--	--	--	--	--	--	--	--	--	<b>0.0007</b>
<b>15 - Floodway Control and Diversion Structure</b>											
16	Mobilization and Demobilization	--	--	--	--	--	--	--	0.6158	--	0.0006
17	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0008
18	Construction Site Dewatering (Pumping)	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	--	--	0.0022
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0005
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0003
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0022
22	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0030
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0010
24	Hinged Bottom Gates	--	--	0.0739	0.0739	0.0739	0.0739	--	--	--	0.0009
	<b>15 - Floodway Control and Div</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.0369</b>	<b>0.6158</b>	--	<b>0.0115</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0002
27	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0001
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
	<b>08 - Roads, Railro</b>	--	--	--	--	--	--	--	--	--	<b>0.0004</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
30	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0018
31	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0002
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0022</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	--	0.0246	--	--	--	--	--	0.0246	--	0.0000
33	Mechanical Hydraulic Cylinders & Housing	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
34	CMU Building Mechanical Equipment	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
35	Electrical Control Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
36	Electrical Power Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
37	Communication Equipment	--	--	--	--	--	0.0493	0.0493	--	--	0.0003
	<b>20 -Permanent Ope</b>	--	<b>0.0246</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.2463</b>	<b>0.2463</b>	<b>0.0246</b>	--	<b>0.0033</b>
<b>GRAND TOTAL</b>		<b>0.0369</b>	<b>0.0616</b>	<b>0.3571</b>	<b>0.3571</b>	<b>0.3571</b>	<b>0.3571</b>	<b>0.2833</b>	<b>0.7389</b>	<b>0.0616</b>	<b>0.0405</b>

**Table L1-106. GHG Emissions from Construction Worker Commuting (Alternative 1)**

#	Activity	Estimated Duration, Days	CO2 Emission Factor, (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	2	301.29	0.18
2	Fremont Weir Concrete Demo	12	301.29	2.17
3	Levee O&M Road Regrading (6" AB)	4	301.29	0.58
4	Temporary Electrical Power	1	301.29	0.05
<b>02 - Relocations Total</b>				<b>2.98</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	2	301.29	1.12
6	Clearing and Grubbing	16	301.29	5.21
7	Excavation (Wet Conditions)	35	301.29	12.65
8	Excavation/Grading (Dry Conditions)	34	301.29	4.92
9	Earthen Backfill	9	301.29	0.65
10	Riprap - Class 2	25	301.29	12.65
11	Riprap - Class 3	10	301.29	5.06
12	RSP Bedding Material	19	301.29	19.23
13	Erosion Control Seeding	16	301.29	1.16
<b>09 - Channels and Canals Total</b>				<b>62.66</b>
<b>11 - Levees and Floodwalls</b>				
14	Mobilization and Demobilization	2	301.29	0.25
15	Soil Cement Bentonite Cutoff Wall	13	301.29	1.88
<b>11 - Levees and Floodwalls Total</b>				<b>2.13</b>
<b>15 - Floodway Control and Diversion Structures</b>				
16	Mobilization and Demobilization	2	301.29	1.81
17	Construction Site Dewatering (Temporary Co	18	301.29	2.28
18	Construction Site Dewatering (Pumping)	120	301.29	6.51
19	Excavation (Wet Conditions)	4	301.29	1.45
20	Sheet Pile Wall	7	301.29	0.89
21	Headworks Structure Concrete Piles	28	301.29	6.58
22	Headworks Structure	18	301.29	8.79
23	Headworks Channel Transition	10	301.29	2.89
24	Hinged Bottom Gates	24	301.29	2.60
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>33.79</b>
<b>08 - Roads, Railroads, and Bridges</b>				
25	Mobilization and Demobilization	2	301.29	0.18
26	Pedestrian Bridge Concrete Piles	2	301.29	0.47
27	Pedestrian Bridge Concrete Abutments and V	1	301.29	0.16
28	Pedestrian Bridge Span Installation	3	301.29	0.38
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>1.19</b>
<b>19 - Buildings, Grounds, and Utilities</b>				
29	Mobilization and Demobilization	2	301.29	0.33
30	CMU Building and Earthwork Pad Constructi	30	301.29	5.42
31	Concrete Duct Bank	4	301.29	0.65
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>6.40</b>
<b>20 -Permanent Operating Equipment</b>				
32	Mobilization and Demobilization	2	301.29	0.07
33	Mechanical Hydraulic Cylinders & Housing	30	301.29	2.17
34	CMU Building Mechanical Equipment	30	301.29	2.17
35	Electrical Control Equipment CMU Building	30	301.29	2.17
36	Electrical Power Equipment CMU Building	30	301.29	2.17
37	Communication Equipment	12	301.29	0.87
<b>20 -Permanent Operating Equipment Total</b>				<b>9.62</b>
<b>GRAND TOTAL</b>				<b>118.77</b>

## Haul Truck Exhaust Emissions Summary

**Table L1-107. Maximum Daily Haul Truck Emissions (Alternative 1)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.48	13.93	2.94	0.06	1.64	0.50
09 - Channels and Canals	4.72	137.62	29.01	0.59	16.20	4.93
11 - Levees and Floodwalls	0.02	0.56	0.12	0.00	0.07	0.02
15 - Floodway Control and Diversion Structures	2.07	60.47	12.75	0.26	7.12	2.17
08 - Roads, Railroads, and Bridges	0.01	0.33	0.07	0.00	0.04	0.01
19 - Buildings, Grounds, and Utilities	0.12	3.59	0.76	0.02	0.42	0.13
20 -Permanent Operating Equipment	0.00	0.03	0.01	0.00	0.00	0.00
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>5.24</b>	<b>152.92</b>	<b>32.24</b>	<b>0.66</b>	<b>18.00</b>	<b>5.48</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-108. Annual Haul Truck Emissions (Alternative 1)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.03	0.01	0.00	0.00	0.00	13.90
09 - Channels and Canals	0.06	1.73	0.36	0.01	0.20	0.06	715.43
11 - Levees and Floodwalls	0.00	0.00	0.00	0.00	0.00	0.00	0.23
15 - Floodway Control and Diversion Structures	0.01	0.35	0.07	0.00	0.04	0.01	145.71
08 - Roads, Railroads, and Bridges	0.00	0.00	0.00	0.00	0.00	0.00	0.67
19 - Buildings, Grounds, and Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.74
20 -Permanent Operating Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.20
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.07</b>	<b>2.12</b>	<b>0.45</b>	<b>0.01</b>	<b>0.25</b>	<b>0.08</b>	<b>876.88</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

Table L1-109. ROG Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																			
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug			
<b>02 - Relocations</b>																											
1	Mobilization and Demobilization	-	-	10	21	2	0.1207	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
2	Fremont Weir Demo	450	CY	58	22	12	0.1207	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--				
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1207	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals</b>																											
5	Mobilization and Demobilization	-	-	66	21	2	0.1207	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
6	Clearing and Grubbing	61	ACR	610	22	16	0.1207	--	0.22	0.22	0.22	--	--	--	--	--	--	--	--	--	--	--	--				
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	0.1207	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--				
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	0.1207	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--				
9	Earthen Backfill	8,950	CY	n/a	n/a	9	0.1207	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--				
10	Riprap - Class 2	24,940	TN	2,310	66	25	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	1.62	1.62	1.62	1.62				
11	Riprap - Class 3	9,420	TN	874	66	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.53				
12	RSP Bedding Material	36,150	TN	3,348	66	19	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	3.09	3.09	3.09	3.09				
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>09 - Channels and Canals Total</b>								<b>0.18</b>	<b>0.22</b>	<b>0.22</b>	--	--	--	--	--	--	--	--	--	<b>3.09</b>	<b>4.72</b>	<b>4.72</b>	<b>4.72</b>	<b>4.72</b>	<b>3.16</b>		
<b>11 - Levees and Floodwalls</b>																											
14	Mobilization and Demobilization	-	-	12	12	2	0.1207	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	--				
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	0.1207	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--				
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	<b>0.02</b>	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures</b>																											
14	Mobilization and Demobilization	-	-	48	21	2	0.1207	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--				
15	Construction Site Dewatering (Temporary C	84,480	SF	n/a	n/a	13	0.1207	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--				
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	0.1207	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	0.1207	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--				
18	Sheet Pile Wall	-	-	n/a	35	120	0.1207	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--				
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	0.1207	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--				
20	Headworks Structure	7,790	SF	1,558	35	7	0.1207	--	--	--	--	--	--	--	--	--	--	2.07	2.07	--	--	--	--				
21	Headworks Channel Transition	5,040	LF	1,008	35	28	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	0.34	0.34	--	--				
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.13</b>	--	--	--	--	--	--	--	--	<b>2.07</b>	<b>2.07</b>	--	<b>0.34</b>	<b>0.34</b>	--			
<b>08 - Roads, Railroads, and Bridges</b>																											
23	Mobilization and Demobilization	1,330	CY	20	21	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--				
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--	--				
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--				
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a				
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--		
<b>19 - Buildings, Grounds, and Utilities</b>																											
27	Mobilization and Demobilization	24	CY	22	21	1	0.1207	0.12	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--				
28	CMU Building	1,040	SF	n/a	35	3	0.1207	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--				
29	Concrete Duct Banc	-	-	n/a	35	2	0.1207	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--				
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.12</b>	--	--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																											
30	Mobilization and Demobilization	1	EA	6	21	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
35	Communication Equipment	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>0.34</b>	<b>0.25</b>	<b>0.39</b>	--	--	--	<b>0.12</b>	<b>0.02</b>	--	--	--	<b>2.09</b>	<b>5.17</b>	<b>4.73</b>	<b>5.05</b>	<b>5.05</b>	<b>5.05</b>	<b>3.16</b>		

Table L1-109. ROG Emissions from Haul T

#	Activity												Annual Emissions , tpy
		12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	0.48	--	0.0010
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	n/a
											<b>0.48</b>	<b>0.03</b>	<b>0.0012</b>
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	0.18	--	--	--	--	--	--	--	--	--	0.0002
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	0.0018
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	1.62	--	--	--	--	--	--	--	--	--	--	0.0203
11	Riprap - Class 3	1.53	--	--	--	--	--	--	--	--	--	--	0.0077
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.0294
13	Erosion Control Seeding	--	--	--	--	n/a	n/a	n/a	--	--	--	--	n/a
		<b>3.16</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	<b>0.0593</b>
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0000
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0000</b>
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.13	--	0.0001
15	Construction Site Dewatering (Temporary C	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	2.07	--	--	--	--	--	--	--	--	--	--	0.0073
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.0047
22	Hinged Bottom Gates	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>2.07</b>	--	--	--	--	--	--	--	--	<b>0.13</b>	--	<b>0.0121</b>
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	0.01	--	--	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	n/a
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	n/a
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0001</b>
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a
					<b>0.00</b>	--	--	--	--	--	<b>0.00</b>	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>5.24</b>	<b>0.18</b>	--	<b>0.00</b>	--	--	--	--	--	<b>0.61</b>	<b>0.03</b>	<b>0.0727</b>

Table L1-110. NOx Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug		
<b>02 - Relocations</b>																										
1	Mobilization and Demobilization	-	-	10	21	2	3.5212	0.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
2	Fremont Weir Demo	450	CY	58	22	12	3.5212	--	0.83	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--			
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4	Temporary Electrical Power	100	LF	n/a	n/a	1	3.5212	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>02 - Relocations Total</b>								<b>0.82</b>	<b>0.83</b>	<b>0.83</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																										
5	Mobilization and Demobilization	-	-	66	21	2	3.5212	5.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
6	Clearing and Grubbing	61	ACR	610	22	16	3.5212	--	6.51	6.51	6.51	--	--	--	--	--	--	--	--	--	--	--	--			
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	3.5212	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--			
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	3.5212	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--			
9	Earthen Backfill	8,950	CY	n/a	n/a	9	3.5212	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--			
10	Riprap - Class 2	24,940	TN	2,310	66	25	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	47.34	47.34	47.34	47.34			
11	Riprap - Class 3	9,420	TN	874	66	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44.78	--			
12	RSP Bedding Material	36,150	TN	3,348	66	19	3.5212	--	--	--	--	--	--	--	--	--	--	--	90.28	90.28	90.28	90.28	--			
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals Total</b>								<b>5.38</b>	<b>6.51</b>	<b>6.51</b>	--	--	--	--	--	--	--	--	--	<b>90.28</b>	<b>137.62</b>	<b>137.62</b>	<b>137.62</b>	<b>92.12</b>		
<b>11 - Levees and Floodwalls</b>																										
14	Mobilization and Demobilization	-	-	12	12	2	3.5212	--	--	--	--	--	--	0.56	--	--	--	0.56	--	--	--	--	--			
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	3.5212	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--			
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	--	<b>0.56</b>	--	--	--	<b>0.56</b>	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures</b>																										
14	Mobilization and Demobilization	-	-	48	21	2	3.5212	--	--	3.91	--	--	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary C	84,480	SF	n/a	n/a	13	3.5212	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	3.5212	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	3.5212	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--			
18	Sheet Pile Wall	-	-	n/a	35	120	3.5212	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--			
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	3.5212	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--			
20	Headworks Structure	7,790	SF	1,558	35	7	3.5212	--	--	--	--	--	--	--	--	--	--	60.47	60.47	--	--	--	--			
21	Headworks Channel Transition	5,040	LF	1,008	35	28	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	9.78	9.78	--	--			
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>3.91</b>	--	--	--	--	--	--	--	--	<b>60.47</b>	<b>60.47</b>	--	<b>9.78</b>	<b>9.78</b>	--		
<b>08 - Roads, Railroads, and Bridges</b>																										
23	Mobilization and Demobilization	1,330	CY	20	21	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	0.33	--	--	--			
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--	--			
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--			
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--			
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.33</b>	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																										
27	Mobilization and Demobilization	24	CY	22	21	1	3.5212	3.59	--	--	--	--	--	3.59	--	--	--	--	--	--	--	--	--			
28	CMU Building	1,040	SF	n/a	35	3	3.5212	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	-	-	n/a	35	2	3.5212	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>3.59</b>	--	--	--	--	--	--	<b>3.59</b>	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																										
30	Mobilization and Demobilization	1	EA	6	21	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>								<b>9.78</b>	<b>7.34</b>	<b>11.25</b>	--	--	--	--	<b>3.59</b>	<b>0.56</b>	--	--	--	--	<b>61.03</b>	<b>150.75</b>	<b>137.95</b>	<b>147.40</b>	<b>147.40</b>	<b>92.12</b>

Table L1-110. NOx Emissions from Haul T

#	Activity												Annual Emissions, tpy
		12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.82	0.0008
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	0.0050
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	13.93	--	0.0279
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	13.93	0.82	0.0336
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	5.38	--	--	--	--	--	--	--	--	--	0.0054
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	0.0521
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	47.34	--	--	--	--	--	--	--	--	--	--	0.5918
11	Riprap - Class 3	44.78	--	--	--	--	--	--	--	--	--	--	0.2239
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.8577
13	Erosion Control Seeding	--	--	--	--	n/a	n/a	n/a	--	--	--	--	n/a
		92.12	5.38	--	--	--	--	--	--	--	--	--	1.7308
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0006
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	0.0006
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	3.91	--	0.0039
15	Construction Site Dewatering (Temporary Cr	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	60.47	--	--	--	--	--	--	--	--	--	--	0.2117
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.1369
22	Hinged Bottom Gates	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		60.47	--	--	--	--	--	--	--	--	3.91	--	0.3525
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	0.33	--	--	--	--	--	--	--	--	--	--	0.0016
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	n/a
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	n/a
		0.33	--	--	--	--	--	--	--	--	--	--	0.0016
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0018
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	0.0018
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	--	--	--	0.03	--	--	--	--	--	0.03	--	0.0005
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a
		--	--	--	0.03	--	--	--	--	--	0.03	--	0.0005
<b>GRAND TOTAL</b>		152.92	5.38	--	0.03	--	--	--	--	--	17.87	0.82	2.1214

Table L1-111. CO Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																			
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug			
<b>02 - Relocations</b>																											
1	Mobilization and Demobilization	-	-	10	21	2	0.7423	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
2	Fremont Weir Demo	450	CY	58	22	12	0.7423	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--					
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.7423	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>02 - Relocations Total</b>								<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>09 - Channels and Canals</b>																											
5	Mobilization and Demobilization	-	-	66	21	2	0.7423	1.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
6	Clearing and Grubbing	61	ACR	610	22	16	0.7423	--	1.37	1.37	1.37	--	--	--	--	--	--	--	--	--	--	--					
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	0.7423	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--					
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	0.7423	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--					
9	Earthen Backfill	8,950	CY	n/a	n/a	9	0.7423	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--					
10	Riprap - Class 2	24,940	TN	2,310	66	25	0.7423	--	--	--	--	--	--	--	--	--	--	--	9.98	9.98	9.98	9.98					
11	Riprap - Class 3	9,420	TN	874	66	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.44					
12	RSP Bedding Material	36,150	TN	3,348	66	19	0.7423	--	--	--	--	--	--	--	--	--	--	--	19.03	19.03	19.03	19.03					
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	0.7423	--	--	--	--	--	--	--	--	--	--	--	19.03	19.03	19.03	19.03					
<b>09 - Channels and Canals Total</b>								<b>1.13</b>	<b>1.37</b>	<b>1.37</b>	--	--	--	--	--	--	--	--	--	<b>19.03</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>19.42</b>			
<b>11 - Levees and Floodwalls</b>																											
14	Mobilization and Demobilization	-	-	12	12	2	0.7423	--	--	--	--	--	--	0.12	--	--	--	0.12	--	--	--	--					
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	0.7423	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--					
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	--	<b>0.12</b>	--	--	--	<b>0.12</b>	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures</b>																											
14	Mobilization and Demobilization	-	-	48	21	2	0.7423	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--	--					
15	Construction Site Dewatering (Temporary C	84,480	SF	n/a	n/a	13	0.7423	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--					
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	0.7423	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a					
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	0.7423	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--					
18	Sheet Pile Wall	-	-	n/a	35	120	0.7423	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--					
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	0.7423	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--					
20	Headworks Structure	7,790	SF	1,558	35	7	0.7423	--	--	--	--	--	--	--	--	--	--	12.75	12.75	--	--	--					
21	Headworks Channel Transition	5,040	LF	1,008	35	28	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	2.06	2.06	--					
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.82</b>	--	--	--	--	--	--	--	--	<b>12.75</b>	<b>12.75</b>	--	<b>2.06</b>	<b>2.06</b>	--			
<b>08 - Roads, Railroads, and Bridges</b>																											
23	Mobilization and Demobilization	1,330	CY	20	21	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--					
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--					
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--					
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a					
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.07</b>	--	--	--		
<b>19 - Buildings, Grounds, and Utilities</b>																											
27	Mobilization and Demobilization	24	CY	22	21	1	0.7423	0.76	--	--	--	--	--	0.76	--	--	--	--	--	--	--	--					
28	CMU Building	1,040	SF	n/a	35	3	0.7423	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--					
29	Concrete Duct Banc	-	-	n/a	35	2	0.7423	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--					
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.76</b>	--	--	--	--	--	--	<b>0.76</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																											
30	Mobilization and Demobilization	1	EA	6	21	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
35	Communication Equipment	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>GRAND TOTAL</b>								<b>2.06</b>	<b>1.55</b>	<b>2.37</b>	--	--	--	<b>0.76</b>	<b>0.12</b>	--	--	--	--	--	--	<b>12.87</b>	<b>31.78</b>	<b>29.08</b>	<b>31.08</b>	<b>31.08</b>	<b>19.42</b>



Table L1-111. CO Emissions from Haul Tri

#	Activity												Annual Emissions, tpy
		12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.17	0.0002
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	0.0010
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	2.94	--	0.0059
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	n/a
											<b>2.94</b>	<b>0.17</b>	<b>0.0071</b>
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	1.13	--	--	--	--	--	--	--	--	--	0.0011
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	0.0110
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	9.98	--	--	--	--	--	--	--	--	--	--	0.1248
11	Riprap - Class 3	9.44	--	--	--	--	--	--	--	--	--	--	0.0472
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.1808
13	Erosion Control Seeding	--	--	--	--	n/a	n/a	n/a	--	--	--	--	n/a
		<b>19.42</b>	<b>1.13</b>	--	--	--	--	--	--	--	--	--	<b>0.3649</b>
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0001
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0001</b>
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.82	--	0.0008
15	Construction Site Dewatering (Temporary C	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	12.75	--	--	--	--	--	--	--	--	--	--	0.0446
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.0289
22	Hinged Bottom Gates	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>12.75</b>	--	--	--	--	--	--	--	--	<b>0.82</b>	--	<b>0.0743</b>
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	0.07	--	--	--	--	--	--	--	--	--	--	0.0003
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	n/a
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	n/a
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	<b>0.0003</b>
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0004</b>
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	--	--	--	0.01	--	--	--	--	--	0.01	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a
					<b>0.01</b>	--	--	--	--	--	<b>0.01</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>32.24</b>	<b>1.13</b>	--	<b>0.01</b>	--	--	--	--	--	<b>3.77</b>	<b>0.17</b>	<b>0.4472</b>

Table L1-112. SOx Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																			
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug			
<b>02 - Relocations</b>																											
1	Mobilization and Demobilization	-	-	10	21	2	0.0152	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
2	Fremont Weir Demo	450	CY	58	22	12	0.0152	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--					
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.0152	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>02 - Relocations Total</b>								<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals</b>																											
5	Mobilization and Demobilization	-	-	66	21	2	0.0152	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
6	Clearing and Grubbing	61	ACR	610	22	16	0.0152	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--					
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	0.0152	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--					
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	0.0152	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--					
9	Earthen Backfill	8,950	CY	n/a	n/a	9	0.0152	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--					
10	Riprap - Class 2	24,940	TN	2,310	66	25	0.0152	--	--	--	--	--	--	--	--	--	--	--	0.20	0.20	0.20	0.20					
11	Riprap - Class 3	9,420	TN	874	66	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19					
12	RSP Bedding Material	36,150	TN	3,348	66	19	0.0152	--	--	--	--	--	--	--	--	--	--	--	0.39	0.39	0.39	0.39					
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>09 - Channels and Canals Total</b>								<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	<b>0.39</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.40</b>			
<b>11 - Levees and Floodwalls</b>																											
14	Mobilization and Demobilization	-	-	12	12	2	0.0152	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--					
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	0.0152	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--					
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	--	<b>0.00</b>	--	--	--	<b>0.00</b>	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures</b>																											
14	Mobilization and Demobilization	-	-	48	21	2	0.0152	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--					
15	Construction Site Dewatering (Temporary C)	84,480	SF	n/a	n/a	13	0.0152	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--					
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	0.0152	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a					
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	0.0152	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--					
18	Sheet Pile Wall	-	-	n/a	35	120	0.0152	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--					
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	0.0152	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--					
20	Headworks Structure	7,790	SF	1,558	35	7	0.0152	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--					
21	Headworks Channel Transition	5,040	LF	1,008	35	28	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--					
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.02</b>	--	--	--	--	--	--	--	--	<b>0.26</b>	<b>0.26</b>	--	<b>0.04</b>	<b>0.04</b>	--			
<b>08 - Roads, Railroads, and Bridges</b>																											
23	Mobilization and Demobilization	1,330	CY	20	21	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--					
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--					
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--					
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a					
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>	--	--	--		
<b>19 - Buildings, Grounds, and Utilities</b>																											
27	Mobilization and Demobilization	24	CY	22	21	1	0.0152	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--					
28	CMU Building	1,040	SF	n/a	35	3	0.0152	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--					
29	Concrete Duct Banc	-	-	n/a	35	2	0.0152	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--					
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.02</b>	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																											
30	Mobilization and Demobilization	1	EA	6	21	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
35	Communication Equipment	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>0.04</b>	<b>0.03</b>	<b>0.05</b>	--	--	--	<b>0.02</b>	<b>0.00</b>	--	--	--	<b>0.26</b>	<b>0.65</b>	<b>0.60</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.40</b>		

Table L1-112. SOx Emissions from Haul T

#	Activity												Annual Emissions , tpy
		12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.00	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	0.06	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	n/a
											<b>0.06</b>	<b>0.00</b>	<b>0.0001</b>
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	0.02	--	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	0.0002
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	0.20	--	--	--	--	--	--	--	--	--	--	0.0026
11	Riprap - Class 3	0.19	--	--	--	--	--	--	--	--	--	--	0.0010
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.0037
13	Erosion Control Seeding	--	--	--	--	n/a	n/a	n/a	--	--	--	--	n/a
		<b>0.40</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	<b>0.0075</b>
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0000
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0000</b>
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.02	--	0.0000
15	Construction Site Dewatering (Temporary C	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.26	--	--	--	--	--	--	--	--	--	--	0.0009
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.0006
22	Hinged Bottom Gates	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>0.26</b>	--	--	--	--	--	--	--	--	<b>0.02</b>	--	<b>0.0015</b>
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	n/a
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	n/a
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	n/a
													<b>0.0000</b>
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a
					<b>0.00</b>	--	--	--	--	--	<b>0.00</b>	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>0.66</b>	<b>0.02</b>	--	<b>0.00</b>	--	--	--	--	--	<b>0.08</b>	<b>0.00</b>	<b>0.0092</b>

Table L1-113. PM10 Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug		
<b>02 - Relocations</b>																										
1	Mobilization and Demobilization	-	-	10	21	2	0.4144	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
2	Fremont Weir Demo	450	CY	58	22	12	0.4144	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--			
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.4144	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>02 - Relocations Total</b>								<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals</b>																										
5	Mobilization and Demobilization	-	-	66	21	2	0.4144	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
6	Clearing and Grubbing	61	ACR	610	22	16	0.4144	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--			
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	0.4144	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--			
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	0.4144	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--			
9	Earthen Backfill	8,950	CY	n/a	n/a	9	0.4144	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--			
10	Riprap - Class 2	24,940	TN	2,310	66	25	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	5.57	5.57	5.57	5.57			
11	Riprap - Class 3	9,420	TN	874	66	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.27			
12	RSP Bedding Material	36,150	TN	3,348	66	19	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	10.62	10.62	10.62	10.62			
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals Total</b>								<b>0.63</b>	<b>0.77</b>	<b>0.77</b>	--	--	--	--	--	--	--	--	--	<b>10.62</b>	<b>16.20</b>	<b>16.20</b>	<b>16.20</b>	<b>16.20</b>	<b>10.84</b>	
<b>11 - Levees and Floodwalls</b>																										
14	Mobilization and Demobilization	-	-	12	12	2	0.4144	--	--	--	--	--	--	--	0.07	--	--	0.07	--	--	--	--	--			
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	0.4144	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--			
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	<b>0.07</b>	--	--	--	<b>0.07</b>	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures</b>																										
14	Mobilization and Demobilization	-	-	48	21	2	0.4144	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary C	84,480	SF	n/a	n/a	13	0.4144	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	0.4144	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	0.4144	--	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--			
18	Sheet Pile Wall	-	-	n/a	35	120	0.4144	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--			
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	0.4144	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--			
20	Headworks Structure	7,790	SF	1,558	35	7	0.4144	--	--	--	--	--	--	--	--	--	--	7.12	7.12	--	--	--	--			
21	Headworks Channel Transition	5,040	LF	1,008	35	28	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	1.15	1.15	--			
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.46</b>	--	--	--	--	--	--	--	--	<b>7.12</b>	<b>7.12</b>	--	<b>1.15</b>	<b>1.15</b>	--		
<b>08 - Roads, Railroads, and Bridges</b>																										
23	Mobilization and Demobilization	1,330	CY	20	21	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--			
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--	--			
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	--			
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a			
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.04</b>	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																										
27	Mobilization and Demobilization	24	CY	22	21	1	0.4144	0.42	--	--	--	--	--	--	0.42	--	--	--	--	--	--	--	--			
28	CMU Building	1,040	SF	n/a	35	3	0.4144	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	-	-	n/a	35	2	0.4144	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.42</b>	--	--	--	--	--	<b>0.42</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																										
30	Mobilization and Demobilization	1	EA	6	21	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>1.15</b>	<b>0.86</b>	<b>1.32</b>	--	--	--	<b>0.42</b>	<b>0.07</b>	--	--	--	--	<b>7.18</b>	<b>17.74</b>	<b>16.23</b>	<b>17.35</b>	<b>17.35</b>	<b>10.84</b>	

Table L1-113. PM10 Emissions from Haul

#	Activity												Annual Emissions, tpy
		12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.10	0.0001
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	1.64	--	0.0033
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	1.64	0.10	0.0040
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	0.63	--	--	--	--	--	--	--	--	--	0.0006
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	0.0061
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	5.57	--	--	--	--	--	--	--	--	--	--	0.0696
11	Riprap - Class 3	5.27	--	--	--	--	--	--	--	--	--	--	0.0263
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.1009
13	Erosion Control Seeding	--	--	--	--	n/a	n/a	n/a	--	--	--	--	n/a
		10.84	0.63	--	--	--	--	--	--	--	--	--	0.2037
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0001
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	0.0001
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.46	--	0.0005
15	Construction Site Dewatering (Temporary C...	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	7.12	--	--	--	--	--	--	--	--	--	--	0.0249
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.0161
22	Hinged Bottom Gates	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		7.12	--	--	--	--	--	--	--	--	0.46	--	0.0415
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	n/a
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	n/a
		0.04	--	--	--	--	--	--	--	--	--	--	0.0002
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	0.0002
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	0.0002
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a
		--	--	--	0.00	--	--	--	--	--	0.00	--	0.0001
<b>GRAND TOTAL</b>		<b>18.00</b>	<b>0.63</b>	<b>--</b>	<b>0.00</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.10</b>	<b>0.10</b>	<b>0.2496</b>

Table L1-114. PM2.5 Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum															
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul			
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	-	-	10	21	2	0.1262	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	450	CY	58	22	12	0.1262	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1262	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	-	-	66	21	2	0.1262	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	61	ACR	610	22	16	0.1262	--	0.23	0.23	0.23	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	0.1262	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--		
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	0.1262	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--		
9	Earthen Backfill	8,950	CY	n/a	n/a	9	0.1262	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--		
10	Riprap - Class 2	24,940	TN	2,310	66	25	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
11	Riprap - Class 3	9,420	TN	874	66	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	36,150	TN	3,348	66	19	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	3.23		
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>0.19</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	<b>3.23</b>	
<b>11 - Levees and Floodwalls</b>																							
14	Mobilization and Demobilization	-	-	12	12	2	0.1262	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--		
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	0.1262	--	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--		
<b>11 - Levees and Floodwalls Total</b>								--	--	--	--	--	--	<b>0.02</b>	--	--	--	<b>0.02</b>	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	-	-	48	21	2	0.1262	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co	84,480	SF	n/a	n/a	13	0.1262	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	2	0.1262	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	0.1262	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	-	-	n/a	35	120	0.1262	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	0.1262	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	--	--		
20	Headworks Structure	7,790	SF	1,558	35	7	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	2.17	2.17		
21	Headworks Channel Transition	5,040	LF	1,008	35	28	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	<b>2.17</b>	<b>2.17</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	1,330	CY	20	21	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	24	CY	22	21	1	0.1262	0.13	--	--	--	--	--	0.13	--	--	--	--	--	--	--		
28	CMU Building	1,040	SF	n/a	35	3	0.1262	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	-	-	n/a	35	2	0.1262	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.13</b>	--	--	--	--	--	<b>0.13</b>	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	1	EA	6	21	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>0.35</b>	<b>0.26</b>	<b>0.40</b>	--	--	--	<b>0.13</b>	<b>0.02</b>	--	--	--	--	--	<b>2.19</b>	<b>5.40</b>	

Table L1-114. PM2.5 Emissions from Haul

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	0.0010
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.03	0.0012
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	0.0002
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0019
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	1.70	1.70	1.70	1.70	1.70	--	--	--	--	--	--	--	--	--	0.0212	
11	Riprap - Class 3	--	--	--	1.60	1.60	--	--	--	--	--	--	--	--	--	0.0080	
12	RSP Bedding Material	3.23	3.23	3.23	--	--	--	--	--	--	--	--	--	--	--	0.0307	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	n/a	
		4.93	4.93	4.93	3.30	3.30	0.19	--	--	--	--	--	--	--	--	0.0620	
<b>11 - Levees and Floodwalls</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000	
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	0.0001	
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
20	Headworks Structure	--	--	--	--	2.17	--	--	--	--	--	--	--	--	--	0.0076	
21	Headworks Channel Transition	--	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	0.0049	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a	
		--	0.35	0.35	--	2.17	--	--	--	--	--	--	--	--	0.14	0.0126	
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	0.01	--	--	--	0.01	--	--	--	--	--	--	--	--	--	0.0001	
24	Pedestrian Bridge Concrete Piles	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
25	Pedestrian Bridge Concrete Abutments and	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	n/a	
26	Pedestrian Bridge Span Installation	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	n/a	
		0.01	--	--	--	0.01	--	--	--	--	--	--	--	--	--	0.0001	
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001	
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001	
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	--	--	--	0.00	--	0.0000	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a	
		--	--	--	--	--	--	--	0.00	--	--	--	--	--	0.00	0.0000	
<b>GRAND TOTAL</b>		4.94	5.28	5.28	3.30	5.48	0.19	--	0.00	--	--	--	--	--	0.64	0.03	0.0760

Table L1-115. GHG Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	CO2 Emission Factor (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	-	-	10	21	2	1604.388845	0.34
2	Fremont Weir Demo	450	CY	58	22	12	1604.388845	2.05
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	1604.388845	11.51
4	Temporary Electrical Power	100	LF	n/a	n/a	1	1604.388845	n/a
<b>02 - Relocations Total</b>								<b>13.90</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	-	-	66	21	2	1604.388845	2.22
6	Clearing and Grubbing	61	ACR	610	22	16	1604.388845	21.53
7	Excavation (Wet Conditions)	61,810	CY	n/a	n/a	35	1604.388845	n/a
8	Excavation/Grading (Dry Conditions)	118,960	CY	n/a	n/a	34	1604.388845	n/a
9	Earthen Backfill	8,950	CY	n/a	n/a	9	1604.388845	n/a
10	Riprap - Class 2	24,940	TN	2,310	66	25	1604.388845	244.61
11	Riprap - Class 3	9,420	TN	874	66	10	1604.388845	92.55
12	RSP Bedding Material	36,150	TN	3,348	66	19	1604.388845	354.52
13	Erosion Control Seeding	31	ACR	n/a	n/a	16	1604.388845	n/a
<b>09 - Channels and Canals Total</b>								<b>715.43</b>
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	-	-	12	12	2	1604.388845	0.23
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	n/a	n/a	13	1604.388845	n/a
<b>11 - Levees and Floodwalls Total</b>								<b>0.23</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization	-	-	48	21	2	1604.388845	1.62
15	Construction Site Dewatering (Temporary Co	84,480	SF	n/a	n/a	13	1604.388845	n/a
16	Construction Site Dewatering(Pumping)	-	-	n/a	n/a	2	1604.388845	n/a
17	Excavation (Wet Conditions)	21,000	SF	n/a	n/a	18	1604.388845	n/a
18	Sheet Pile Wall	-	-	n/a	35	120	1604.388845	n/a
19	Headworks Structure Concrete Piles	6,130	CY	n/a	35	4	1604.388845	n/a
20	Headworks Structure	7,790	SF	1,558	35	7	1604.388845	87.49
21	Headworks Channel Transition	5,040	LF	1,008	35	28	1604.388845	56.60
22	Hinged Bottom Gates	3,080	CY	n/a	n/a	18	1604.388845	n/a
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>145.71</b>



Table L1-115. GHG Emissions from Haul Trucks (Alternative 1)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	CO2 Emission Factor (g/mi)	Annual Emissions, MTCO2e/yr
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization	1,330	CY	20	21	10	1604.388845	0.67
24	Pedestrian Bridge Concrete Piles	3	EA	n/a	35	15	1604.388845	n/a
25	Pedestrian Bridge Concrete Abutments and	-	-	n/a	35	2	1604.388845	n/a
26	Pedestrian Bridge Span Installation	320	LF	n/a	35	2	1604.388845	n/a
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>0.67</b>
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization	24	CY	22	21	1	1604.388845	0.74
28	CMU Building	1,040	SF	n/a	35	3	1604.388845	n/a
29	Concrete Duct Banc	-	-	n/a	35	2	1604.388845	n/a
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.74</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization	1	EA	6	21	30	1604.388845	0.20
31	Mechanical Hydraulic Cylinders & Housing	190	CY	n/a	n/a	4	1604.388845	n/a
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	2	1604.388845	n/a
33	Electrical Control Equipment CMUBuilding	-	-	n/a	n/a	30	1604.388845	n/a
34	Electrical Power Equipment CMUBuilding	-	-	n/a	n/a	30	1604.388845	n/a
35	Communication Equipment	-	-	n/a	n/a	30	1604.388845	n/a
<b>20 -Permanent Operating Equipment Total</b>								<b>0.20</b>
<b>GRAND TOTAL</b>								<b>876.88</b>

**Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization																			
	Material Handling	n/a																		
	Grading	n/a																		
	Bulldozing	n/a																		
	Unpaved Road Dust	n/a																		
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																			
	Material Handling		0.13	0.13																
	Grading		n/a	n/a																
	Bulldozing		n/a	n/a																
	Unpaved Road Dust		n/a	n/a																
	Paved Road Dust																			
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																			
	Material Handling	n/a																		
	Grading	n/a																		
	Bulldozing	n/a																		
	Unpaved Road Dust	n/a																		
	Paved Road Dust																			
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization																			
	Material Handling	n/a																		n/a
	Grading	n/a																		n/a
	Bulldozing	n/a																		n/a
	Unpaved Road Dust	n/a																		n/a
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																			
	Material Handling		n/a	n/a	n/a															
	Grading		0.41	0.41	0.41															
	Bulldozing		n/a	n/a	n/a															
	Unpaved Road Dust		n/a	n/a	n/a															
	Paved Road Dust																			
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive C**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo										n/a	0.00
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)										n/a	0.00
	Material Handling								n/a		n/a	n/a
	Grading								0.21		n/a	0.00
	Bulldozing								n/a		n/a	n/a
	Unpaved Road Dust								n/a		n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	<b>0.21</b>	--	--	<b>0.00</b>
4	Temporary Electrical Power										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	--	--	--	<b>0.21</b>	--	--	<b>0.00</b>
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing										n/a	0.00
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>

Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM10 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
7	Excavation (Wet Conditions)																				
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a								
	Grading							n/a	n/a	n/a	n/a	n/a	n/a								
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a								
	Unpaved Road Dust								112.65	112.65	112.65	112.65	112.65	112.65							
	Paved Road Dust																				
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	112.65	112.65	112.65	112.65	112.65	112.65	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)																				
	Material Handling					0.63	0.63	0.63	0.63	0.63	0.63										
	Grading					2.07	2.07	2.07	2.07	2.07	2.07										
	Bulldozing					2.35	2.35	2.35	2.35	2.35	2.35										
	Unpaved Road Dust				n/a	n/a	n/a	n/a	n/a	n/a	n/a										
	Paved Road Dust																				
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	5.05	5.05	5.05	5.05	5.05	5.05	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill																				
	Material Handling							n/a	n/a												
	Grading							0.21	0.21												
	Bulldozing							2.35	2.35												
	Unpaved Road Dust							n/a	n/a												
	Paved Road Dust																				
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	2.56	2.56	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2																				
	Material Handling													1.65	1.65	1.65	1.65	1.65			
	Grading													n/a	n/a	n/a	n/a	n/a			
	Bulldozing													n/a	n/a	n/a	n/a	n/a			
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a			
	Paved Road Dust																				
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	1.65	1.65	1.65	--	--	
11	Riprap - Class 3																				
	Material Handling																	1.65	1.65		
	Grading																	n/a	n/a		
	Bulldozing																	n/a	n/a		
	Unpaved Road Dust																	n/a	n/a		
	Paved Road Dust																				
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	--	--
12	RSP Bedding Material																				
	Material Handling													1.65	1.65	1.65	1.65				
	Grading													n/a	n/a	n/a	n/a				
	Bulldozing													n/a	n/a	n/a	n/a				
	Unpaved Road Dust													n/a	n/a	n/a	n/a				
	Paved Road Dust																				
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	1.65	1.65	--	--	--	--
13	Erosion Control Seeding																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>09 - Channels and Canals Total</b>	--	0.41	0.41	0.41	5.05	7.60	120.25	117.70	117.70	117.70	112.65	112.65	1.65	3.30	3.30	3.30	3.30	3.30	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive C**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
7	Excavation (Wet Conditions) Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a 1.89
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>1.89</b>
8	Excavation/Grading (Dry Conditions) Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										0.01 0.04 0.04 n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.09</b>
9	Earthen Backfill Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a 0.00 0.01 n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
10	Riprap - Class 2 Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										0.01 n/a n/a n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3 Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										0.02 n/a n/a n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
12	RSP Bedding Material Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										0.01 n/a n/a n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust			n/a	n/a	n/a					n/a n/a n/a n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	--	--	--	<b>2.03</b>

Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>11 - Levees and Floodwalls</b>																				
14	Mobilization and Demobilization																			
	Material Handling									n/a				n/a						
	Grading									n/a				n/a						
	Bulldozing									n/a				n/a						
	Unpaved Road Dust									n/a				n/a						
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall																			
	Material Handling									n/a		n/a		n/a						
	Grading										0.21		0.21		0.21					
	Bulldozing										2.35		2.35		2.35					
	Unpaved Road Dust									n/a		n/a		n/a						
	Paved Road Dust																			
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	2.56	--	2.56	--	2.56	--	--	--	--	--
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	--	2.56	--	2.56	--	2.56	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																				
16	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)																			
	Material Handling					n/a		n/a		n/a										
	Grading					n/a		n/a		n/a										
	Bulldozing					n/a		n/a		n/a										
	Unpaved Road Dust					n/a		n/a		n/a										
	Paved Road Dust																			
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)																			
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading								n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust																			
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	112.65	--	--	--	--	--	--	--	--	--	--	--
20	Sheet Pile Wall																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive E**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall										n/a
	Material Handling										0.00
	Grading										0.02
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
<b>15 - Floodway Control and Diversion Structures</b>											
16	Mobilization and Demobilization										n/a
	Material Handling								n/a		n/a
	Grading								n/a		n/a
	Bulldozing								n/a		n/a
	Unpaved Road Dust								n/a		n/a
	Paved Road Dust								n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Subt</b>	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)										n/a
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust										n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										0.19
	Paved Road Dust										n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.19</b>
20	Sheet Pile Wall										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
21	Headworks Structure Concrete Piles																			
	Material Handling									n/a	n/a	n/a	n/a	n/a						
	Grading									n/a	n/a	n/a	n/a	n/a						
	Bulldozing									n/a	n/a	n/a	n/a	n/a						
	Unpaved Road Dust									n/a	n/a	n/a	n/a	n/a						
	Paved Road Dust																			
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure																			
	Material Handling												n/a	n/a					n/a	
	Grading												n/a	n/a					n/a	
	Bulldozing												n/a	n/a					n/a	
	Unpaved Road Dust												n/a	n/a					n/a	
	Paved Road Dust																			
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition																			
	Material Handling															n/a	n/a			
	Grading															n/a	n/a			
	Bulldozing															n/a	n/a			
	Unpaved Road Dust															n/a	n/a			
	Paved Road Dust																			
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	--	112.65	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																				
25	Mobilization and Demobilization																			
	Material Handling															n/a				n/a
	Grading														n/a					n/a
	Bulldozing														n/a					n/a
	Unpaved Road Dust														n/a					n/a
	Paved Road Dust																			
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles																			
	Material Handling															n/a				
	Grading														n/a					
	Bulldozing														n/a					
	Unpaved Road Dust														n/a					
	Paved Road Dust																			
<b>Pedestrian Bridge Concete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls																			
	Material Handling																		n/a	
	Grading																		n/a	
	Bulldozing																		n/a	
	Unpaved Road Dust																		n/a	
	Paved Road Dust																			
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Sub</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



**Table L1-116. PM10 Emissions Summary from Fugitive C**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
21	Headworks Structure Concrete Piles										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--
22	Headworks Structure										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates										
	Material Handling			n/a	n/a	n/a	n/a				n/a
	Grading			n/a	n/a	n/a	n/a				n/a
	Bulldozing			n/a	n/a	n/a	n/a				n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a				n/a
	Paved Road Dust										
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	--	--	--	<b>0.19</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Pedestrian Bridge Concete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls										
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Sub</b>		--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	Pedestrian Bridge Span Installation																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																				
29	Mobilization and Demobilization																			
	Material Handling	n/a																		n/a
	Grading	n/a																		n/a
	Bulldozing	n/a																		n/a
	Unpaved Road Dust	n/a																		n/a
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction																			
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a													
	Grading	0.83	0.83	0.83	0.83	0.83	0.83													
	Bulldozing	2.35	2.35	2.35	2.35	2.35	2.35													
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a													
	Paved Road Dust																			
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc																			
	Material Handling					n/a														
	Grading					n/a														
	Bulldozing					n/a														
	Unpaved Road Dust					n/a														
	Paved Road Dust																			
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
32	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive C**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	Pedestrian Bridge Span Installation										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction										n/a
	Material Handling										0.01
	Grading										0.04
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	--	--	--	<b>0.05</b>
31	Concrete Duct Banc										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	--	--	--	<b>0.05</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization										n/a
	Material Handling		n/a						n/a		n/a
	Grading		n/a						n/a		n/a
	Bulldozing		n/a						n/a		n/a
	Unpaved Road Dust		n/a						n/a		n/a
	Paved Road Dust		n/a						n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing										n/a
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--	--	--	--

**Table L1-116. PM10 Emissions Summary from Fugitive Dust (Alternative 1)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
34	CMU Building Mechanical Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	3.72	3.72	3.59	8.22	10.78	232.91	117.70	120.25	120.25	115.21	112.65	1.65	3.30	3.30	3.30	3.30	3.30	--

**Table L1-116. PM10 Emissions Summary from Fugitive C**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
34	CMU Building Mechanical Equipment										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust										
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust										
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust										
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
37	Communication Equipment										
	Material Handling						n/a	n/a			n/a
	Grading						n/a	n/a			n/a
	Bulldozing						n/a	n/a			n/a
	Unpaved Road Dust						n/a	n/a			n/a
	Paved Road Dust										
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	--	--	--	--	--	--	0.21	--	2.28

Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization																				
	Material Handling	n/a																			
	Grading	n/a																			
	Bulldozing	n/a																			
	Unpaved Road Dust	n/a																			
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																				
	Material Handling		0.02	0.02																	
	Grading		n/a	n/a																	
	Bulldozing		n/a	n/a																	
	Unpaved Road Dust		n/a	n/a																	
	Paved Road Dust																				
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																				
	Material Handling	n/a																			
	Grading	n/a																			
	Bulldozing	n/a																			
	Unpaved Road Dust	n/a																			
	Paved Road Dust																				
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization																				
	Material Handling	n/a																		n/a	
	Grading	n/a																		n/a	
	Bulldozing	n/a																		n/a	
	Unpaved Road Dust	n/a																		n/a	
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																				
	Material Handling		n/a	n/a	n/a																
	Grading		0.04	0.04	0.04																
	Bulldozing		n/a	n/a	n/a																
	Unpaved Road Dust		n/a	n/a	n/a																
	Paved Road Dust																				
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-117. PM2.5 Emissions Summary from Fugitive |

#	Activity									Annual Emissions, tpy		
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct			
<b>02 - Relocations</b>												
1	Mobilization and Demobilization										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo										n/a	0.00
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	--	--	--	0.00	0.00
3	Levee O&M Road Regrading (6" AB)										n/a	0.00
	Material Handling							n/a			n/a	n/a
	Grading							0.02			n/a	0.00
	Bulldozing							n/a			n/a	n/a
	Unpaved Road Dust							n/a			n/a	n/a
	Paved Road Dust							n/a			n/a	n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	0.02	--	--	0.00	0.00
4	Temporary Electrical Power										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	--	--	0.02	--	--	0.00	0.00
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization										n/a	n/a
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing										n/a	0.00
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	--	--	--	0.00	0.00

Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)

		PM2.5 Daily Emissions Summary, lbs/day																			
#	Activity	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
7	Excavation (Wet Conditions)																				
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a								
	Grading							n/a	n/a	n/a	n/a	n/a	n/a								
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a								
	Unpaved Road Dust							11.27	11.27	11.27	11.27	11.27	11.27								
	Paved Road Dust																				
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	11.27	11.27	11.27	11.27	11.27	11.27	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)																				
	Material Handling					0.10	0.10	0.10	0.10	0.10	0.10										
	Grading					0.22	0.22	0.22	0.22	0.22	0.22										
	Bulldozing					1.29	1.29	1.29	1.29	1.29	1.29										
	Unpaved Road Dust				n/a	n/a	n/a	n/a	n/a	n/a	n/a										
	Paved Road Dust																				
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	1.61	1.61	1.61	1.61	1.61	1.61	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill																				
	Material Handling						n/a	n/a													
	Grading							0.02	0.02												
	Bulldozing							1.29	1.29												
	Unpaved Road Dust					n/a	n/a														
	Paved Road Dust																				
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	1.31	1.31	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2																				
	Material Handling														0.25	0.25	0.25	0.25	0.25		
	Grading														n/a	n/a	n/a	n/a	n/a		
	Bulldozing														n/a	n/a	n/a	n/a	n/a		
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a		
	Paved Road Dust																				
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	--	--
11	Riprap - Class 3																				
	Material Handling																	0.25	0.25		
	Grading																n/a	n/a			
	Bulldozing																n/a	n/a			
	Unpaved Road Dust																n/a	n/a			
	Paved Road Dust																				
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	--	--
12	RSP Bedding Material																				
	Material Handling														0.25	0.25	0.25	0.25			
	Grading														n/a	n/a	n/a	n/a			
	Bulldozing														n/a	n/a	n/a	n/a			
	Unpaved Road Dust														n/a	n/a	n/a	n/a			
	Paved Road Dust																				
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	--	--	--
13	Erosion Control Seeding																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>09 - Channels and Canals Total</b>	--	0.04	0.04	0.04	1.61	2.92	14.19	12.87	12.87	12.87	11.27	11.27	0.25	0.50	0.50	0.50	0.50	0.50	--	--



Table L1-117. PM2.5 Emissions Summary from Fugitive |

#	Activity									Annual Emissions , tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
7	Excavation (Wet Conditions) Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a 0.19
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.19</b>
8	Excavation/Grading (Dry Conditions) Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									0.00 0.00 0.02 n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.03</b>
9	Earthen Backfill Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a 0.00 0.01 n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.01</b>
10	Riprap - Class 2 Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									0.00 n/a n/a n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.00</b>
11	Riprap - Class 3 Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									0.00 n/a n/a n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									0.00 n/a n/a n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	<b>0.00</b>
13	Erosion Control Seeding Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust		n/a	n/a	n/a					n/a n/a n/a n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	--	--	<b>0.23</b>

Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>11 - Levees and Floodwalls</b>																					
14	Mobilization and Demobilization																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	1.31	1.31	1.31	--	--	--	--	--	--	--	--	--
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	1.31	1.31	1.31	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																					
16	Mobilization and Demobilization																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Sheet Pile Wall																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-117. PM2.5 Emissions Summary from Fugitive |**

#	Activity									Annual Emissions, tpy	
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall										n/a
	Material Handling										0.00
	Grading										0.01
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
<b>15 - Floodway Control and Diversion Structures</b>											
16	Mobilization and Demobilization										n/a
	Material Handling							n/a			n/a
	Grading							n/a			n/a
	Bulldozing							n/a			n/a
	Unpaved Road Dust							n/a			n/a
	Paved Road Dust							n/a			n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)										n/a
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust										n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										0.02
	Paved Road Dust										n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
20	Sheet Pile Wall										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--

Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
21	Headworks Structure Concrete Piles																				
	Material Handling								n/a	n/a	n/a	n/a	n/a								
	Grading								n/a	n/a	n/a	n/a	n/a								
	Bulldozing								n/a	n/a	n/a	n/a	n/a								
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust																				
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure																				
	Material Handling												n/a	n/a					n/a		
	Grading												n/a	n/a					n/a		
	Bulldozing												n/a	n/a					n/a		
	Unpaved Road Dust												n/a	n/a					n/a		
	Paved Road Dust																				
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition																				
	Material Handling															n/a	n/a				
	Grading															n/a	n/a				
	Bulldozing															n/a	n/a				
	Unpaved Road Dust															n/a	n/a				
	Paved Road Dust																				
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--
08 - Roads, Railroads, and Bridges																					
25	Mobilization and Demobilization																				
	Material Handling															n/a			n/a		
	Grading															n/a			n/a		
	Bulldozing															n/a			n/a		
	Unpaved Road Dust															n/a			n/a		
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concrete Piles																				
	Material Handling																		n/a		
	Grading																		n/a		
	Bulldozing																		n/a		
	Unpaved Road Dust																		n/a		
	Paved Road Dust																				
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls																				
	Material Handling																			n/a	
	Grading																		n/a		
	Bulldozing																		n/a		
	Unpaved Road Dust																		n/a		
	Paved Road Dust																				
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-117. PM2.5 Emissions Summary from Fugitive |

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
21	Headworks Structure Concrete Piles Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--
22	Headworks Structure Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust		n/a	n/a	n/a	n/a				n/a n/a n/a n/a
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	--	--	<b>0.02</b>
<b>08 - Roads, Railroads, and Bridges</b>										
25	Mobilization and Demobilization Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concrete Piles Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--
27	Pedestrian Bridge Concrete Abutments and Wingwalls Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust									n/a n/a n/a n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Su</b>		--	--	--	--	--	--	--	--	--

**Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
28	Pedestrian Bridge Span Installation																				
	Material Handling																				n/a
	Grading																				n/a
	Bulldozing																				n/a
	Unpaved Road Dust																				n/a
	Paved Road Dust																				n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19 - Buildings, Grounds, and Utilities																					
29	Mobilization and Demobilization																				
	Material Handling	n/a																			n/a
	Grading	n/a																			n/a
	Bulldozing	n/a																			n/a
	Unpaved Road Dust	n/a																			n/a
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction																				
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a													
	Grading		0.09	0.09	0.09	0.09	0.09	0.09													
	Bulldozing		1.29	1.29	1.29	1.29	1.29	1.29													
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a													
	Paved Road Dust																				
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc																				
	Material Handling							n/a													
	Grading							n/a													
	Bulldozing							n/a													
	Unpaved Road Dust							n/a													
	Paved Road Dust																				
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
20 -Permanent Operating Equipment																					
32	Mobilization and Demobilization																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment																				
	Material Handling																				
	Grading																				
	Bulldozing																				
	Unpaved Road Dust																				
	Paved Road Dust																				
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-117. PM2.5 Emissions Summary from Fugitive |

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	Pedestrian Bridge Span Installation									n/a
	Material Handling									n/a
	Grading									n/a
	Bulldozing									n/a
	Unpaved Road Dust									n/a
	Paved Road Dust									n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>										
29	Mobilization and Demobilization									n/a
	Material Handling									n/a
	Grading									n/a
	Bulldozing									n/a
	Unpaved Road Dust									n/a
	Paved Road Dust									n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction									n/a
	Material Handling									0.00
	Grading									0.02
	Bulldozing									n/a
	Unpaved Road Dust									n/a
	Paved Road Dust									n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	--	--	<b>0.02</b>
31	Concrete Duct Banc									n/a
	Material Handling									n/a
	Grading									n/a
	Bulldozing									n/a
	Unpaved Road Dust									n/a
	Paved Road Dust									n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	--	--	<b>0.02</b>
<b>20 -Permanent Operating Equipment</b>										
32	Mobilization and Demobilization									n/a
	Material Handling	n/a						n/a		n/a
	Grading	n/a						n/a		n/a
	Bulldozing	n/a						n/a		n/a
	Unpaved Road Dust	n/a						n/a		n/a
	Paved Road Dust									n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing									n/a
	Material Handling		n/a	n/a	n/a	n/a	n/a			n/a
	Grading		n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing		n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust									n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment									n/a
	Material Handling		n/a	n/a	n/a	n/a	n/a			n/a
	Grading		n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing		n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust									n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--

Table L1-117. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
35	Electrical Control Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																				
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																				
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																				
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	1.45	1.45	1.42	2.99	4.30	25.45	12.87	14.19	14.19	12.58	11.27	0.25	0.50	0.50	0.50	0.50	0.50	--	--



**Table L1-117. PM2.5 Emissions Summary from Fugitive |**

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
35	Electrical Control Equipment CMU Building									
	Material Handling		n/a	n/a	n/a	n/a	n/a			n/a
	Grading		n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing		n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust									
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building									
	Material Handling		n/a	n/a	n/a	n/a	n/a			n/a
	Grading		n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing		n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust									
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--
37	Communication Equipment									
	Material Handling					n/a	n/a			n/a
	Grading					n/a	n/a			n/a
	Bulldozing					n/a	n/a			n/a
	Unpaved Road Dust					n/a	n/a			n/a
	Paved Road Dust									
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	--	--	--	--	0.02	--	--	0.28

### Alternative 1: East Side Small Gated Notch Fugitive Dust Emissions - Material Handling (Truck Loading/Unloading)

Equation (AP-42, Chapter 13.2.4):

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$

where:

- E = emission factor, pound per ton
- k = particle size multiplier
- U = mean wind speed, miles per hour
- M = material moisture content, %

Average Wind Speed 8.59 mph

Source: MesoWest, Station KSMF (Sacramento International Airport), 2015 data. Site accessed October 27, 2016. mesowest.utah.edu.

#### k values

PM10	0.35
PM2.5	0.053

#### Material Moisture Content (%)

Spoils	12	Source: CalEEMod 2016.3.1 User's Guide; default values
Limestone	2.1	Source: AP-42, Table 13.2.4-1; various limestone products
Demolition	2	Source: CalEEMod 2016.3.1 User's Guide; default values

**Table L1-118. Material Handling Emissions (Alternative 1)**

Activity	Total Daily Output, Quantity,		Total Daily Output, Quantity,		Type	PM10 EF, PM2.5 EF,		PM10, PM2.5,		PM10, PM2.5,	
	cy/day	cy/year	ton/day	ton/year		lb/ton	lb/ton	lbs/day	lbs/day	tpy	tpy
<b>02 - Relocations</b>											
Fremont Weir Demo	40	450	50	563	Demolition	2.26E-03	3.43E-04	0.1	0.0	0.00	0.00
<b>09 - Channels and Canals</b>											
Excavation/Grading (Dry Conditions)	3,500	118,960	4,375	148,700	Spoils	1.84E-04	2.79E-05	0.6	0.1	0.01	0.00
Earthen Backfill	1,000	8,950	1,250	11,188	Spoils	1.84E-04	2.79E-05	0.2	0.0	0.00	0.00
Riprap - Class 2	n/a	n/a	1,000	8,950	Limestone	2.11E-03	3.20E-04	1.6	0.2	0.01	0.00
Riprap - Class 3	n/a	n/a	1,000	24,940	Limestone	2.11E-03	3.20E-04	1.6	0.2	0.02	0.00
RSP Bedding Material	n/a	n/a	1,000	9,420	Limestone	2.11E-03	3.20E-04	1.6	0.2	0.01	0.00
<b>09 - Channels and Canals Total</b>	<b>4,500</b>	<b>127,910</b>	<b>8,625</b>	<b>203,198</b>				<b>5.8</b>	<b>0.9</b>	<b>0.05</b>	<b>0.01</b>

Source: HDR. 2016. Draft Technical Memorandum: Constructability and Construction Considerations. Yolo Bypass Salmonid Habitat Restoration & Fish Passage Project - 10% Design. August 31.

**Note:**

Emissions assume that standard construction practice of watering is used.

Fremont weir demolition emissions assume that there is an additional "drop" from the mechanical dismemberment of the structure; method is consistent with CalEEMod 2016.3.1.

No emissions assumed to occur with wet excavation activities because spoils would be waterlogged.

**Density**

1.25 tons per cubic yard

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

**Number of Drops**

2 drops per truck      *(one drop at borrow site and one drop at dam site)*

**Dust Control**

61% reduction from watering at least 3 times per day

Source: CalEEMod

**Conversion**

2,000 pounds per ton

**Alternative 1: East Side Small Gated Notch  
Fugitive Dust Emissions - Grading**

Equations (AP-42, Chapter 11.9):

$$TSP = 0.040(S)^{2.5} \quad \text{and} \quad PM_{15} = 0.051(S)^{2.0}$$

where:

S = mean vehicle speed, miles per hour

Scaling Factors

PM10 0.60 (multiply the 15-micron equation by this fraction to determine emissions)  
PM2.5 0.031 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

PM10 1.54 lb/VMT  
PM2.5 0.17 lb/VMT

Mileage Calculation (CalEEMod 2016.3.1 User's Guide, Appendix A):

$$VMT = As/Wb \times 43,560 \left( \frac{sqft}{acre} \right) / 5,280 \left( \frac{ft}{mile} \right)$$

**Table L1-119. Maximum Daily Disturbed Area**

Equipment Type	Acres/8hr-day
Crawler Tractors	0.5
Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

**Table L1-120. Grading Emissions (Alternative 1)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy	
<b>02 - Relocations</b>													
Levee O&M Road Regrading (6" AB)	12' Blade Grader	Graders	1	1	4	0.5	2.0	1.4	0.207	0.022	0.00041	0.00004	
	4000 gallon Water Truck	n/a - onroad	1	1	4	--	--	--	--	--	--	--	
	Pickup Truck Conventional	n/a - onroad	1	1	4	--	--	--	--	--	--	--	
	16 CY 3 Axle Dump Truck	n/a - onroad	5	1	4	--	--	--	--	--	--	--	
						<b>Levee O&amp;M Road Regrading (6" AB) Total</b>	<b>0.5</b>	<b>2.0</b>	<b>1.4</b>	<b>0.207</b>	<b>0.022</b>	<b>0.00041</b>	<b>0.00004</b>
<b>09 - Channels and Canals</b>													
Clearing and Grubbing	1.5 CY Front End Loader Crawler	Crawler Tractors	1	2	16	1.0	16.0	11.0	0.4	0.0	0.0	0.0	
	Trailer Mounted Brush Chipper	Shredders	1	2	16	--	--	--	--	--	--	--	
	Chainsaw	Chainsaws	1	2	16	--	--	--	--	--	--	--	
	4000 gallon Water Truck	n/a - onroad	1	2	16	--	--	--	--	--	--	--	
	Pickup Truck Conventional	n/a - onroad	6	2	16	--	--	--	--	--	--	--	
	16 CY 3 Axle Dump Truck	n/a - onroad	1	2	16	--	--	--	--	--	--	--	
						<b>Clearing and Grubbing Total</b>	<b>1.0</b>	<b>16.0</b>	<b>11.0</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Table L1-120. Grading Emissions (Alternative 1)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
Excavation/Grading (Dry Conditions)	300 HP Dozer	Rubber Tired Dozers	1	1	34	0.5	17.0	11.7	0.2	0.0	0.0	0.0
	21 CY Scrapers	Scrapers	4	1	34	4.0	136.0	93.5	1.7	0.2	0.0	0.0
	12' Blade Grader	Graders	1	1	34	0.5	17.0	11.7	0.2	0.0	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	34	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	1	34	--	--	--	--	--	--	--
<b>Excavation/Grading (Dry Conditions) Total</b>						<b>5.0</b>	<b>170.0</b>	<b>116.9</b>	<b>2.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>
Earthen Backfill	300 HP Dozer	Rubber Tired Dozers	1	1	9	0.5	4.5	3.1	0.2	0.0	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	9	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	9	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	3	1	9	--	--	--	--	--	--	--
<b>Earthen Backfill Total</b>						<b>0.5</b>	<b>4.5</b>	<b>3.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>11 - Levees and Floodwalls</b>												
Soil Cement Bentonite Cutoff Wall	4.5 CY Hydraulic Excavator	Excavators	1	1	13	--	--	--	--	--	--	--
	300 HP Dozer	Rubber Tired Dozers	1	1	13	0.5	6.5	4.5	0.2	0.0	0.0	0.0
	2.5 CY Hydraulic Excavator	Excavators	1	1	13	--	--	--	--	--	--	--
	16 CY 3 Axle Dump Truck	n/a - onroad	1	1	13	--	--	--	--	--	--	--
	Flash Mixer	Cement and Mortar Mixers	1	1	13	--	--	--	--	--	--	--
	Slurry Pump	Pumps	1	1	13	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	5	1	13	--	--	--	--	--	--	--
<b>Soil Cement Bentonite Cutoff Wall Total</b>						<b>0.5</b>	<b>6.5</b>	<b>4.5</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>19 - Buildings, Grounds, and Utilities</b>												
CMU Building and Earthwork Pad Construction	165 HP Dozer	Rubber Tired Dozers	1	1	30	0.5	15.0	10.3	0.2	0.0	0.0	0.0
	Scraper	Scrapers	1	1	30	1.0	30.0	20.6	0.4	0.0	0.0	0.0
	Motor Grader	Graders	1	1	30	0.5	15.0	10.3	0.2	0.0	0.0	0.0
	Compactor	Rollers	1	1	30	--	--	--	--	--	--	--
	4000 gallon Water Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	30	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	1	30	--	--	--	--	--	--	--
	Concrete Pump Boom Truck Mounted	Pumps	1	1	30	--	--	--	--	--	--	--
	2.5" Dia. Concrete Vibrator	Plate Compactors	1	1	30	--	--	--	--	--	--	--
	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	1	30	--	--	--	--	--	--	--
	Concrete Mixer Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
<b>CMU Building and Earthwork Pad Construction Total</b>						<b>2.0</b>	<b>60.0</b>	<b>41.3</b>	<b>0.8</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>

Blade Width  
12 feet

Scraper Speed  
7.1 mph (AP-42 default)

Conversions  
43,560 square feet per acre  
5,280 feet per mile  
2,000 pounds per ton

Levee O&M Road Regrading (6" AB)  
Clearing and Grubbing

Excavation/Grading (Dry Conditions)

CMU Building and Earthwork Pad Construction

Dust Control  
61% reduction from watering at least 3 times per day  
Source: CalEEMod

### Alternative 1: East Side Small Gated Notch Fugitive Dust Emissions - Bulldozing

Equations (AP-42, Chapter 11.9):

$$TSP = \frac{5.7(s)^{1.2}}{M^{1.3}} \quad \text{and} \quad PM_{15} = \frac{1.0(s)^{1.5}}{M^{1.4}}$$

where:

- s = silt content 6.9 % (AP-42, Table 11.9-3, Overburden)
- M = material moisture content 7.9 % (AP-42, Table 11.9-3, Overburden)

Scaling Factors

- PM10 0.75 (multiply the 15-micron equation by this fraction to determine emissions)
- PM2.5 0.105 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

- PM10 0.75 lb/hr
- PM2.5 0.41 lb/hr

**Table L1-121. Bulldozing Emissions (Alternative 1)**

Activity	Crew / Equipment	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>								
Excavation/Grading (Dry Conditions)	300 HP Dozer	1	1	34	2.35	1.29	0.04	0.02
Earthen Backfill	300 HP Dozer	1	1	9	2.35	1.29	0.01	0.01
<b>11 - Levees and Floodwalls</b>								
Soil Cement Bentonite Cutoff Wall	300 HP Dozer	1	1	13	2.35	1.29	0.02	0.01
<b>19 - Buildings, Grounds, and Utilities</b>								
CMU Building and Earthwork Pad Construct	165 HP Dozer	1	1	30	2.35	1.29	0.04	0.02

Operating Schedule

8 hr/day

Conversion

2,000 pounds per ton

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

**Alternative 1: East Side Small Gated Notch  
Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)**

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	4.3 (CalEEMod default)
W, tons	180 loaded 74 unloaded

**Table L1-122. Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	3.76	0.38
Unloaded	2.52	0.25
Average	3.14	0.31

**Table L1-123. Unpaved Road Dust Emissions (Alternative 1)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	1,800	61,810	CY	35	92	3,092	112.7	11.3	1.9	0.2
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,130	CY	4	92	308	112.7	11.3	0.2	0.02

Notes:

Assumes payload of each truck is 100 tons.

Half of truck trips will be loaded and other half will be unloaded.

Only includes materials that will be transported to spoil site by dump trucks.

Distance to borrow area

2 miles (spoils site located within a 1-mile radius of the project access point(s); average of 1 mile travel distance from point of excavation)

Density

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod



Prepared by: Gwen Pelletier; February 7, 2017  
 Reviewed by: John Pehrson, October 24, 2017. No comments/issues with this sheet.

### Alternative 1: East Side Small Gated Notch Fugitive Dust Emissions - Paved Road Dust (Haul Roads and Worker Commuting)

Equation (AP-42, Chapter 13.2.1):

$$E = k(SL)^{0.91} \times (W)^{1.02}$$

where:

E = particulate emission factor, lb/VMT

k = particle size multiplier, lb/VMT

sL = road surface silt loading (g/m<sup>2</sup>)

W = average weight (tons) of the vehicles traveling the road

#### Variables

k (PM10)	0.0022 lb/VMT	
k (PM2.5)	0.00054 lb/VMT	
sL	0.1 g/m <sup>2</sup>	(CalEEMod 2016.3.1 default)
W	2.4 tons	(CalEEMod 2016.3.1 default)

#### Emission Factors

PM10 6.61E-04 lb/VMT

PM2.5 1.62E-04 lb/VMT

Note: Because construction would occur during dry season, no natural mitigation from precipitation was applied to emission

## Mitigated Offroad Exhaust Emissions Summary

**Table L1-124. Maximum Daily Mitigated Offroad Construction Equipment Emissions (Alternative 1)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.60	13.08	13.94	0.05	0.21	0.10
09 - Channels and Canals	21.53	164.94	70.20	0.42	2.31	6.12
11 - Levees and Floodwalls	0.72	5.20	16.10	0.07	0.18	3.84
15 - Floodway Control and Diversion Structures	2.46	25.06	42.00	0.16	0.95	0.51
08 - Roads, Railroads, and Bridges	1.06	7.95	21.15	0.10	0.32	0.19
19 - Buildings, Grounds, and Utilities	1.30	11.64	34.58	0.11	0.46	0.26
20 -Permanent Operating Equipment	0.46	2.23	10.60	0.03	0.22	1.27
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>23.20</b>	<b>179.64</b>	<b>110.17</b>	<b>0.55</b>	<b>3.02</b>	<b>6.42</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-13%</i>	<i>-31%</i>	<i>-14%</i>	<i>-2%</i>	<i>-59%</i>	<i>0%</i>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-125. Annual Mitigated Offroad Construction Equipment Emissions (Alternative 1)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.06	0.10	0.00	0.00	0.00	39.60
09 - Channels and Canals	0.32	2.65	2.37	0.01	0.05	0.05	1,196.70
11 - Levees and Floodwalls	0.01	0.04	0.11	0.00	0.00	0.04	46.71
15 - Floodway Control and Diversion Structures	0.05	0.43	0.86	0.00	0.02	0.01	351.13
08 - Roads, Railroads, and Bridges	0.00	0.02	0.04	0.00	0.00	0.00	16.38
19 - Buildings, Grounds, and Utilities	0.01	0.12	0.45	0.00	0.00	0.00	132.51
20 -Permanent Operating Equipment	0.01	0.04	0.16	0.00	0.00	0.00	44.78
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.40</b>	<b>3.36</b>	<b>4.09</b>	<b>0.02</b>	<b>0.08</b>	<b>0.11</b>	<b>1,827.82</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-40%</i>	<i>-53%</i>	<i>-13%</i>	<i>-1%</i>	<i>-68%</i>	<i>-43%</i>	<i>-2%</i>

Notes:

Total may not add exactly because of rounding.

**Table L1-126. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0226 0.0280 0.0311 2.0565 5.1968 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0246 2.0565 1.3847 5.1968	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.0565 1.3847	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.0337 0.0754 72.5633 2.0565 1.3847 5.1968	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0226 0.0304 0.0280 5.1968 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0304 0.0282 0.0246 2.0565 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0304 2.0565 0.0178 1.3847	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug		
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	--	0.14	0.14 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.08	0.08 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.05	0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.09	0.09 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.55</b>	<b>0.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.19</b>	<b>0.55</b>	<b>0.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04 --		
		0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05 --	
		0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02 --	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>		
6	Clearing and Grubbing	--	0.13	0.13	0.13 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.37	0.37	0.37 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	20.48	20.48	20.48 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.07	0.07	0.07 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.29	0.29	0.29 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>21.53</b>	<b>21.53</b>	<b>21.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17 --	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	0.32	0.32	0.32	0.32	0.32	0.32 --	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	0.16	0.16	0.16	0.16	0.16	0.16 --	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82 --	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17 --	--	--	--	--	--	--	--	--		
		--	--	--	--	--	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	<b>1.65</b>	--	--	--	--	--	--	--	--			
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.16	0.16	0.16	0.16	0.16	0.16 --	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.81	0.81	0.81	0.81	0.81	0.81 --	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08 --	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04 --	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17 --	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	--	--	--	--	--	--	--	--	--			
9	Earthen Backfill	--	--	--	--	--	0.16	0.16 --	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	0.04	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	0.05	0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	0.07	0.07 --	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--	--	--	--			

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>										
1	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	--	0.05	0.0000
		--	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--	--
								<b>0.11</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0005
									0.0009	
									<b>0.0033</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	0.08	--	0.0002
		--	--	--	--	--	--	0.04	--	0.0001
		--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	0.46	--	0.0009
								<b>0.60</b>	<b>0.0012</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
									<b>0.0000</b>	
								<b>0.60</b>	<b>0.11</b>	<b>0.0047</b>
<b>09 - Channels and Canals</b>										
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
									<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.1638
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0023
									0.0015	
									<b>0.1722</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.0056
		--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	0.0144
		--	--	--	--	--	--	--	--	0.0030
									<b>0.0289</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	0.0138
		--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0029
									<b>0.0214</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0003
									<b>0.0014</b>	

**Table L1-126. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0226 0.0241 5.1968 1.3847	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0226 0.0241 5.1968 1.3847	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0226 0.0241 1.3847 5.1968	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0311 1.3847	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>11 - Levees and Floodwalls</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0226 0.0304 0.0226 5.1968 0.3702 0.0818 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>													
<b>11 - Levees and Floodwalls Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.0565 0.0266 1.3847	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0818 1.3847	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0226 0.0304 0.0280 5.1968 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	0.20	0.20	0.20	0.20	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.11	2.11	2.11	2.11	2.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.56</b>	<b>2.56</b>	<b>2.56</b>	<b>2.56</b>	<b>2.56</b>	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	0.20	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.11	2.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.56</b>	<b>2.56</b>	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.24	0.24	0.24	0.24	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	4.22	4.22	4.22	4.22	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	--	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	<b>21.53</b>	<b>21.53</b>	<b>21.53</b>	<b>1.26</b>	<b>1.58</b>	<b>3.23</b>	<b>2.91</b>	<b>2.91</b>	<b>2.91</b>	<b>1.65</b>	<b>1.65</b>	<b>5.12</b>	<b>7.69</b>	<b>7.69</b>	<b>7.69</b>	<b>5.12</b>	<b>5.12</b>	<b>0.11</b>	--
<b>11 - Levees and Floodwalls</b>																					
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	--	--	--	0.04	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.04</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.04</b>	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--
		--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--
		--	--	<b>0.12</b>	--	--	--	--	--	<b>0.65</b>	<b>0.65</b>	<b>0.65</b>	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.04</b>	<b>0.72</b>	<b>0.72</b>	<b>0.72</b>	<b>0.04</b>	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																					
16	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
		--	--	--	--	--	--	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.65</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
10	Riprap - Class 2	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	0.0264
		--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	<b>0.0320</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	<b>0.0128</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	0.0401
		--	--	--	--	--	--	--	--	<b>0.0487</b>
13	Erosion Control Seeding	--	0.05	0.05	0.05	--	--	--	--	0.0004
		--	0.10	0.10	0.10	--	--	--	--	0.0008
		--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	--	<b>0.0012</b>
		--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	<b>0.3188</b>	
<b>11 - Levees and Floodwalls</b>										
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0001</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.12	--	0.0008
		--	--	--	--	--	<b>0.12</b>	--	<b>0.0054</b>	
		--	--	--	--	--	<b>0.12</b>	--	<b>0.0055</b>	
<b>15 - Floodway Control and Diversion Structures</b>										
16	Mobilization and Demobilization	--	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	--	0.05	--	0.0000
		--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.11</b>	--	<b>0.0001</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	<b>0.0026</b>
18	Construction Site Dewatering (Pumping)	0.12	0.12	0.12	0.12	0.12	0.12	--	--	0.0073
		0.07	0.07	0.07	0.07	0.07	0.07	--	--	0.0044
		<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	--	--	<b>0.0117</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	<b>0.0033</b>	



**Table L1-126. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.0565 0.0266 1.3847	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0158 0.0266 0.0818 2.0565 0.0311 0.0352 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.0818 0.2845 2.0565 1.3847	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.2845 2.0565 1.3847	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0158 5.1968 1.3847	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0158 0.0266 0.0818 2.0565 0.0311 0.0352 1.3847	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.0818 0.2845 2.0565 1.3847	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0158 2.0565 1.3847	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													



Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity									Annual Emissions, tpy
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	<b>0.0010</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	--	0.0027	
		--	--	--	--	--	--	--	<b>0.0148</b>	
22	Headworks Structure	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	<b>0.0109</b>	
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	<b>0.0026</b>	
24	Hinged Bottom Gates	--	0.13	0.13	0.13	0.13	--	--	--	0.0009
		--	0.09	0.09	0.09	0.09	--	--	--	0.0007
		--	0.10	0.10	0.10	0.10	--	--	--	0.0007
		--	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	--	--	<b>0.0024</b>	
		<b>0.19</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>0.19</b>	<b>0.11</b>	<b>0.0493</b>	
<b>08 - Roads, Railroads, and Bridges</b>										
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>	
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	<b>0.0011</b>	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0002</b>	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.0005</b>	
		--	--	--	--	--	--	--	<b>0.0018</b>	

**Table L1-126. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
29	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.0328 0.0282 0.0246 0.0259 2.0565 0.0178 1.3847 0.0818 0.2845 0.0255 2.0565	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	4	0.0818 0.2845 2.0565 1.3847	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
32	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.0565 0.0255 1.3847 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.0255 1.3847	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.0255 1.3847	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.3847	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.3847	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.3847	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>19 - Buildings, Grounds, and Utilities</b>																					
29	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.40</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>1.30</b>	<b>0.90</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																					
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		<b>0.40</b>	<b>22.98</b>	<b>23.20</b>	<b>22.71</b>	<b>2.85</b>	<b>2.76</b>	<b>5.18</b>	<b>4.48</b>	<b>5.16</b>	<b>4.88</b>	<b>3.62</b>	<b>4.15</b>	<b>6.53</b>	<b>7.99</b>	<b>9.46</b>	<b>8.80</b>	<b>5.64</b>	<b>6.64</b>	<b>0.30</b>	<b>0.19</b>

Table L1-126. ROG Exhaust Emissions from Offroad C

#	Activity									Annual Emissions, tpy	
		2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0134</b>
31	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0008</b>
		--	--	--	--	--	--	--	--	--	<b>0.0143</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	0.0000
		0.05	--	--	--	--	--	0.05	--	--	0.0000
		0.02	--	--	--	--	--	0.02	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	<b>0.11</b>	--	--	<b>0.0001</b>
33	Mechanical Hydraulic Cylinders & Housing	--	0.05	0.05	0.05	0.05	0.05	--	--	--	0.0007
		--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	<b>0.0018</b>
34	CMU Building Mechanical Equipment	--	0.05	0.05	0.05	0.05	0.05	--	--	--	0.0007
		--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	<b>0.0018</b>
35	Electrical Control Equipment CMU Building	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0011</b>
36	Electrical Power Equipment CMU Building	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0011</b>
37	Communication Equipment	--	--	--	--	0.07	0.07	--	--	--	0.0004
		--	--	--	--	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0004</b>
		<b>0.11</b>	<b>0.38</b>	<b>0.38</b>	<b>0.38</b>	<b>0.46</b>	<b>0.46</b>	<b>0.11</b>	--	--	<b>0.0063</b>
<b>GRAND TOTAL</b>		<b>0.30</b>	<b>1.04</b>	<b>1.04</b>	<b>1.04</b>	<b>0.97</b>	<b>0.65</b>	<b>0.93</b>	<b>0.11</b>	--	<b>0.4007</b>

**Table L1-127. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.8403 0.5411 1.2324 0.0000	g/hr g/hp-hr g/hr g/hr	1.11 0.95 0.02 --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.08</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.1016 0.0989 0.5090 62.8403 131.5280 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.1067 62.8403 1.2324 131.5280	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	62.8403 1.2324	g/hr g/hr	1.11 0.04
<b>Temporary Electrical Power Subtotal</b>														<b>1.15</b>
<b>02 - Relocations Total</b>														<b>3.24</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.8403 0.5411 1.2324 0.0000	g/hr g/hp-hr g/hr g/hr	1.11 0.95 0.02 --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.08</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.5867 0.7727 1.2873 62.8403 1.2324 131.5280	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.1016 0.1077 0.0989 131.5280 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.1077 0.1282 0.1067 62.8403 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.1077 62.8403 0.0977 1.2324	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	0.64	0.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.87	0.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.32	2.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>5.36</b>	<b>5.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>5.36</b>	<b>5.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	--	--
6	Clearing and Grubbing	2.28	2.28	2.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.22	2.22	2.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.26	0.26	0.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.64	4.64	4.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>13.57</b>	<b>13.57</b>	<b>13.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	0.77	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.14	1.14	1.14	1.14	1.14	1.14	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.57	0.57	0.57	0.57	0.57	0.57	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	20.88	20.88	20.88	20.88	20.88	20.88	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>23.51</b>	<b>23.51</b>	<b>23.51</b>	<b>23.51</b>	<b>23.51</b>	<b>23.51</b>	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	0.57	0.57	0.57	0.57	0.57	0.57	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.68	3.68	3.68	3.68	3.68	3.68	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.11	1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>5.86</b>	<b>5.86</b>	<b>5.86</b>	<b>5.86</b>	<b>5.86</b>	<b>5.86</b>	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	0.57	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>2.01</b>	<b>2.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	--	--	--	--	--	1.11	0.0011
		--	--	--	--	--	0.95	0.0010
		--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.08</b>	<b>0.0021</b>
2	Fremont Weir Demo	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	0.0139
		--	--	--	--	--	0.0008	
		--	--	--	--	--	<b>0.0322</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	0.35	--	0.0007
		--	--	--	--	1.11	--	0.0022
		--	--	--	--	0.02	--	0.0000
		--	--	--	--	11.60	--	0.0232
		--	--	--	--	<b>13.08</b>	--	<b>0.0262</b>
4	Temporary Electrical Power	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0006</b>
		--	--	--	--	<b>13.08</b>	<b>2.08</b>	<b>0.0610</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0021</b>
6	Clearing and Grubbing	--	--	--	--	--	--	0.0182
		--	--	--	--	--	--	0.0305
		--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	0.0177
		--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	0.0371
		--	--	--	--	--	--	<b>0.1086</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0135
		--	--	--	--	--	--	0.0200
		--	--	--	--	--	--	0.0100
		--	--	--	--	--	--	0.3654
		--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	<b>0.4114</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	0.0097
		--	--	--	--	--	--	0.0626
		--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	0.0188
		--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	<b>0.0997</b>
9	Earthen Backfill	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0091</b>

**Table L1-127. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.1016 0.1129 131.5280 1.2324	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.1016 0.1129 131.5280 1.2324	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.1016 0.1129 1.2324 131.5280	g/hp-hr g/hp-hr g/hr g/hr	--
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.5090 1.2324	g/hp-hr g/hr	--
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														<b>2.08</b>
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.8403 0.5411 1.2324 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.1016 0.1077 0.1016 131.5280 2.3182 0.9989 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.8403 0.5411 1.2324 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	62.8403 0.1311 1.2324	g/hr g/hp-hr g/hr	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.9989 1.2324	g/hp-hr g/hr	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.1016 0.1077 0.0989 131.5280 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--
<b>Excavation (Wet Conditions) Subtotal</b>														--

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.92	0.92	0.92	0.92	0.92	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.60	0.60	0.60	0.60	0.60	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	53.35	53.35	53.35	53.35	53.35	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>54.98</b>	<b>54.98</b>	<b>54.98</b>	<b>54.98</b>	<b>54.98</b>	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.92	0.92	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.60	0.60	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53.35	53.35	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>54.98</b>	<b>54.98</b>	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	--	1.84	1.84	1.84	1.84	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.19	1.19	1.19	1.19	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	0.22	0.22	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	106.71	106.71	106.71	106.71	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.87
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>
		<b>13.57</b>	<b>13.57</b>	<b>13.57</b>	<b>5.86</b>	<b>7.88</b>	<b>31.39</b>	<b>29.37</b>	<b>29.37</b>	<b>29.37</b>	<b>23.51</b>	<b>23.51</b>	<b>109.96</b>	<b>164.94</b>	<b>164.94</b>	<b>164.94</b>	<b>109.96</b>	<b>109.96</b>	<b>2.08</b>	--	--	<b>0.96</b>
<b>11 - Levees and Floodwalls</b>																						
14	Mobilization and Demobilization	--	--	--	--	--	--	1.11	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.95	0.95	0.95	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.11</b>	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>1.11</b>	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.57	0.57	0.57	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.46	0.46	0.46	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	2.32	2.32	2.32	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.48</b>	--	--	--	--	--	<b>4.23</b>	<b>4.23</b>	<b>4.23</b>	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.48</b>	--	--	--	--	<b>1.11</b>	<b>5.20</b>	<b>5.20</b>	<b>5.20</b>	<b>1.11</b>	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																						
16	Mobilization and Demobilization	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
		--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
		--	--	--	--	--	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	20.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>23.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	0.0075
		--	--	--	--	--	--	0.6669
		--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	<b>0.6873</b>
11	Riprap - Class 3	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	0.2668
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.2749</b>
12	RSP Bedding Material	--	--	--	--	--	--	0.0175
		--	--	--	--	--	--	0.0114
		--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	1.0137
		--	--	--	--	--	--	<b>1.0446</b>
13	Erosion Control Seeding	0.87	0.87	--	--	--	--	0.0070
		0.09	0.09	--	--	--	--	0.0007
		<b>0.96</b>	<b>0.96</b>	--	--	--	--	<b>0.0077</b>
		<b>0.96</b>	<b>0.96</b>	--	--	--	--	<b>2.6453</b>
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0021</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	0.0151
		--	--	--	--	--	--	0.0024
		--	--	--	--	1.48	--	0.0096
		--	--	--	--	--	--	0.0007
--	--	--	--	<b>1.48</b>	--	<b>0.0395</b>		
--	--	--	--	<b>1.48</b>	--	<b>0.0416</b>		
<b>15 - Floodway Control and Diversion Structures</b>								
16	Mobilization and Demobilization	--	--	--	--	1.11	--	0.0011
		--	--	--	--	0.95	--	0.0010
		--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>2.08</b>	--	<b>0.0021</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	0.0100
		--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0157</b>
18	Construction Site Dewatering (Pumping)	1.48	1.48	1.48	1.48	--	--	0.0888
		0.07	0.07	0.07	0.07	--	--	0.0039
		<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	--	--	<b>0.0927</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0418
		--	--	--	--	--	--	0.0003
--	--	--	--	--	--	<b>0.0470</b>		

**Table L1-127. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	62.8403 0.1311 1.2324	g/hr g/hp-hr g/hr	-- -- --
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0772 0.1311 0.9989 62.8403 0.5090 0.1070 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.9989 1.7813 62.8403 1.2324	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.7813 62.8403 1.2324	g/hp-hr g/hr g/hr	-- -- --
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0772 131.5280 1.2324	g/hp-hr g/hr g/hr	-- -- --
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.8403 0.5411 1.2324 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0772 0.1311 0.9989 62.8403 0.5090 0.1070 1.2324	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.9989 1.7813 62.8403 1.2324	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0772 62.8403 1.2324	g/hp-hr g/hr g/hr	-- -- --
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
20	Sheet Pile Wall	--	--	--	--	--	--	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.48	1.48	1.48	1.48	1.48	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.87	0.87	0.87	0.87	0.87	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.18	1.18	1.18	1.18	1.18	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	--	--	--	--	--	--	--	--	--	
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	4.44	4.44	--	--	--	--	4.44	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75	--	--	--	
		--	--	--	--	--	--	--	--	--	--	6.65	6.65	--	--	--	--	6.65	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.46	0.46	--	--	--	--	0.46	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>12.30</b>	<b>12.30</b>	--	--	--	--	<b>12.30</b>	--	--	--	
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.43	4.43	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.20</b>	<b>5.20</b>	--	--	--	--	--	
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.32	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.02</b>	
		--	<b>2.08</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>25.06</b>	<b>11.25</b>	<b>11.25</b>	<b>9.50</b>	<b>9.50</b>	<b>21.80</b>	<b>13.85</b>	<b>1.55</b>	<b>6.74</b>	<b>6.74</b>	<b>1.55</b>	<b>13.85</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>4.56</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--	--	--	1.11	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.95	--	--	--	0.95	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	--	--	--	<b>2.08</b>	--	--	--	
26	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	0.41	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.51	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	3.32	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.87	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.18	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>7.95</b>	--	--	--	--	--	--	--	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	2.22	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.10</b>	--	--	--	--	--	--	--	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.22	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.94</b>	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	<b>7.95</b>	<b>4.10</b>	<b>2.94</b>	<b>2.08</b>	--	--	--	

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity								Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Sheet Pile Wall	--	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	<b>0.0061</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0072
		--	--	--	--	--	--	--	0.0207
		--	--	--	--	--	--	--	0.0465
		--	--	--	--	--	--	--	0.0122
		--	--	--	--	--	--	--	0.0166
		--	--	--	--	--	--	--	0.0024
--	--	--	--	--	--	--	<b>0.1113</b>		
22	Headworks Structure	--	--	--	--	--	--	--	0.0400
		--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	0.0598
		--	--	--	--	--	--	--	0.0041
--	--	--	--	--	--	--	<b>0.1107</b>		
23	Headworks Channel Transition	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	0.0222
		--	--	--	--	--	--	--	0.0013
--	--	--	--	--	--	--	<b>0.0260</b>		
24	Hinged Bottom Gates	0.61	0.61	0.61	--	--	--	--	0.0046
		2.32	2.32	2.32	--	--	--	--	0.0174
		0.09	0.09	0.09	--	--	--	--	0.0007
		<b>3.02</b>	<b>3.02</b>	<b>3.02</b>	--	--	--	--	<b>0.0226</b>
--	<b>4.56</b>	<b>4.56</b>	<b>4.56</b>	<b>1.55</b>	<b>2.08</b>	--	--	<b>0.4344</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	<b>0.0021</b>		
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0002
--	--	--	--	--	--	--	<b>0.0080</b>		
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0001
--	--	--	--	--	--	--	<b>0.0020</b>		
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0002
--	--	--	--	--	--	--	<b>0.0044</b>		
--	--	--	--	--	--	--	<b>0.0165</b>		

**Table L1-127. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	62.8403	g/hr	1.11
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.5411	g/hp-hr	0.95
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				1.2324	g/hr	0.02
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>2.08</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.1098	g/hp-hr	--
				Scraper	Scrapers	1	367	-				0.1282	g/hp-hr	--
				Motor Grader	Graders	1	187	-				0.1067	g/hp-hr	--
				Compactor	Rollers	1	80	-				0.5088	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				62.8403	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				0.0977	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				1.2324	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				0.9989	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.7813	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.5411	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				62.8403	g/hr	--
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.9989	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.7813	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				62.8403	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				1.2324	g/hr	--
<b>Concrete Duct Banc Subtotal</b>														<b>--</b>
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>2.08</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	62.8403	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.5411	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				1.2324	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.5411	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				1.2324	g/hr	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.5411	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				1.2324	g/hr	--
<b>CMU Building Mechanical Equipment Subtotal</b>														<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.2324	g/hr	--
<b>Electrical Control Equipment CMU Building Subtotal</b>														<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.2324	g/hr	--
<b>Electrical Power Equipment CMU Building Subtotal</b>														<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.2324	g/hr	--
<b>Communication Equipment Subtotal</b>														<b>--</b>
<b>20 -Permanent Operating Equipment Total</b>														<b>--</b>
<b>GRAND TOTAL</b>														<b>7.40</b>



Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
							<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	0.32	0.32	0.32	0.32	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.83	0.83	0.83	0.83	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.72	0.72	0.72	0.72	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.27	0.27	0.27	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.48	1.48	1.48	1.48	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.95	0.95	0.95	0.95	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	2.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>4.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>11.64</b>	<b>7.54</b>	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																					<b>2.08</b>	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
																						<b>1.02</b>
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
																						<b>1.02</b>
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
																						<b>0.07</b>
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07
																						<b>0.07</b>
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																						--
																						<b>2.08</b>
																						<b>2.17</b>
<b>GRAND TOTAL</b>		<b>26.47</b>	<b>30.04</b>	<b>22.87</b>	<b>19.26</b>	<b>17.17</b>	<b>58.53</b>	<b>41.73</b>	<b>45.83</b>	<b>44.08</b>	<b>38.21</b>	<b>46.42</b>	<b>123.81</b>	<b>168.57</b>	<b>179.64</b>	<b>175.78</b>	<b>114.44</b>	<b>125.89</b>	<b>3.63</b>	<b>1.55</b>	<b>3.63</b>	<b>7.69</b>

Table L1-127. NOx Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>								
29	Mobilization and Demobilization	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0021</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	0.0124
		--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	0.0108
		--	--	--	--	--	--	0.0166
		--	--	--	--	--	--	0.0041
		--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	0.0222
		--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	0.0143
		--	--	--	--	--	--	0.0166
		--	--	--	--	--	--	<b>0.1132</b>
31	Concrete Duct Banc	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0044
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0082</b>
		--	--	--	--	--	--	<b>0.1234</b>
<b>20 -Permanent Operating Equipment</b>								
32	Mobilization and Demobilization	--	--	--	--	1.11	--	0.0011
		--	--	--	--	0.95	--	0.0010
		--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>2.08</b>	--	<b>0.0021</b>
33	Mechanical Hydraulic Cylinders & Housing	0.95	0.95	0.95	0.95	--	--	0.0143
		0.07	0.07	0.07	0.07	--	--	0.0010
		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	--	--	<b>0.0153</b>
34	CMU Building Mechanical Equipment	0.95	0.95	0.95	0.95	--	--	0.0143
		0.07	0.07	0.07	0.07	--	--	0.0010
		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	--	--	<b>0.0153</b>
35	Electrical Control Equipment CMU Building	0.07	0.07	0.07	0.07	--	--	0.0010
		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	<b>0.0010</b>
36	Electrical Power Equipment CMU Building	0.07	0.07	0.07	0.07	--	--	0.0010
		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	<b>0.0010</b>
37	Communication Equipment	--	--	0.07	0.07	--	--	0.0004
		--	--	<b>0.07</b>	<b>0.07</b>	--	--	<b>0.0004</b>
		<b>2.17</b>	<b>2.17</b>	<b>2.23</b>	<b>2.23</b>	<b>2.08</b>	--	<b>0.0350</b>
<b>GRAND TOTAL</b>		<b>7.69</b>	<b>7.69</b>	<b>6.80</b>	<b>3.78</b>	<b>18.73</b>	<b>2.08</b>	<b>3.3571</b>

**Table L1-128. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.5648 2.0693 12.4711 0.0000	g/hr g/hp-hr g/hr g/hr	0.19 3.65 0.22 --
<b>Mobilization and Demobilization Subtotal</b>														<b>4.06</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.5975 1.6565 1.9153 10.5648 33.0182 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.6411 10.5648 12.4711 33.0182	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	10.5648 12.4711	g/hr g/hr	0.19 0.44
<b>Temporary Electrical Power Subtotal</b>														<b>0.63</b>
<b>02 - Relocations Total</b>														<b>4.68</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.5648 2.0693 12.4711 0.0000	g/hr g/hp-hr g/hr g/hr	0.19 3.65 0.22 --
<b>Mobilization and Demobilization Subtotal</b>														<b>4.06</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	2.2674 1.1116 146.1724 10.5648 12.4711 33.0182	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.5975 0.6274 1.6565 33.0182 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.6274 0.7376 0.6411 10.5648 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.6274 10.5648 1.6405 12.4711	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	3.78	3.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.79	4.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.28	3.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.58	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>13.94</b>	<b>13.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>13.94</b>	<b>13.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>	--	--
6	Clearing and Grubbing	8.80	8.80	8.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.64	2.64	2.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.16	1.16	1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>59.71</b>	<b>59.71</b>	<b>59.71</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	4.52	4.52	4.52	4.52	4.52	4.52	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	6.64	6.64	6.64	6.64	6.64	6.64	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	5.24	5.24	5.24	5.24	5.24	5.24	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>27.52</b>	<b>27.52</b>	<b>27.52</b>	<b>27.52</b>	<b>27.52</b>	<b>27.52</b>	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	3.32	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	21.18	21.18	21.18	21.18	21.18	21.18	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	2.11	2.11	2.11	2.11	2.11	2.11	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>28.34</b>	<b>28.34</b>	<b>28.34</b>	<b>28.34</b>	<b>28.34</b>	<b>28.34</b>	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	3.32	3.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	4.54	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>8.71</b>	<b>8.71</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	--	--	--	--	--	0.19	0.0002
		--	--	--	--	--	3.65	0.0036
		--	--	--	--	--	0.22	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>4.06</b>	<b>0.0041</b>
2	Fremont Weir Demo	--	--	--	--	--	--	0.0227
		--	--	--	--	--	--	0.0287
		--	--	--	--	--	--	0.0197
		--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0035
		--	--	--	--	--	0.0079	
		--	--	--	--	--	<b>0.0836</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	2.11	--	0.0042
		--	--	--	--	0.19	--	0.0004
		--	--	--	--	0.22	--	0.0004
		--	--	--	--	2.91	--	0.0058
		--	--	--	--	<b>5.43</b>	--	<b>0.0109</b>
4	Temporary Electrical Power	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0003</b>
		--	--	--	--	<b>5.43</b>	<b>4.06</b>	<b>0.0989</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0041</b>
6	Clearing and Grubbing	--	--	--	--	--	--	0.0704
		--	--	--	--	--	--	0.0439
		--	--	--	--	--	--	0.3300
		--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	0.0211
		--	--	--	--	--	0.0093	
		--	--	--	--	--	<b>0.4777</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0791
		--	--	--	--	--	--	0.1162
		--	--	--	--	--	--	0.1677
		--	--	--	--	--	--	0.0917
		--	--	--	--	--	--	0.0269
		--	--	--	--	--	<b>0.4816</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	0.0564
		--	--	--	--	--	--	0.3601
		--	--	--	--	--	--	0.0359
		--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	0.0262
		--	--	--	--	--	<b>0.4818</b>	
9	Earthen Backfill	--	--	--	--	--	--	0.0149
		--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	0.0204
		--	--	--	--	--	--	0.0030
		--	--	--	--	--	<b>0.0392</b>	

**Table L1-128. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.5975 0.6597 33.0182 12.4711	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.5975 0.6597 33.0182 12.4711	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.5975 0.6597 12.4711 33.0182	g/hp-hr g/hp-hr g/hr g/hr	--
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	1.9153 12.4711	g/hp-hr g/hr	--
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														4.06
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.5648 2.0693 12.4711 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.5975 0.6274 0.5975 33.0182 1.9417 2.3329 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.5648 2.0693 12.4711 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	10.5648 0.7660 12.4711	g/hr g/hp-hr g/hr	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.3329 12.4711	g/hp-hr g/hr	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.5975 0.6274 1.6565 33.0182 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--
<b>Excavation (Wet Conditions) Subtotal</b>														--

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	5.42	5.42	5.42	5.42	5.42	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	3.49	3.49	3.49	3.49	3.49	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	13.39	13.39	13.39	13.39	13.39	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.10	1.10	1.10	1.10	1.10	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>23.40</b>	<b>23.40</b>	<b>23.40</b>	<b>23.40</b>	<b>23.40</b>	--	--	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.42	5.42	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.49	3.49	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.39	13.39	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	1.10	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>23.40</b>	<b>23.40</b>	--	--	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	10.83	10.83	10.83	10.83	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	6.98	6.98	6.98	6.98	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	2.20	2.20	2.20	2.20	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	26.79	26.79	26.79	26.79	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.28	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.88	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.16</b>	
		<b>59.71</b>	<b>59.71</b>	<b>59.71</b>	<b>28.34</b>	<b>37.05</b>	<b>64.57</b>	<b>55.86</b>	<b>55.86</b>	<b>55.86</b>	<b>27.52</b>	<b>27.52</b>	<b>46.80</b>	<b>70.20</b>	<b>70.20</b>	<b>70.20</b>	<b>46.80</b>	<b>46.80</b>	<b>4.06</b>	--	<b>4.16</b>	
<b>11 - Levees and Floodwalls</b>																						
14	Mobilization and Demobilization	--	--	--	--	--	--	0.19	--	--	--	0.19	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.65	3.65	3.65	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.22	0.22	0.22	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.19</b>	<b>3.87</b>	<b>3.87</b>	<b>3.87</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	4.52	4.52	4.52	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	2.71	2.71	2.71	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.58	0.58	0.58	--	--	--	--	--	--	--	--	--	--	
		--	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	1.10	1.10	1.10	--	--	--	--	--	--	--	--	--	--	
		--	<b>3.46</b>	--	--	--	--	--	<b>12.23</b>	<b>12.23</b>	<b>12.23</b>	--	--	--	--	--	--	--	--	--	--	
		--	<b>3.46</b>	--	--	--	--	<b>0.19</b>	<b>16.10</b>	<b>16.10</b>	<b>16.10</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																						
16	Mobilization and Demobilization	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	1.32	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>4.49</b>	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	
		--	--	--	--	--	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	
		--	--	--	--	--	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	
19	Excavation (Wet Conditions)	--	--	--	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	6.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	9.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	5.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>27.52</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	0.0677
		--	--	--	--	--	--	0.0436
		--	--	--	--	--	--	0.1674
		--	--	--	--	--	--	0.0137
		--	--	--	--	--	--	<b>0.2925</b>
11	Riprap - Class 3	--	--	--	--	--	--	0.0271
		--	--	--	--	--	--	0.0175
		--	--	--	--	--	--	0.0670
		--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	<b>0.1170</b>
12	RSP Bedding Material	--	--	--	--	--	--	0.1029
		--	--	--	--	--	--	0.0663
		--	--	--	--	--	--	0.0209
		--	--	--	--	--	--	0.2545
		--	--	--	--	--	--	<b>0.4446</b>
13	Erosion Control Seeding	3.28	3.28	--	--	--	--	0.0262
		0.88	0.88	--	--	--	--	0.0070
		<b>4.16</b>	<b>4.16</b>	--	--	--	--	<b>0.0333</b>
		<b>4.16</b>	<b>4.16</b>	--	--	--	--	<b>2.3717</b>
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0041</b>
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	0.0294
		--	--	--	--	--	--	0.0216
		--	--	--	--	--	--	0.0176
		--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	0.0020
		--	--	--	--	3.46	--	0.0225
		--	--	--	--	--	--	0.0071
--	--	--	--	<b>3.46</b>	--	<b>0.1040</b>		
--	--	--	--	<b>3.46</b>	--	<b>0.1080</b>		
<b>15 - Floodway Control and Diversion Structures</b>								
16	Mobilization and Demobilization	--	--	--	--	0.19	--	0.0002
		--	--	--	--	3.65	--	0.0036
		--	--	--	--	0.22	--	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	<b>4.06</b>	--	<b>0.0041</b>
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	0.0269
		--	--	--	--	--	--	0.0119
		--	--	--	--	--	--	<b>0.0404</b>
18	Construction Site Dewatering (Pumping)	3.46	3.46	3.46	3.46	--	--	0.2074
		0.66	0.66	0.66	0.66	--	--	0.0396
		<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	--	--	<b>0.2470</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0090
		--	--	--	--	--	--	0.0133
		--	--	--	--	--	--	0.0192
		--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	0.0031
--	--	--	--	--	--	<b>0.0550</b>		



**Table L1-128. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	10.5648 0.7660 12.4711	g/hr g/hp-hr g/hr	--
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.4386 0.7660 2.3329 10.5648 1.9153 0.6129 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.3329 1.4921 10.5648 12.4711	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.4921 10.5648 12.4711	g/hp-hr g/hr g/hr	--
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.4386 33.0182 12.4711	g/hp-hr g/hr g/hr	--
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.5648 2.0693 12.4711 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.4386 0.7660 2.3329 10.5648 1.9153 0.6129 12.4711	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.3329 1.4921 10.5648 12.4711	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.4386 10.5648 12.4711	g/hp-hr g/hr g/hr	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																					
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	
20	Sheet Pile Wall	--	--	--	--	--	--	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	2.32	2.32	2.32	2.32	2.32	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	2.99	2.99	2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	3.46	3.46	3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	3.28	3.28	3.28	3.28	3.28	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	6.79	6.79	6.79	6.79	6.79	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.76	1.76	1.76	1.76	1.76	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	--	--	--	--	--	--	--	--	--	--	
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	10.37	10.37	--	--	--	--	10.37	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	1.12	1.12	--	--	--	--	1.12	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	4.62	4.62	--	--	--	--	4.62	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>16.74</b>	<b>16.74</b>	--	--	--	--	<b>16.74</b>	--	--	--	--	
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.64	2.64	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.81</b>	<b>3.81</b>	--	--	--	--	--	--	
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.48	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.58	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.88	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.94</b>	
		--	<b>4.06</b>	<b>4.49</b>	<b>4.49</b>	<b>4.49</b>	<b>31.64</b>	<b>29.75</b>	<b>29.75</b>	<b>25.26</b>	<b>25.26</b>	<b>42.00</b>	<b>20.85</b>	<b>4.12</b>	<b>7.92</b>	<b>7.92</b>	<b>4.12</b>	<b>20.85</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>9.06</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	0.19	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	3.65	--	--	--	3.65	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--	0.22	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>	--	--	--	<b>4.06</b>	--	--	--	--	
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	2.32	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.99	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	3.28	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	6.79	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.76	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>21.15</b>	--	--	--	--	--	--	--	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.54	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.58</b>	--	--	--	--	--	--	--	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.48	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.95</b>	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>	<b>21.15</b>	<b>5.58</b>	<b>4.95</b>	<b>4.06</b>	--	--	--	--	

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity								Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Sheet Pile Wall	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0104
		--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	<b>0.0157</b>	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0325
		--	--	--	--	--	--	--	0.0418
		--	--	--	--	--	--	--	0.0484
		--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	0.0459
		--	--	--	--	--	--	--	0.0950
		--	--	--	--	--	--	0.0246	
		--	--	--	--	--	--	<b>0.2960</b>	
22	Headworks Structure	--	--	--	--	--	--	--	0.0933
		--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0101
		--	--	--	--	--	--	--	0.0416
		--	--	--	--	--	--	<b>0.1506</b>	
23	Headworks Channel Transition	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	0.0132
		--	--	--	--	--	--	<b>0.0190</b>	
24	Hinged Bottom Gates	3.48	3.48	3.48	--	--	--	--	0.0261
		0.58	0.58	0.58	--	--	--	--	0.0044
		0.88	0.88	0.88	--	--	--	--	0.0066
		<b>4.94</b>	<b>4.94</b>	<b>4.94</b>	--	--	--	--	<b>0.0371</b>
		<b>9.06</b>	<b>9.06</b>	<b>9.06</b>	<b>4.12</b>	<b>4.06</b>	--	<b>0.8650</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0041</b>	
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	0.0035
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	0.0018	
		--	--	--	--	--	--	<b>0.0211</b>	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0028</b>	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	<b>0.0074</b>	
		--	--	--	--	--	--	<b>0.0354</b>	

Table L1-128. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	10.5648	g/hr	0.19
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				2.0693	g/hp-hr	3.65
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				12.4711	g/hr	0.22
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
				<b>Mobilization and Demobilization Subtotal</b>										<b>4.06</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	1.9690	g/hp-hr	--
				Scraper	Scrapers	1	367	-				0.7376	g/hp-hr	--
				Motor Grader	Graders	1	187	-				0.6411	g/hp-hr	--
				Compactor	Rollers	1	80	-				1.8537	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				10.5648	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				1.6405	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				12.4711	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				2.3329	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.4921	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				2.0693	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				10.5648	g/hr	--
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>										<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	2.3329	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				1.4921	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				10.5648	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				12.4711	g/hr	--
				<b>Concrete Duct Banc Subtotal</b>										<b>--</b>
				<b>19 - Buildings, Grounds, and Utilities Total</b>										<b>4.06</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	10.5648	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				2.0693	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				12.4711	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
				<b>Mobilization and Demobilization Subtotal</b>										<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.0693	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				12.4711	g/hr	--
				<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>										<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.0693	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				12.4711	g/hr	--
				<b>CMU Building Mechanical Equipment Subtotal</b>										<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.4711	g/hr	--
				<b>Electrical Control Equipment CMU Building Subtotal</b>										<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.4711	g/hr	--
				<b>Electrical Power Equipment CMU Building Subtotal</b>										<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.4711	g/hr	--
				<b>Communication Equipment Subtotal</b>										<b>--</b>
				<b>20 -Permanent Operating Equipment Total</b>										<b>--</b>
<b>GRAND TOTAL</b>														<b>12.79</b>

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	--	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
							<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	5.73	5.73	5.73	5.73	5.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.77	4.77	4.77	4.77	4.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.11	2.11	2.11	2.11	2.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.62	2.62	2.62	2.62	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.54	4.54	4.54	4.54	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.46	3.46	3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.65	3.65	3.65	3.65	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>5.58</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>34.58</b>	<b>29.01</b>	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																					<b>4.06</b>	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
																						<b>4.31</b>
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
																						<b>4.31</b>
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
																						<b>0.66</b>
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66
																						<b>0.66</b>
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																						--
																						<b>4.06</b>
																						<b>9.94</b>
<b>GRAND TOTAL</b>		<b>102.66</b>	<b>110.17</b>	<b>93.21</b>	<b>67.42</b>	<b>70.54</b>	<b>100.26</b>	<b>85.80</b>	<b>101.72</b>	<b>97.22</b>	<b>68.88</b>	<b>69.71</b>	<b>67.65</b>	<b>78.37</b>	<b>99.27</b>	<b>83.70</b>	<b>55.87</b>	<b>71.71</b>	<b>8.17</b>	<b>4.12</b>	<b>8.17</b>	<b>23.15</b>

Table L1-128. CO Exhaust Emissions from Offroad Co

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>								
29	Mobilization and Demobilization	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0041</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	0.0859
		--	--	--	--	--	--	0.0716
		--	--	--	--	--	--	0.0317
		--	--	--	--	--	--	0.0392
		--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	0.0681
		--	--	--	--	--	--	0.0231
		--	--	--	--	--	--	0.0518
		--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	0.0547
		--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	<b>0.4351</b>
31	Concrete Duct Banc	--	--	--	--	--	--	0.0069
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	<b>0.0112</b>
		--	--	--	--	--	--	<b>0.4503</b>
<b>20 -Permanent Operating Equipment</b>								
32	Mobilization and Demobilization	--	--	--	--	0.19	--	0.0002
		--	--	--	--	3.65	--	0.0036
		--	--	--	--	0.22	--	0.0002
		--	--	--	--	--	--	--
		--	--	--	--	<b>4.06</b>	--	<b>0.0041</b>
33	Mechanical Hydraulic Cylinders & Housing	3.65	3.65	3.65	3.65	--	--	0.0547
		0.66	0.66	0.66	0.66	--	--	0.0099
		<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	--	--	<b>0.0646</b>
34	CMU Building Mechanical Equipment	3.65	3.65	3.65	3.65	--	--	0.0547
		0.66	0.66	0.66	0.66	--	--	0.0099
		<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	--	--	<b>0.0646</b>
35	Electrical Control Equipment CMU Building	0.66	0.66	0.66	0.66	--	--	0.0099
		<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	--	--	<b>0.0099</b>
36	Electrical Power Equipment CMU Building	0.66	0.66	0.66	0.66	--	--	0.0099
		<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	--	--	<b>0.0099</b>
37	Communication Equipment	--	--	0.66	0.66	--	--	0.0040
		--	--	<b>0.66</b>	<b>0.66</b>	--	--	<b>0.0040</b>
		<b>9.94</b>	<b>9.94</b>	<b>10.60</b>	<b>10.60</b>	<b>4.06</b>	--	<b>0.1571</b>
<b>GRAND TOTAL</b>		<b>23.15</b>	<b>23.15</b>	<b>19.66</b>	<b>14.71</b>	<b>17.00</b>	<b>4.06</b>	<b>4.0864</b>

**Table L1-129. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1718 0.0040 0.0468 0.0000	g/hr g/hp-hr g/hr g/hr	0.00 0.01 0.00 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.01</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0032 0.0035 0.0037 0.1718 0.2206 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0039 0.1718 0.0468 0.2206	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.1718 0.0468	g/hr g/hr	0.00 0.00
<b>Temporary Electrical Power Subtotal</b>														<b>0.00</b>
<b>02 - Relocations Total</b>														<b>0.02</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1718 0.0040 0.0468 0.0000	g/hr g/hp-hr g/hr g/hr	0.00 0.01 0.00 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.01</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.0043 0.0026 0.0163 0.1718 0.0468 0.2206	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0032 0.0033 0.0035 0.2206 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0033 0.0040 0.0039 0.1718 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0033 0.1718 0.0036 0.0468	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--
6	Clearing and Grubbing	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0003</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.00	--	0.0000
		--	--	--	--	0.00	--	0.0000
		--	--	--	--	0.02	--	0.0000
		--	--	--	--	<b>0.04</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0005</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0021</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0026</b>
9	Earthen Backfill	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>

**Table L1-129. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0032 0.0036 0.2206 0.0468	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0032 0.0036 0.2206 0.0468	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0032 0.0036 0.0468 0.2206	g/hp-hr g/hp-hr g/hr g/hr	--
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0037 0.0468	g/hp-hr g/hr	--
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														<b>0.01</b>
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1718 0.0040 0.0468 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0032 0.0033 0.0032 0.2206 0.0049 0.0049 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1718 0.0040 0.0468 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.1718 0.0048 0.0468	g/hr g/hp-hr g/hr	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0049 0.0468	g/hp-hr g/hr	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0032 0.0033 0.0035 0.2206 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--
<b>Excavation (Wet Conditions) Subtotal</b>														--

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	--	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	0.18	0.18	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	--	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
		<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.15</b>	<b>0.19</b>	<b>0.31</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.12</b>	<b>0.12</b>	<b>0.28</b>	<b>0.42</b>	<b>0.42</b>	<b>0.42</b>	<b>0.28</b>	<b>0.28</b>	<b>0.01</b>	--	--	<b>0.01</b>
<b>11 - Levees and Floodwalls</b>																						
14	Mobilization and Demobilization	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	<b>0.00</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																						
16	Mobilization and Demobilization	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0018</b>	
11	Riprap - Class 3	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0007</b>	
12	RSP Bedding Material	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0017
		--	--	--	--	--	<b>0.0027</b>	
13	Erosion Control Seeding	0.01	0.01	--	--	--	--	0.0001
		0.00	0.00	--	--	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	--	--	--	--	<b>0.0001</b>
		<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0106</b>	
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	<b>0.01</b>	<b>0.0005</b>	
		--	--	--	--	<b>0.01</b>	<b>0.0005</b>	
<b>15 - Floodway Control and Diversion Structures</b>								
16	Mobilization and Demobilization	--	--	--	--	0.00	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>0.01</b>	<b>0.0000</b>	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0002</b>	
18	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	--	--	0.0004
		0.00	0.00	0.00	0.00	--	--	0.0001
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0006</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	<b>0.0002</b>	

**Table L1-129. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.1718 0.0048 0.0468	g/hr g/hp-hr g/hr	-- -- --
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0024 0.0048 0.0049 0.1718 0.0037 0.0032 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.0049 0.0038 0.1718 0.0468	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0038 0.1718 0.0468	g/hp-hr g/hr g/hr	-- -- --
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0024 0.2206 0.0468	g/hp-hr g/hr g/hr	-- -- --
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1718 0.0040 0.0468 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0024 0.0048 0.0049 0.1718 0.0037 0.0032 0.0468	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.0049 0.0038 0.1718 0.0468	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0024 0.1718 0.0468	g/hp-hr g/hr g/hr	-- -- --
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	
20	Sheet Pile Wall	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	--	--	--	
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	
		--	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.11</b>	<b>0.11</b>	<b>0.16</b>	<b>0.07</b>	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	<b>0.07</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.04</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	0.00	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	<b>0.01</b>	--	--	--	--	
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	--	--	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	--	--	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.03</b>	<b>0.01</b>	--	--	--	--	

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0013</b>
22	Headworks Structure	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0005</b>
23	Headworks Channel Transition	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>
24	Hinged Bottom Gates	0.02	0.02	0.02	--	--	--	0.0001
		0.00	0.00	0.00	--	--	--	0.0000
		0.00	0.00	0.00	--	--	--	0.0000
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0002</b>
		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.01</b>	<b>0.01</b>	--	<b>0.0034</b>
<b>08 - Roads, Railroads, and Bridges</b>								
25	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	--	<b>0.0002</b>

**Table L1-129. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1718	g/hr	0.00
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0040	g/hp-hr	0.01
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.0468	g/hr	0.00
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>0.01</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.0039	g/hp-hr	--
				Scraper	Scrapers	1	367	-				0.0040	g/hp-hr	--
				Motor Grader	Graders	1	187	-				0.0039	g/hp-hr	--
				Compactor	Rollers	1	80	-				0.0037	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				0.1718	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				0.0036	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.0468	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				0.0049	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0038	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0040	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				0.1718	g/hr	--
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.0049	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0038	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				0.1718	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.0468	g/hr	--
<b>Concrete Duct Banc Subtotal</b>														<b>--</b>
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>0.01</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1718	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0040	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.0468	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.0468	g/hr	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.0468	g/hr	--
<b>CMU Building Mechanical Equipment Subtotal</b>														<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0468	g/hr	--
<b>Electrical Control Equipment CMU Building Subtotal</b>														<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0468	g/hr	--
<b>Electrical Power Equipment CMU Building Subtotal</b>														<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.0468	g/hr	--
<b>Communication Equipment Subtotal</b>														<b>--</b>
<b>20 -Permanent Operating Equipment Total</b>														<b>--</b>
<b>GRAND TOTAL</b>														<b>0.04</b>



Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.09</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>0.20</b>	<b>0.22</b>	<b>0.18</b>	<b>0.29</b>	<b>0.31</b>	<b>0.45</b>	<b>0.41</b>	<b>0.48</b>	<b>0.45</b>	<b>0.30</b>	<b>0.29</b>	<b>0.35</b>	<b>0.44</b>	<b>0.55</b>	<b>0.48</b>	<b>0.32</b>	<b>0.36</b>	<b>0.02</b>	<b>0.01</b>	<b>0.02</b>	<b>0.07</b>

Table L1-129. SO2 Exhaust Emissions from Offroad C

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>								
29	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0014</b>
31	Concrete Duct Banc	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>								
32	Mobilization and Demobilization	--	--	--	--	0.00	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
33	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
34	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
35	Electrical Control Equipment CMU Building	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
36	Electrical Power Equipment CMU Building	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
37	Communication Equipment	--	--	0.00	0.00	--	--	0.0000
		--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.07</b>	<b>0.07</b>	<b>0.06</b>	<b>0.04</b>	<b>0.07</b>	<b>0.01</b>	<b>0.0168</b>

**Table L1-130. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.2051 0.0038 0.7714 0.0000	g/hr g/hp-hr g/hr g/hr	0.04 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.06</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0036 0.0038 0.0040 2.2051 1.5952 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0038 2.2051 0.7714 1.5952	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.2051 0.7714	g/hr g/hr	0.04 0.03
<b>Temporary Electrical Power Subtotal</b>														<b>0.07</b>
<b>02 - Relocations Total</b>														<b>0.13</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.2051 0.0038 0.7714 0.0000	g/hr g/hp-hr g/hr g/hr	0.04 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.06</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.0045 0.0303 0.2300 2.2051 0.7714 1.5952	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0036 0.0040 0.0038 1.5952 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0040 0.0045 0.0038 2.2051 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0040 2.2051 0.0034 0.7714	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	--	--	--
6	Clearing and Grubbing	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.53</b>	<b>0.53</b>	<b>0.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.06</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0011</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.04	--	0.0001
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.14	--	0.0003
		--	--	--	--	<b>0.21</b>	--	<b>0.0004</b>
4	Temporary Electrical Power	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	<b>0.21</b>	<b>0.06</b>	<b>0.0016</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0042</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0044
		--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	<b>0.0077</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	<b>0.0051</b>
9	Earthen Backfill	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0005</b>

**Table L1-130. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0036 0.0040 1.5952 0.7714	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0036 0.0040 1.5952 0.7714	g/hp-hr g/hp-hr g/hr g/hr	--
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0036 0.0040 0.7714 1.5952	g/hp-hr g/hp-hr g/hr g/hr	--
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0040 0.7714	g/hp-hr g/hr	--
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														<b>0.06</b>
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.2051 0.0038 0.7714 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0036 0.0040 0.0036 1.5952 0.0906 0.0071 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.2051 0.0038 0.7714 0.0000	g/hr g/hp-hr g/hr g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.2051 0.0046 0.7714	g/hr g/hp-hr g/hr	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0071 0.7714	g/hp-hr g/hr	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0036 0.0040 0.0038 1.5952 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--
<b>Excavation (Wet Conditions) Subtotal</b>														--

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.65	0.65	0.65	0.65	0.65	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.77</b>	<b>0.77</b>	<b>0.77</b>	<b>0.77</b>	<b>0.77</b>	--	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.65	0.65	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.77</b>	<b>0.77</b>	--	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	1.29	1.29	1.29	1.29	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	--	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>
		<b>0.53</b>	<b>0.53</b>	<b>0.53</b>	<b>0.30</b>	<b>0.41</b>	<b>0.85</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.44</b>	<b>0.44</b>	<b>1.54</b>	<b>2.31</b>	<b>2.31</b>	<b>2.31</b>	<b>1.54</b>	<b>1.54</b>	<b>0.06</b>	--	--	<b>0.06</b>
<b>11 - Levees and Floodwalls</b>																						
14	Mobilization and Demobilization	--	--	--	--	--	--	0.04	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.04</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.04</b>	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	--	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	--	--	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	<b>0.04</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.04</b>	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																						
16	Mobilization and Demobilization	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
		--	--	--	--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0081
		--	--	--	--	--	--	0.0009
		--	--	--	--	--	<b>0.0096</b>	
11	Riprap - Class 3	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	<b>0.0038</b>	
12	RSP Bedding Material	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	0.0123
		--	--	--	--	--	<b>0.0146</b>	
13	Erosion Control Seeding	0.01	0.01	--	--	--	--	0.0001
		0.05	0.05	--	--	--	--	0.0004
		<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.0005</b>
		<b>0.06</b>	<b>0.06</b>	--	--	--	<b>0.0461</b>	
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.0001</b>	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	0.01	--	0.0001
		--	--	--	--	<b>0.01</b>	<b>0.0012</b>	
		--	--	--	--	<b>0.01</b>	<b>0.0013</b>	
<b>15 - Floodway Control and Diversion Structures</b>								
16	Mobilization and Demobilization	--	--	--	--	0.04	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>0.06</b>	<b>0.0001</b>	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	<b>0.0012</b>	
18	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	--	--	0.0006
		0.04	0.04	0.04	0.04	--	--	0.0024
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0031</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0009</b>	



**Table L1-130. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.2051 0.0046 0.7714	g/hr g/hp-hr g/hr	-- -- --
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0027 0.0046 0.0071 2.2051 0.0040 0.0041 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.0071 0.0696 2.2051 0.7714	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0696 2.2051 0.7714	g/hp-hr g/hr g/hr	-- -- --
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0027 1.5952 0.7714	g/hp-hr g/hr g/hr	-- -- --
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.2051 0.0038 0.7714 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0027 0.0046 0.0071 2.2051 0.0040 0.0041 0.7714	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.0071 0.0696 2.2051 0.7714	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0027 2.2051 0.7714	g/hp-hr g/hr g/hr	-- -- --
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																					
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	
20	Sheet Pile Wall	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--	
22	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.23	0.23	--	--	--	--	0.23	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--	0.29	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	--	--	--	--	<b>0.58</b>	--	--	--	--	
23	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.34</b>	<b>0.34</b>	--	--	--	--	--	--	
24	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	
		--	<b>0.06</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.49</b>	<b>0.51</b>	<b>0.51</b>	<b>0.37</b>	<b>0.37</b>	<b>0.95</b>	<b>0.63</b>	<b>0.05</b>	<b>0.39</b>	<b>0.39</b>	<b>0.05</b>	<b>0.63</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.16</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
25	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	0.04	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	0.01	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	--	--	--	<b>0.06</b>	--	--	--	--	
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	--	--	--	--	--	--	--	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.19</b>	--	--	--	--	--	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.17</b>	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.32</b>	<b>0.19</b>	<b>0.17</b>	<b>0.06</b>	--	--	--	--	

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0005</b>
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	<b>0.0045</b>
22	Headworks Structure	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	<b>0.0052</b>
23	Headworks Channel Transition	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0017</b>
24	Hinged Bottom Gates	0.02	0.02	0.02	--	--	--	0.0002
		0.03	0.03	0.03	--	--	--	0.0002
		0.05	0.05	0.05	--	--	--	0.0004
		<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	<b>0.0008</b>
		<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.05</b>	<b>0.06</b>	--	<b>0.0179</b>
<b>08 - Roads, Railroads, and Bridges</b>								
25	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0003</b>
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0003</b>
		--	--	--	--	--	--	<b>0.0007</b>

**Table L1-130. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.2051	g/hr	0.04
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0038	g/hp-hr	0.01
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.7714	g/hr	0.01
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>0.06</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.0043	g/hp-hr	--
				Scraper	Scrapers	1	367	-				0.0045	g/hp-hr	--
				Motor Grader	Graders	1	187	-				0.0038	g/hp-hr	--
				Compactor	Rollers	1	80	-				0.0037	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				2.2051	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				0.0034	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.7714	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				0.0071	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0696	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0038	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				2.2051	g/hr	--
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.0071	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0696	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				2.2051	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.7714	g/hr	--
<b>Concrete Duct Banc Subtotal</b>														<b>--</b>
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>0.06</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.2051	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0038	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.7714	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0038	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.7714	g/hr	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0038	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.7714	g/hr	--
<b>CMU Building Mechanical Equipment Subtotal</b>														<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.7714	g/hr	--
<b>Electrical Control Equipment CMU Building Subtotal</b>														<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.7714	g/hr	--
<b>Electrical Power Equipment CMU Building Subtotal</b>														<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.7714	g/hr	--
<b>Communication Equipment Subtotal</b>														<b>--</b>
<b>20 -Permanent Operating Equipment Total</b>														<b>--</b>
<b>GRAND TOTAL</b>														<b>0.24</b>

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.46</b>	<b>0.27</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.05</b>
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.05</b>
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.04</b>
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.04</b>
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.18</b>
<b>GRAND TOTAL</b>		<b>0.99</b>	<b>1.06</b>	<b>0.94</b>	<b>0.90</b>	<b>0.82</b>	<b>1.40</b>	<b>1.29</b>	<b>1.43</b>	<b>1.29</b>	<b>0.99</b>	<b>1.43</b>	<b>2.17</b>	<b>2.42</b>	<b>3.02</b>	<b>2.89</b>	<b>1.76</b>	<b>2.23</b>	<b>0.11</b>	<b>0.05</b>	<b>0.11</b>	<b>0.39</b>

Table L1-130. PM10 Exhaust Emissions from Offroad (

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>								
29	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	<b>0.0040</b>
31	Concrete Duct Banc	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0004</b>
		--	--	--	--	--	--	<b>0.0045</b>
<b>20 -Permanent Operating Equipment</b>								
32	Mobilization and Demobilization	--	--	--	--	0.04	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>0.06</b>	--	<b>0.0001</b>
33	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	--	--	0.0001
		0.04	0.04	0.04	0.04	--	--	0.0006
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
34	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	--	--	0.0001
		0.04	0.04	0.04	0.04	--	--	0.0006
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
35	Electrical Control Equipment CMU Building	0.04	0.04	0.04	0.04	--	--	0.0006
		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	<b>0.0006</b>
36	Electrical Power Equipment CMU Building	0.04	0.04	0.04	0.04	--	--	0.0006
		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	<b>0.0006</b>
37	Communication Equipment	--	--	0.04	0.04	--	--	0.0002
		--	--	<b>0.04</b>	<b>0.04</b>	--	--	<b>0.0002</b>
		<b>0.18</b>	<b>0.18</b>	<b>0.22</b>	<b>0.22</b>	<b>0.06</b>	--	<b>0.0030</b>
<b>GRAND TOTAL</b>		<b>0.39</b>	<b>0.39</b>	<b>0.37</b>	<b>0.27</b>	<b>0.33</b>	<b>0.06</b>	<b>0.0751</b>

**Table L1-131. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>02 - Relocations</b>														
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.9499 0.0035 0.3620 0.0000	g/hr g/hp-hr g/hr g/hr	0.02 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.03</b>
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.0033 0.0035 0.0037 0.9499 0.6688 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0035 0.9499 0.3620 0.6688	g/hp-hr g/hr g/hr g/hr	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.9499 0.3620	g/hr g/hr	0.02 0.01
<b>Temporary Electrical Power Subtotal</b>														<b>0.03</b>
<b>02 - Relocations Total</b>														<b>0.06</b>
<b>09 - Channels and Canals</b>														
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.9499 0.0035 0.3620 0.0000	g/hr g/hp-hr g/hr g/hr	0.02 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														<b>0.03</b>
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16	0.0041 0.0279 0.2116 0.9499 0.3620 0.6688	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35	0.0033 0.0037 0.0035 0.6688 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34	0.0037 0.0042 0.0035 0.9499 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9	0.0042 0.9499 2.0287 0.3620	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>

Table L1-131. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																			
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--
6	Clearing and Grubbing	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.14	0.14	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	5.62	5.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>5.68</b>	<b>5.68</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--



**Table L1-131. PM2.5 Exhaust Emissions from Offroad**

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.03</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
								0.0002
								<b>0.0006</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.02	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.06	--	0.0001
								<b>0.0002</b>
4	Temporary Electrical Power	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
								<b>0.0000</b>
								<b>0.0009</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
								<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0006
								0.0002
								<b>0.0028</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	0.0008
								<b>0.0041</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0008
								<b>0.0036</b>
9	Earthen Backfill	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0253
		--	--	--	--	--	--	0.0001
								<b>0.0255</b>

**Table L1-131. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25	0.0033 0.0036 0.6688 0.3620	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Riprap - Class 2 Subtotal</b>														--
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10	0.0033 0.0036 0.6688 0.3620	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Riprap - Class 3 Subtotal</b>														--
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19	0.0033 0.0036 0.3620 0.6688	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>RSP Bedding Material Subtotal</b>														--
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16	0.0037 0.3620	g/hp-hr g/hr	-- --
<b>Erosion Control Seeding Subtotal</b>														--
<b>09 - Channels and Canals Total</b>														<b>0.03</b>
<b>11 - Levees and Floodwalls</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.9499 0.0036 0.3620 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13	0.0037 0.7097 0.0000 0.6688 0.0000 2.0287 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>														--
<b>11 - Levees and Floodwalls Total</b>														--
<b>15 - Floodway Control and Diversion Structures</b>														
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.9499 0.0035 0.3620 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.9499 0.0042 0.3620	g/hr g/hp-hr g/hr	-- -- --
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0066 0.3620	g/hp-hr g/hr	-- --
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0033 0.0037 0.0035 0.6688 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														--



**Table L1-131. PM2.5 Exhaust Emissions from Offroad**

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	<b>0.0044</b>	
11	Riprap - Class 3	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	<b>0.0018</b>	
12	RSP Bedding Material	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0052
		--	--	--	--	--	<b>0.0067</b>	
13	Erosion Control Seeding	0.01	0.01	--	--	--	--	0.0001
		0.03	0.03	--	--	--	--	0.0002
		<b>0.03</b>	<b>0.03</b>	--	--	--	--	<b>0.0003</b>
		<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0492</b>	
<b>11 - Levees and Floodwalls</b>								
14	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.0000</b>	
15	Soil Cement Bentonite Cutoff Wall	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0244
		--	--	--	--	--	--	--
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--
		--	--	--	--	3.01	--	0.0195
		--	--	--	--	3.01	0.0002	
		--	--	--	--	<b>3.01</b>	<b>0.0444</b>	
		--	--	--	--	<b>3.01</b>	<b>0.0444</b>	
<b>15 - Floodway Control and Diversion Structures</b>								
16	Mobilization and Demobilization	--	--	--	--	0.02	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>0.03</b>	<b>0.0000</b>	
17	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	<b>0.0006</b>	
18	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	--	--	0.0006
		0.02	0.02	0.02	0.02	--	--	0.0011
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0017</b>
19	Excavation (Wet Conditions)	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	<b>0.0005</b>	

**Table L1-131. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.9499 0.0042 0.3620	g/hr g/hp-hr g/hr	-- -- --
<b>Sheet Pile Wall Subtotal</b>														--
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28	0.0025 0.0042 0.0066 0.9499 0.0037 0.0037 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Headworks Structure Concrete Piles Subtotal</b>														--
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.0066 0.0640 0.9499 0.3620	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Headworks Structure Subtotal</b>														--
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0640 0.9499 0.3620	g/hp-hr g/hr g/hr	-- -- --
<b>Headworks Channel Transition Subtotal</b>														--
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15	0.0025 0.6688 0.3620	g/hp-hr g/hr g/hr	-- -- --
<b>Hinged Bottom Gates Subtotal</b>														--
<b>15 - Floodway Control and Diversion Structures Total</b>														--
<b>08 - Roads, Railroads, and Bridges</b>														
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.9499 0.0035 0.3620 0.0000	g/hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														--
26	Pedestrian Bridge Concrete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2	0.0025 0.0042 0.0066 0.9499 0.0037 0.0037 0.3620	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	-- -- -- -- -- -- --
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.0066 0.0640 0.9499 0.3620	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3	0.0025 0.9499 0.3620	g/hp-hr g/hr g/hr	-- -- --
<b>Pedestrian Bridge Span Installation Subtotal</b>														--
<b>08 - Roads, Railroads, and Bridges Total</b>														--



**Table L1-131. PM2.5 Exhaust Emissions from Offroad**

#	Activity								Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Sheet Pile Wall	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0003</b>	
21	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	<b>0.0026</b>	
22	Headworks Structure	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0026</b>	
23	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.0008</b>	
24	Hinged Bottom Gates	0.02	0.02	0.02	--	--	--	--	0.0001
		0.01	0.01	0.01	--	--	--	--	0.0001
		0.03	0.03	0.03	--	--	--	--	0.0002
		<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.0004</b>
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.03</b>	<b>0.03</b>	--	<b>0.0096</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
25	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>	
26	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0002</b>	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>	
28	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
		--	--	--	--	--	--	<b>0.0004</b>	

**Table L1-131. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr
<b>19 - Buildings, Grounds, and Utilities</b>														
29	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.9499	g/hr	0.02
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0042	g/hp-hr	0.01
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.3620	g/hr	0.01
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>0.03</b>
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.0040	g/hp-hr	--
				Scraper	Scrapers	1	367	-				0.0042	g/hp-hr	--
				Motor Grader	Graders	1	187	-				0.0035	g/hp-hr	--
				Compactor	Rollers	1	80	-				0.0034	g/hp-hr	--
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-				0.9499	g/hr	--
				10 TN Smooth Roller	Rollers	1	157	-				0.0031	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.3620	g/hr	--
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-				0.0066	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0640	g/hp-hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.0035	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-				0.9499	g/hr	--
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														<b>--</b>
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	4	0.0066	g/hp-hr	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-				0.0640	g/hp-hr	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-				0.9499	g/hr	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-				0.3620	g/hr	--
<b>Concrete Duct Banc Subtotal</b>														<b>--</b>
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>0.03</b>
<b>20 -Permanent Operating Equipment</b>														
32	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.9499	g/hr	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-				0.7097	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-				0.3620	g/hr	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-				0.0000	g/hr	--
<b>Mobilization and Demobilization Subtotal</b>														<b>--</b>
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0035	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.3620	g/hr	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														<b>--</b>
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0035	g/hp-hr	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-				0.3620	g/hr	--
<b>CMU Building Mechanical Equipment Subtotal</b>														<b>--</b>
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.3620	g/hr	--
<b>Electrical Control Equipment CMU Building Subtotal</b>														<b>--</b>
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.3620	g/hr	--
<b>Electrical Power Equipment CMU Building Subtotal</b>														<b>--</b>
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.3620	g/hr	--
<b>Communication Equipment Subtotal</b>														<b>--</b>
<b>20 -Permanent Operating Equipment Total</b>														<b>--</b>
<b>GRAND TOTAL</b>														<b>0.12</b>



Table L1-131. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																				
		22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
29	Mobilization and Demobilization	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
							<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
					<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.26</b>	<b>0.17</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																						
32	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.25	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																					<b>1.27</b>	--
33	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
																						<b>0.03</b>
34	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
																						<b>0.03</b>
35	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
																						<b>0.02</b>
36	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
																						<b>0.02</b>
37	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																						--
																						<b>1.27</b>
																						<b>0.09</b>
<b>GRAND TOTAL</b>		<b>0.62</b>	<b>3.65</b>	<b>0.59</b>	<b>0.55</b>	<b>6.13</b>	<b>6.42</b>	<b>0.75</b>	<b>4.58</b>	<b>4.50</b>	<b>4.29</b>	<b>0.76</b>	<b>1.02</b>	<b>1.12</b>	<b>1.44</b>	<b>1.34</b>	<b>0.82</b>	<b>1.05</b>	<b>0.06</b>	<b>0.03</b>	<b>1.30</b>	<b>0.21</b>

Table L1-131. PM2.5 Exhaust Emissions from Offroad

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>								
29	Mobilization and Demobilization	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>
30	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0025</b>
31	Concrete Duct Banc	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0002</b>
		--	--	--	--	--	--	<b>0.0027</b>
<b>20 -Permanent Operating Equipment</b>								
32	Mobilization and Demobilization	--	--	--	--	0.02	--	0.0000
		--	--	--	--	1.25	--	0.0013
		--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--
		--	--	--	--	<b>1.27</b>	--	<b>0.0013</b>
33	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	--	--	0.0001
		0.02	0.02	0.02	0.02	--	--	0.0003
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0004</b>
34	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	--	--	0.0001
		0.02	0.02	0.02	0.02	--	--	0.0003
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0004</b>
35	Electrical Control Equipment CMU Building	0.02	0.02	0.02	0.02	--	--	0.0003
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0003</b>
36	Electrical Power Equipment CMU Building	0.02	0.02	0.02	0.02	--	--	0.0003
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0003</b>
37	Communication Equipment	--	--	0.02	0.02	--	--	0.0001
		--	--	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0001</b>
		<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.11</b>	<b>1.27</b>	--	<b>0.0027</b>
<b>GRAND TOTAL</b>		<b>0.21</b>	<b>0.21</b>	<b>0.19</b>	<b>0.14</b>	<b>4.40</b>	<b>0.03</b>	<b>0.1099</b>

**Table L1-132. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
2	Fremont Weir Demo	450	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
6	Clearing and Grubbing	61	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	16
7	Excavation (Wet Conditions)	61,810	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	35
8	Excavation/Grading (Dry Conditions)	118,960	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	1	3,500	34

Table L1-132. GHG Exhaust Emissions from Offroad (

#	Activity	Emission Factors				Units	Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e		
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
2	Fremont Weir Demo	323.9047	0.008193	0	324.1095	g/hp-hr	11.17
		306.8813	0.006461	0	307.0428	g/hp-hr	4.83
		312.5705	0.009723	0	312.8135	g/hp-hr	2.91
		24535.76	0	0	24535.76	g/hr	2.36
		34432.03	0	0	34432.03	g/hr	3.31
		8626.376	0	0	8626.376	g/hr	4.97
<b>Fremont Weir Demo Subtotal</b>						<b>29.55</b>	
3	Levee O&M Road Regrading (6" AB)	346.6654	0.007486	0	346.8525	g/hp-hr	2.08
		24535.76	0	0	24535.76	g/hr	0.79
		8626.376	0	0	8626.376	g/hr	0.28
		34432.03	0	0	34432.03	g/hr	5.51
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>						<b>8.65</b>	
4	Temporary Electrical Power	24535.76	0	0	24535.76	g/hr	0.20
		8626.376	0	0	8626.376	g/hr	0.14
<b>Temporary Electrical Power Subtotal</b>						<b>0.33</b>	
<b>02 - Relocations Total</b>						<b>39.60</b>	
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
6	Clearing and Grubbing	363.734	0.012212	0	364.0393	g/hp-hr	10.25
		227.3238	0.0068	0	227.4937	g/hp-hr	8.15
		395.0924	0	0	395.0924	g/hp-hr	0.81
		24535.76	0	0	24535.76	g/hr	6.28
		8626.376	0	0	8626.376	g/hr	13.25
		34432.03	0	0	34432.03	g/hr	8.81
<b>Clearing and Grubbing Subtotal</b>						<b>47.56</b>	
7	Excavation (Wet Conditions)	323.9047	0.008193	0	324.1095	g/hp-hr	38.93
		335.2553	0.009105	0	335.4829	g/hp-hr	56.36
		306.8813	0.006461	0	307.0428	g/hp-hr	28.20
		34432.03	0	0	34432.03	g/hr	86.77
		8626.376	0	0	8626.376	g/hr	16.91
<b>Excavation (Wet Conditions) Subtotal</b>						<b>227.17</b>	
8	Excavation/Grading (Dry Conditions)	335.2553	0.009105	0	335.4829	g/hp-hr	27.38
		409.1243	0.009162	0	409.3534	g/hp-hr	181.27
		346.6654	0.007486	0	346.8525	g/hp-hr	17.64
		24535.76	0	0	24535.76	g/hr	6.67
		8626.376	0	0	8626.376	g/hr	16.42
<b>Excavation/Grading (Dry Conditions) Subtotal</b>						<b>249.38</b>	

**Table L1-132. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
9	Earthen Backfill	8,950	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	9
10	Riprap - Class 2	24,940	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	25
11	Riprap - Class 3	9,420	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	10
12	RSP Bedding Material	36,150	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	19
13	Erosion Control Seeding	31	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	16
<b>11 - Levees and Floodwalls</b>											
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
15	Soil Cement Bentonite Cutoff Wall	84,480	SF	4.5 CY Hydraulic Excavator 300 HP Dozer 2.5 CY Hydraulic Excavator 16 CY 3 Axle Dump Truck Flash Mixer Slurry Pump Pickup Truck Conventional	Excavators Rubber Tired Dozers Excavators n/a - onroad Cement and Mortar Mixers Pumps n/a - onroad	1 1 1 1 1 1 5	429 300 257 HHDT 9 84 LDT2	7,000	1	7,000	13
<b>15 - Floodway Control and Diversion Structures</b>											
16	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
17	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18

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Table L1-132. GHG Exhaust Emissions from Offroad C

#	Activity	Emission Factors				Units	Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e		
9	Earthen Backfill	335.2553	0.009105	0	335.4829	g/hp-hr	7.25
		24535.76	0	0	24535.76	g/hr	1.77
		318.2734	0.005321	0	318.4065	g/hp-hr	3.60
		8626.376	0	0	8626.376	g/hr	1.86
		<b>Earthen Backfill Subtotal</b>					<b>14.48</b>
10	Riprap - Class 2	323.9047	0.008193	0	324.1095	g/hp-hr	33.32
		363.7512	0.008415	0	363.9615	g/hp-hr	21.84
		34432.03	0	0	34432.03	g/hr	158.39
		8626.376	0	0	8626.376	g/hr	8.63
		<b>Riprap - Class 2 Subtotal</b>					<b>222.17</b>
11	Riprap - Class 3	323.9047	0.008193	0	324.1095	g/hp-hr	13.33
		363.7512	0.008415	0	363.9615	g/hp-hr	8.74
		34432.03	0	0	34432.03	g/hr	63.35
		8626.376	0	0	8626.376	g/hr	3.45
		<b>Riprap - Class 3 Subtotal</b>					<b>88.87</b>
12	RSP Bedding Material	323.9047	0.008193	0	324.1095	g/hp-hr	50.64
		363.7512	0.008415	0	363.9615	g/hp-hr	33.19
		8626.376	0	0	8626.376	g/hr	13.11
		34432.03	0	0	34432.03	g/hr	240.75
		<b>RSP Bedding Material Subtotal</b>					<b>337.70</b>
13	Erosion Control Seeding	312.5705	0.009723	0	312.8135	g/hp-hr	3.88
		8626.376	0	0	8626.376	g/hr	4.42
		<b>Erosion Control Seeding Subtotal</b>					<b>8.30</b>
		<b>09 - Channels and Canals Total</b>					<b>1,196.70</b>
<b>11 - Levees and Floodwalls</b>							
14	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
		<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
15	Soil Cement Bentonite Cutoff Wall	323.9047	0.008193	0	324.1095	g/hp-hr	14.46
		335.2553	0.009105	0	335.4829	g/hp-hr	10.47
		323.9047	0.008193	0	324.1095	g/hp-hr	8.66
		34432.03	0	0	34432.03	g/hr	3.58
		318.0018	0.0334	0	318.8368	g/hp-hr	0.30
		420.626	0.007382	0	420.8105	g/hp-hr	3.68
8626.376	0	0	8626.376	g/hr	4.49		
		<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>					<b>45.63</b>
		<b>11 - Levees and Floodwalls Total</b>					<b>46.71</b>
<b>15 - Floodway Control and Diversion Structures</b>							
16	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
		<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
17	Construction Site Dewatering (Temporary Cofferdam)	24535.76	0	0	24535.76	g/hr	3.53
		426.9427	0.007987	0	427.1424	g/hp-hr	13.59
		8626.376	0	0	8626.376	g/hr	7.45
		<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>					<b>24.58</b>

**Table L1-132. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
18	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120
19	Excavation (Wet Conditions)	6,130	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4
20	Sheet Pile Wall	7,790	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7
21	Headworks Structure Concrete Piles	5,040	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	28
22	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18
23	Headworks Channel Transition	1,330	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10
24	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.2	1	0.2	15
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2

Table L1-132. GHG Exhaust Emissions from Offroad (

#	Activity	Emission Factors				Units	Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e		
18	Construction Site Dewatering (Pumping)	420.626	0.007382	0	420.8105	g/hp-hr	33.93
		8626.376	0	0	8626.376	g/hr	24.84
<b>Construction Site Dewatering (Pumping) Subtotal</b>							<b>58.78</b>
19	Excavation (Wet Conditions)	323.9047	0.008193	0	324.1095	g/hp-hr	4.45
		335.2553	0.009105	0	335.4829	g/hp-hr	6.44
		306.8813	0.006461	0	307.0428	g/hp-hr	3.22
		34432.03	0	0	34432.03	g/hr	9.92
		8626.376	0	0	8626.376	g/hr	1.93
<b>Excavation (Wet Conditions) Subtotal</b>							<b>25.96</b>
20	Sheet Pile Wall	24535.76	0	0	24535.76	g/hr	1.37
		426.9427	0.007987	0	427.1424	g/hp-hr	5.29
		8626.376	0	0	8626.376	g/hr	2.90
<b>Sheet Pile Wall Subtotal</b>							<b>9.56</b>
21	Headworks Structure Concrete Piles	244.4287	0.005327	0	244.5619	g/hp-hr	16.43
		426.9427	0.007987	0	427.1424	g/hp-hr	21.15
		420.626	0.007382	0	420.8105	g/hp-hr	7.92
		24535.76	0	0	24535.76	g/hr	16.49
		312.5705	0.009723	0	312.8135	g/hp-hr	6.80
		323.9835	0.009263	0	324.215	g/hp-hr	45.61
		8626.376	0	0	8626.376	g/hr	15.46
<b>Headworks Structure Concrete Piles Subtotal</b>							<b>129.85</b>
22	Headworks Structure	420.626	0.007382	0	420.8105	g/hp-hr	15.27
		244.3625	0.025666	0	245.0041	g/hp-hr	0.85
		24535.76	0	0	24535.76	g/hr	21.20
		8626.376	0	0	8626.376	g/hr	26.09
<b>Headworks Structure Subtotal</b>							<b>63.40</b>
23	Headworks Channel Transition	244.3625	0.025666	0	245.0041	g/hp-hr	0.31
		24535.76	0	0	24535.76	g/hr	7.85
		8626.376	0	0	8626.376	g/hr	8.28
<b>Headworks Channel Transition Subtotal</b>							<b>16.45</b>
24	Hinged Bottom Gates	244.4287	0.005327	0	244.5619	g/hp-hr	13.21
		34432.03	0	0	34432.03	g/hr	4.13
		8626.376	0	0	8626.376	g/hr	4.14
<b>Hinged Bottom Gates Subtotal</b>							<b>21.48</b>
<b>15 - Floodway Control and Diversion Structures Total</b>							<b>351.13</b>
<b>08 - Roads, Railroads, and Bridges</b>							
25	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>							<b>1.08</b>



**Table L1-132. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
26	Pedestrian Bridge Concete Piles	320	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	2
27	Pedestrian Bridge Concrete Abutments and Wingwalls	24	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1
28	Pedestrian Bridge Span Installation	1,040	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	3
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
30	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30
31	Concrete Duct Banc	190	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	4
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
33	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30
34	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30

Table L1-132. GHG Exhaust Emissions from Offroad (

#	Activity	Emission Factors				Units	Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e		
26	Pedestrian Bridge Concrete Piles	244.4287	0.005327	0	244.5619	g/hp-hr	1.17
		426.9427	0.007987	0	427.1424	g/hp-hr	1.51
		420.626	0.007382	0	420.8105	g/hp-hr	0.57
		24535.76	0	0	24535.76	g/hr	1.18
		312.5705	0.009723	0	312.8135	g/hp-hr	0.49
		323.9835	0.009263	0	324.215	g/hp-hr	3.26
		8626.376	0	0	8626.376	g/hr	1.10
<b>Pedestrian Bridge Concrete Piles Subtotal</b>						<b>9.27</b>	
27	Pedestrian Bridge Concrete Abutments and Wingwalls	420.626	0.007382	0	420.8105	g/hp-hr	0.28
		244.3625	0.025666	0	245.0041	g/hp-hr	0.02
		24535.76	0	0	24535.76	g/hr	0.39
		8626.376	0	0	8626.376	g/hr	0.48
<b>n Bridge Concrete Abutments and Wingwalls Subtotal</b>						<b>1.17</b>	
28	Pedestrian Bridge Span Installation	244.4287	0.005327	0	244.5619	g/hp-hr	2.64
		24535.76	0	0	24535.76	g/hr	1.18
		8626.376	0	0	8626.376	g/hr	1.04
<b>Pedestrian Bridge Span Installation Subtotal</b>						<b>4.85</b>	
<b>08 - Roads, Railroads, and Bridges Total</b>						<b>16.38</b>	
<b>19 - Buildings, Grounds, and Utilities</b>							
29	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
30	CMU Building and Earthwork Pad Construction	342.9603	0.009314	0	343.1931	g/hp-hr	13.59
		409.1243	0.009162	0	409.3534	g/hp-hr	36.06
		346.6654	0.007486	0	346.8525	g/hp-hr	15.57
		318.2617	0.007649	0	318.4529	g/hp-hr	6.11
		24535.76	0	0	24535.76	g/hr	5.89
		318.2734	0.005321	0	318.4065	g/hp-hr	12.00
		8626.376	0	0	8626.376	g/hr	14.49
		420.626	0.007382	0	420.8105	g/hp-hr	8.48
		244.3625	0.025666	0	245.0041	g/hp-hr	0.47
		340.9885	0.010135	0	341.2419	g/hp-hr	8.19
		24535.76	0	0	24535.76	g/hr	5.89
<b>MU Building and Earthwork Pad Construction Subtotal</b>						<b>126.74</b>	
31	Concrete Duct Banc	420.626	0.007382	0	420.8105	g/hp-hr	1.13
		244.3625	0.025666	0	245.0041	g/hp-hr	0.06
		24535.76	0	0	24535.76	g/hr	1.57
		8626.376	0	0	8626.376	g/hr	1.93
<b>Concrete Duct Banc Subtotal</b>						<b>4.70</b>	
<b>19 - Buildings, Grounds, and Utilities Total</b>						<b>132.51</b>	
<b>20 -Permanent Operating Equipment</b>							
32	Mobilization and Demobilization	24535.76	0	0	24535.76	g/hr	0.39
		340.9885	0.010135	0	341.2419	g/hp-hr	0.55
		8626.376	0	0	8626.376	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
33	Mechanical Hydraulic Cylinders & Housing	340.9885	0.010135	0	341.2419	g/hp-hr	8.19
		8626.376	0	0	8626.376	g/hr	6.21
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>						<b>14.40</b>	
34	CMU Building Mechanical Equipment	340.9885	0.010135	0	341.2419	g/hp-hr	8.19

**Table L1-132. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 1) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
				Pickup Truck Conventional	n/a - onroad	3	LDT2				
35	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30
36	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30
37	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12
<b>GRAND TOTAL</b>											

Table L1-132. GHG Exhaust Emissions from Offroad (

#	Activity	Emission Factors				Units	Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e		
		8626.376	0	0	8626.376	g/hr	6.21
		<b>CMU Building Mechanical Equipment Subtotal</b>					<b>14.40</b>
35	Electrical Control Equipment CMU Building	8626.376	0	0	8626.376	g/hr	6.21
		<b>Electrical Control Equipment CMU Building Subtotal</b>					<b>6.21</b>
36	Electrical Power Equipment CMU Building	8626.376	0	0	8626.376	g/hr	6.21
		<b>Electrical Power Equipment CMU Building Subtotal</b>					<b>6.21</b>
37	Communication Equipment	8626.376	0	0	8626.376	g/hr	2.48
		<b>Communication Equipment Subtotal</b>					<b>2.48</b>
		<b>20 -Permanent Operating Equipment Total</b>					<b>44.78</b>
<b>GRAND TOTAL</b>							<b>1,827.82</b>

**Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																	
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug
<b>02 - Relocations</b>																			
1	Mobilization and Demobilization																		
	Material Handling	n/a																	
	Grading	n/a																	
	Bulldozing	n/a																	
	Unpaved Road Dust	n/a																	
	Paved Road Dust	n/a																	
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																		
	Material Handling		0.13	0.13															
	Grading		n/a	n/a															
	Bulldozing		n/a	n/a															
	Unpaved Road Dust		n/a	n/a															
	Paved Road Dust		n/a	n/a															
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																		
	Material Handling																		
	Grading																		
	Bulldozing																		
	Unpaved Road Dust																		
	Paved Road Dust																		
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																		
	Material Handling	n/a																	
	Grading	n/a																	
	Bulldozing	n/a																	
	Unpaved Road Dust	n/a																	
	Paved Road Dust	n/a																	
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																			
5	Mobilization and Demobilization																		
	Material Handling	n/a																	n/a
	Grading	n/a																	n/a
	Bulldozing	n/a																	n/a
	Unpaved Road Dust	n/a																	n/a
	Paved Road Dust	n/a																	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																		
	Material Handling		n/a	n/a	n/a														
	Grading		0.41	0.41	0.41														
	Bulldozing		n/a	n/a	n/a														
	Unpaved Road Dust		n/a	n/a	n/a														
	Paved Road Dust		n/a	n/a	n/a														
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-133. PM10 Emissions Summary from Fugitive I

#	Activity										Annual Emissions , tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo											0.00
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)											n/a
	Material Handling								n/a			n/a
	Grading								0.21			0.00
	Bulldozing								n/a			n/a
	Unpaved Road Dust								n/a			n/a
	Paved Road Dust								n/a			n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	<b>0.21</b>	--	--	<b>0.00</b>
4	Temporary Electrical Power											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	--	--	--	<b>0.21</b>	--	--	<b>0.00</b>
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing											n/a
	Material Handling											0.00
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>

Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
7	Excavation (Wet Conditions)																			
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a							
	Grading							n/a	n/a	n/a	n/a	n/a	n/a							
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust								46.27	46.27	46.27	46.27	46.27	46.27						
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	46.27	46.27	46.27	46.27	46.27	46.27	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)																			
	Material Handling					0.63	0.63	0.63	0.63	0.63	0.63									
	Grading					2.07	2.07	2.07	2.07	2.07	2.07									
	Bulldozing					2.35	2.35	2.35	2.35	2.35	2.35									
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	5.05	5.05	5.05	5.05	5.05	5.05	--	--	--	--	--	--	--	--	--
9	Earthen Backfill																			
	Material Handling							0.18	0.18											
	Grading							0.21	0.21											
	Bulldozing							2.35	2.35											
	Unpaved Road Dust							n/a	n/a											
	Paved Road Dust							n/a	n/a											
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	2.74	2.74	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2																			
	Material Handling													1.65	1.65	1.65	1.65	1.65		
	Grading													n/a	n/a	n/a	n/a	n/a		
	Bulldozing													n/a	n/a	n/a	n/a	n/a		
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a		
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a		
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	1.65	1.65	1.65	--	--
11	Riprap - Class 3																			
	Material Handling																	1.65	1.65	
	Grading																	n/a	n/a	
	Bulldozing																	n/a	n/a	
	Unpaved Road Dust																	n/a	n/a	
	Paved Road Dust																	n/a	n/a	
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	--
12	RSP Bedding Material																			
	Material Handling													1.65	1.65	1.65	1.65			
	Grading												n/a	n/a	n/a	n/a				
	Bulldozing												n/a	n/a	n/a	n/a				
	Unpaved Road Dust												n/a	n/a	n/a	n/a				
	Paved Road Dust												n/a	n/a	n/a	n/a				
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	1.65	1.65	1.65	1.65	--	--	--
13	Erosion Control Seeding																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>09 - Channels and Canals Total</b>	--	0.41	0.41	0.41	5.05	7.78	54.05	51.32	51.32	51.32	46.27	46.27	1.65	3.30	3.30	3.30	3.30	3.30	--

**Table L1-133. PM10 Emissions Summary from Fugitive I**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
7	Excavation (Wet Conditions)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										0.78
	Paved Road Dust										n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.78</b>
8	Excavation/Grading (Dry Conditions)										0.01
	Material Handling										0.04
	Grading										0.04
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.09</b>
9	Earthen Backfill										0.00
	Material Handling										0.00
	Grading										0.01
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
10	Riprap - Class 2										0.01
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3										0.02
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
12	RSP Bedding Material										0.01
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding										n/a
	Material Handling			n/a	n/a	n/a					n/a
	Grading			n/a	n/a	n/a					n/a
	Bulldozing			n/a	n/a	n/a					n/a
	Unpaved Road Dust			n/a	n/a	n/a					n/a
	Paved Road Dust			n/a	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	--	--	--	<b>0.91</b>



**Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>11 - Levees and Floodwalls</b>																				
14	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	2.56	2.56	2.56	--	--	--	--	--	--	--	--
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	2.56	2.56	2.56	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																				
16	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	46.27	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-133. PM10 Emissions Summary from Fugitive I**

#	Activity										Annual Emissions , tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>11 - Levees and Floodwalls</b>												
14	Mobilization and Demobilization											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall											n/a
	Material Handling											0.00
	Grading											0.02
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>
<b>15 - Floodway Control and Diversion Structures</b>												
16	Mobilization and Demobilization											n/a
	Material Handling								n/a			n/a
	Grading								n/a			n/a
	Bulldozing								n/a			n/a
	Unpaved Road Dust								n/a			n/a
	Paved Road Dust								n/a			n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)											n/a
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											0.08
	Paved Road Dust											n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.08</b>

**Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Sheet Pile Wall																			
	Material Handling								n/a	n/a										
	Grading								n/a	n/a										
	Bulldozing								n/a	n/a										
	Unpaved Road Dust								n/a	n/a										
	Paved Road Dust								n/a	n/a										
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles																			
	Material Handling								n/a	n/a	n/a	n/a	n/a							
	Grading								n/a	n/a	n/a	n/a	n/a							
	Bulldozing								n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a							
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a							
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure																			
	Material Handling												n/a	n/a					n/a	
	Grading												n/a	n/a					n/a	
	Bulldozing												n/a	n/a					n/a	
	Unpaved Road Dust												n/a	n/a					n/a	
	Paved Road Dust												n/a	n/a					n/a	
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition																			
	Material Handling														n/a	n/a				
	Grading														n/a	n/a				
	Bulldozing														n/a	n/a				
	Unpaved Road Dust														n/a	n/a				
	Paved Road Dust														n/a	n/a				
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	46.27	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																				
25	Mobilization and Demobilization																			
	Material Handling														n/a				n/a	
	Grading														n/a				n/a	
	Bulldozing														n/a				n/a	
	Unpaved Road Dust														n/a				n/a	
	Paved Road Dust														n/a				n/a	
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles																			
	Material Handling																		n/a	
	Grading																		n/a	
	Bulldozing																		n/a	
	Unpaved Road Dust																		n/a	
	Paved Road Dust																		n/a	
	<b>Pedestrian Bridge Concete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-133. PM10 Emissions Summary from Fugitive I**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates										n/a
	Material Handling			n/a	n/a	n/a	n/a				n/a
	Grading			n/a	n/a	n/a	n/a				n/a
	Bulldozing			n/a	n/a	n/a	n/a				n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a				n/a
	Paved Road Dust			n/a	n/a	n/a	n/a				n/a
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	--	--	--	<b>0.08</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Pedestrian Bridge Concete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
27	Pedestrian Bridge Concrete Abutments and Wingwalls																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																				
29	Mobilization and Demobilization																			
	Material Handling	n/a																		n/a
	Grading	n/a																		n/a
	Bulldozing	n/a																		n/a
	Unpaved Road Dust	n/a																		n/a
	Paved Road Dust	n/a																		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction																			
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a												
	Grading		0.83	0.83	0.83	0.83	0.83	0.83												
	Bulldozing		2.35	2.35	2.35	2.35	2.35	2.35												
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a												
	Paved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a												
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc																			
	Material Handling							n/a												
	Grading							n/a												
	Bulldozing							n/a												
	Unpaved Road Dust							n/a												
	Paved Road Dust							n/a												
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
32	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-133. PM10 Emissions Summary from Fugitive I**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
27	Pedestrian Bridge Concrete Abutments and Wingwalls Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Su</b>	--	--	--	--	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>											
29	Mobilization and Demobilization Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a 0.01 0.04 n/a n/a
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.05</b>
31	Concrete Duct Banc Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	--	--	--	--	--	--	--	--	<b>0.05</b>
<b>20 -Permanent Operating Equipment</b>											
32	Mobilization and Demobilization Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust		n/a						n/a		n/a n/a n/a n/a n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-133. PM10 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
33	Mechanical Hydraulic Cylinders & Housing Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	<b>3.72</b>	<b>3.72</b>	<b>3.59</b>	<b>8.22</b>	<b>10.96</b>	<b>100.33</b>	<b>51.32</b>	<b>53.87</b>	<b>53.87</b>	<b>48.83</b>	<b>46.27</b>	<b>1.65</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>
	<i>Percent Reduction (Compared to Unmitigated)</i>	<i>n/a</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>2%</i>	<i>-57%</i>	<i>-56%</i>	<i>-55%</i>	<i>-55%</i>	<i>-58%</i>	<i>-59%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>n/a</i>

**Table L1-133. PM10 Emissions Summary from Fugitive I**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
33	Mechanical Hydraulic Cylinders & Housing										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
37	Communication Equipment										
	Material Handling						n/a	n/a			n/a
	Grading						n/a	n/a			n/a
	Bulldozing						n/a	n/a			n/a
	Unpaved Road Dust						n/a	n/a			n/a
	Paved Road Dust						n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>										<b>0.21</b>	<b>1.06</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0%</i>	<i>n/a</i>	<i>-54%</i>



**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	n/a																		
	Material Handling	n/a																		
	Grading	n/a																		
	Bulldozing	n/a																		
	Unpaved Road Dust	n/a																		
	Paved Road Dust	n/a																		
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																			
	Material Handling		0.02	0.02																
	Grading		n/a	n/a																
	Bulldozing		n/a	n/a																
	Unpaved Road Dust		n/a	n/a																
	Paved Road Dust		n/a	n/a																
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																			
	Material Handling	n/a																		
	Grading	n/a																		
	Bulldozing	n/a																		
	Unpaved Road Dust	n/a																		
	Paved Road Dust	n/a																		
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization																			
	Material Handling	n/a																		n/a
	Grading	n/a																		n/a
	Bulldozing	n/a																		n/a
	Unpaved Road Dust	n/a																		n/a
	Paved Road Dust	n/a																		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																			
	Material Handling		n/a	n/a	n/a															
	Grading		0.04	0.04	0.04															
	Bulldozing		n/a	n/a	n/a															
	Unpaved Road Dust		n/a	n/a	n/a															
	Paved Road Dust		n/a	n/a	n/a															
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions , tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization											
	Material Handling										n/a	n/a
	Grading										n/a	n/a
	Bulldozing										n/a	n/a
	Unpaved Road Dust										n/a	n/a
	Paved Road Dust										n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo											
	Material Handling											0.00
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)											
	Material Handling									n/a		n/a
	Grading								0.02			0.00
	Bulldozing									n/a		n/a
	Unpaved Road Dust									n/a		n/a
	Paved Road Dust									n/a		n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	<b>0.02</b>	--	--	<b>0.00</b>
4	Temporary Electrical Power											
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	--	--	--	<b>0.02</b>	--	--	<b>0.00</b>
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization											
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing											
	Material Handling											n/a
	Grading											0.00
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>

**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
7	Excavation (Wet Conditions)																			
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a							
	Grading							n/a	n/a	n/a	n/a	n/a	n/a							
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust								4.63	4.63	4.63	4.63	4.63	4.63						
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>4.63</b>	<b>4.63</b>	<b>4.63</b>	<b>4.63</b>	<b>4.63</b>	<b>4.63</b>	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)																			
	Material Handling						0.10	0.10	0.10	0.10	0.10	0.10								
	Grading						0.22	0.22	0.22	0.22	0.22	0.22								
	Bulldozing						1.29	1.29	1.29	1.29	1.29	1.29								
	Unpaved Road Dust						n/a	n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust						n/a	n/a	n/a	n/a	n/a	n/a								
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	<b>1.61</b>	<b>1.61</b>	<b>1.61</b>	<b>1.61</b>	<b>1.61</b>	<b>1.61</b>	--	--	--	--	--	--	--	--	--
9	Earthen Backfill																			
	Material Handling							0.03	0.03											
	Grading							0.02	0.02											
	Bulldozing							1.29	1.29											
	Unpaved Road Dust							n/a	n/a											
	Paved Road Dust							n/a	n/a											
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	<b>1.34</b>	<b>1.34</b>	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2																			
	Material Handling													0.25	0.25	0.25	0.25	0.25		
	Grading													n/a	n/a	n/a	n/a	n/a		
	Bulldozing													n/a	n/a	n/a	n/a	n/a		
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a		
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a		
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	--	--
11	Riprap - Class 3																			
	Material Handling																	0.25	0.25	
	Grading																	n/a	n/a	
	Bulldozing																	n/a	n/a	
	Unpaved Road Dust																	n/a	n/a	
	Paved Road Dust																	n/a	n/a	
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.25</b>	<b>0.25</b>	--
12	RSP Bedding Material																			
	Material Handling													0.25	0.25	0.25	0.25			
	Grading													n/a	n/a	n/a	n/a			
	Bulldozing													n/a	n/a	n/a	n/a			
	Unpaved Road Dust													n/a	n/a	n/a	n/a			
	Paved Road Dust													n/a	n/a	n/a	n/a			
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	--	--	--
13	Erosion Control Seeding																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>09 - Channels and Canals Total</b>	--	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>1.61</b>	<b>2.95</b>	<b>7.58</b>	<b>6.24</b>	<b>6.24</b>	<b>6.24</b>	<b>4.63</b>	<b>4.63</b>	<b>0.25</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
7	Excavation (Wet Conditions)										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										0.08
	Paved Road Dust										n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.08</b>
8	Excavation/Grading (Dry Conditions)										0.00
	Material Handling										0.00
	Grading										0.02
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.03</b>
9	Earthen Backfill										0.00
	Material Handling										0.00
	Grading										0.01
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
10	Riprap - Class 2										0.00
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.00</b>
11	Riprap - Class 3										0.00
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material										0.00
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.00</b>
13	Erosion Control Seeding										n/a
	Material Handling			n/a	n/a	n/a					n/a
	Grading			n/a	n/a	n/a					n/a
	Bulldozing			n/a	n/a	n/a					n/a
	Unpaved Road Dust			n/a	n/a	n/a					n/a
	Paved Road Dust			n/a	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	--	--	--	<b>0.12</b>

**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>11 - Levees and Floodwalls</b>																				
14	Mobilization and Demobilization																			
	Material Handling									n/a				n/a						
	Grading									n/a				n/a						
	Bulldozing									n/a				n/a						
	Unpaved Road Dust									n/a				n/a						
	Paved Road Dust									n/a				n/a						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall																			
	Material Handling									n/a		n/a		n/a						
	Grading									0.02		0.02		0.02						
	Bulldozing									1.29		1.29		1.29						
	Unpaved Road Dust									n/a		n/a		n/a						
	Paved Road Dust									n/a		n/a		n/a						
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	1.31		1.31		1.31		--	--	--	--	--
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	1.31		1.31		1.31		--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures</b>																				
16	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--		4.63	--	--	--	--	--	--	--	--	--	--	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>11 - Levees and Floodwalls</b>												
14	Mobilization and Demobilization											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
15	Soil Cement Bentonite Cutoff Wall											n/a
	Material Handling											0.00
	Grading											0.01
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Soil Cement Bentonite Cutoff Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
	<b>11 - Levees and Floodwalls Total</b>	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
<b>15 - Floodway Control and Diversion Structures</b>												
16	Mobilization and Demobilization											n/a
	Material Handling								n/a			n/a
	Grading								n/a			n/a
	Bulldozing								n/a			n/a
	Unpaved Road Dust								n/a			n/a
	Paved Road Dust								n/a			n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
17	Construction Site Dewatering (Temporary Cofferdam)											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											n/a
	Paved Road Dust											n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	--	--	--	--	--
18	Construction Site Dewatering (Pumping)											n/a
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--
19	Excavation (Wet Conditions)											n/a
	Material Handling											n/a
	Grading											n/a
	Bulldozing											n/a
	Unpaved Road Dust											0.01
	Paved Road Dust											n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>

**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Sheet Pile Wall																			
	Material Handling								n/a	n/a										
	Grading								n/a	n/a										
	Bulldozing								n/a	n/a										
	Unpaved Road Dust								n/a	n/a										
	Paved Road Dust								n/a	n/a										
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles																			
	Material Handling								n/a	n/a	n/a	n/a	n/a							
	Grading								n/a	n/a	n/a	n/a	n/a							
	Bulldozing								n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a							
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a							
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure																			
	Material Handling												n/a	n/a					n/a	
	Grading												n/a	n/a					n/a	
	Bulldozing												n/a	n/a					n/a	
	Unpaved Road Dust												n/a	n/a					n/a	
	Paved Road Dust												n/a	n/a					n/a	
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition																			
	Material Handling														n/a	n/a				n/a
	Grading														n/a	n/a				n/a
	Bulldozing														n/a	n/a				n/a
	Unpaved Road Dust														n/a	n/a				n/a
	Paved Road Dust														n/a	n/a				n/a
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																				
25	Mobilization and Demobilization																			
	Material Handling														n/a				n/a	
	Grading														n/a				n/a	
	Bulldozing														n/a				n/a	
	Unpaved Road Dust														n/a				n/a	
	Paved Road Dust														n/a				n/a	
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles																			
	Material Handling																n/a			
	Grading															n/a				
	Bulldozing															n/a				
	Unpaved Road Dust															n/a				
	Paved Road Dust															n/a				
	<b>Pedestrian Bridge Concete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Sheet Pile Wall										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--
21	Headworks Structure Concrete Piles										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--
22	Headworks Structure										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--
23	Headworks Channel Transition										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--
24	Hinged Bottom Gates										n/a
	Material Handling			n/a	n/a	n/a	n/a				n/a
	Grading			n/a	n/a	n/a	n/a				n/a
	Bulldozing			n/a	n/a	n/a	n/a				n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a				n/a
	Paved Road Dust			n/a	n/a	n/a	n/a				n/a
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	--	--	--	<b>0.01</b>
<b>08 - Roads, Railroads, and Bridges</b>											
25	Mobilization and Demobilization										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Concete Piles										n/a
	Material Handling										n/a
	Grading										n/a
	Bulldozing										n/a
	Unpaved Road Dust										n/a
	Paved Road Dust										n/a
	<b>Pedestrian Bridge Concete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--



**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
27	Pedestrian Bridge Concrete Abutments and Wingwalls																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																				
29	Mobilization and Demobilization																			
	Material Handling	n/a																		n/a
	Grading	n/a																		n/a
	Bulldozing	n/a																		n/a
	Unpaved Road Dust	n/a																		n/a
	Paved Road Dust	n/a																		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction																			
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a												
	Grading		0.09	0.09	0.09	0.09	0.09	0.09												
	Bulldozing		1.29	1.29	1.29	1.29	1.29	1.29												
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a												
	Paved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a												
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	--	--
31	Concrete Duct Banc																			
	Material Handling																			n/a
	Grading																			n/a
	Bulldozing																			n/a
	Unpaved Road Dust																			n/a
	Paved Road Dust																			n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
32	Mobilization and Demobilization																			
	Material Handling																			
	Grading																			
	Bulldozing																			
	Unpaved Road Dust																			
	Paved Road Dust																			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
27	Pedestrian Bridge Concrete Abutments and Wingwalls Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Su</b>	--	--	--	--	--	--	--	--	--	--
28	Pedestrian Bridge Span Installation Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities</b>										
29	Mobilization and Demobilization Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--
30	CMU Building and Earthwork Pad Construction Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a 0.00 0.02 n/a n/a
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
31	Concrete Duct Banc Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust										n/a n/a n/a n/a n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	--	--	--	--	--	--	--	--	<b>0.02</b>
	<b>20 -Permanent Operating Equipment</b>										
32	Mobilization and Demobilization Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust		n/a						n/a		n/a n/a n/a n/a n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-134. PM2.5 Emissions Summary from Fugitive Dust (Alternative 1) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
33	Mechanical Hydraulic Cylinders & Housing Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Communication Equipment Material Handling Grading Bulldozing Unpaved Road Dust Paved Road Dust																			
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	1.45	1.45	1.42	2.99	4.33	12.20	6.24	7.55	7.55	5.94	4.63	0.25	0.50	0.50	0.50	0.50	0.50	--
	<i>Percent Reduction (Compared to Unmitigated)</i>	n/a	0%	0%	0%	0%	1%	-52%	-52%	-47%	-47%	-53%	-59%	0%	0%	0%	0%	0%	0%	n/a

**Table L1-134. PM2.5 Emissions Summary from Fugitive**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
33	Mechanical Hydraulic Cylinders & Housing										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--	--	--	--
34	CMU Building Mechanical Equipment										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
35	Electrical Control Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
36	Electrical Power Equipment CMU Building										
	Material Handling			n/a	n/a	n/a	n/a	n/a			n/a
	Grading			n/a	n/a	n/a	n/a	n/a			n/a
	Bulldozing			n/a	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust			n/a	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--	--	--	--
37	Communication Equipment										
	Material Handling						n/a	n/a			n/a
	Grading						n/a	n/a			n/a
	Bulldozing						n/a	n/a			n/a
	Unpaved Road Dust						n/a	n/a			n/a
	Paved Road Dust						n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>									<b>0.02</b>		<b>0.15</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0%</i>	<i>n/a</i>	<i>-44%</i>

**Alternative 1: East Side Small Gated Notch  
Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)**

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

- E = size-specific emission factor (lb/VMT)
- s = surface material silt content (%)
- W = mean vehicle weight (tons)

Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	1.6 crushed limestone (AP-42, Table 13.2.4-1)
W, tons	180 loaded 74 unloaded

**Table L1-135. Mitigated Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	1.54	0.15
Unloaded	1.04	0.10
Average	1.29	0.13

**Table L1-136. Mitigated Unpaved Road Dust Emissions (Alternative 1)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	1,800	61,810	CY	35	92	3,092	46.3	4.6	0.8	0.1
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,130	CY	13	92	308	46.3	4.6	0.1	0.01

Notes:

- Assumes payload of each truck is 100 tons.
- Half of truck trips will be loaded and other half will be unloaded.
- Only includes materials that will be transported to spoil site by dump trucks.

Distance to borrow area

2 miles (spoils site located within a 1-mile radius of the project access point(s); average of 1 mile travel distance from point of excavation)

Density

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

## Offroad Exhaust Emissions Summary

**Table L1-137. Maximum Daily Offroad Construction Equipment Emissions (Alternative 2)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	1.07	20.99	14.88	0.05	0.57	0.45
09 - Channels and Canals	23.68	324.65	199.82	0.74	12.44	10.89
15 - Floodway Control and Diversion Structures	4.93	59.98	44.88	0.17	2.56	1.99
08 - Roads, Railroads, and Bridges	2.29	25.87	22.55	0.10	1.16	0.96
19 - Buildings, Grounds, and Utilities	3.67	42.91	39.08	0.11	2.11	1.78
20 -Permanent Operating Equipment	0.60	3.68	11.36	0.03	0.35	0.23
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>28.27</b>	<b>387.58</b>	<b>242.73</b>	<b>0.88</b>	<b>14.66</b>	<b>12.72</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-138. Annual Offroad Construction Equipment Emissions (Alternative 2)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.01	0.12	0.10	0.00	0.00	0.00	38.76
09 - Channels and Canals	0.88	11.26	5.69	0.02	0.31	0.25	2,679.86
15 - Floodway Control and Diversion Structures	0.11	1.12	1.00	0.00	0.06	0.04	385.05
08 - Roads, Railroads, and Bridges	0.01	0.10	0.07	0.00	0.00	0.00	32.24
19 - Buildings, Grounds, and Utilities	0.05	0.62	0.57	0.00	0.03	0.03	155.08
20 -Permanent Operating Equipment	0.01	0.06	0.17	0.00	0.01	0.00	45.09
<b>Annual Construction Exhaust Emissions Total</b>	<b>1.07</b>	<b>13.28</b>	<b>7.61</b>	<b>0.03</b>	<b>0.41</b>	<b>0.33</b>	<b>3,336.08</b>

Notes:

Total may not add exactly because of rounding.

**Table L1-139. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.0451 0.1035 0.0901 3.1225 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.1131 3.1225 1.4797 6.9998	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	3.1225 1.4797	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.2384 0.0754 72.5631 3.1225 1.4797 6.9998	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.0451 0.1608 0.1035 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.1608 0.1193 0.1131 3.1225 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													



Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.29</b>	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.93	0.93	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	20.48	20.48	20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.31	0.31	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.40	3.40	3.40	3.40	3.40	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.20	1.20	1.20	1.20	1.20	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	2.22	2.22	2.22	2.22	2.22	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	2.55	2.55	2.55	2.55	2.55	2.55	--	--	--	--	--	--	--	--	--
		--	--	--	--	10.27	10.27	10.27	10.27	10.27	10.27	--	--	--	--	--	--	--	--	--
		--	--	--	--	1.12	1.12	1.12	1.12	1.12	1.12	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.55	0.55	0.55	0.55	0.55	0.55	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	--	--	--	--	--	--	--	--	--

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	0.10	0.0001
		--	--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.18</b>	<b>0.0002</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0009	
		--	--	--	--	--	--	--	--	<b>0.0059</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.37	--	0.0007
		--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.03	--	0.0001
		--	--	--	--	--	--	--	0.62	--	0.0012
		--	--	--	--	--	--	<b>1.07</b>	--	<b>0.0021</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>
		--	--	--	--	--	--	--	<b>1.07</b>	<b>0.18</b>	<b>0.0084</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.06	--	--	--	--	--	--	--	0.0001
		--	0.10	--	--	--	--	--	--	--	0.0001
		--	0.03	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.18</b>	--	--	--	--	--	--	--	<b>0.0002</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0083
		--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	0.1843
		--	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	0.0022	
		--	--	--	--	--	--	--	--	--	<b>0.2020</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0092
		--	--	--	--	--	--	--	--	--	0.0459
		--	--	--	--	--	--	--	--	--	0.0162
		--	--	--	--	--	--	--	--	--	0.0300
		--	--	--	--	--	--	--	--	0.0049	
		--	--	--	--	--	--	--	--	--	<b>0.1063</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0459
		--	--	--	--	--	--	--	--	--	0.1849
		--	--	--	--	--	--	--	--	--	0.0202
		--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.0099	
		--	--	--	--	--	--	--	--	--	<b>0.2639</b>

**Table L1-139. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.1608 3.1225 0.0598 1.4797	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.0451 0.1004 6.9998 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.0451 0.1004 6.9998 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.0451 0.1004 1.4797 6.9998	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.0901 1.4797	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	3.1225 0.0550 1.4797	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.2640 1.4797	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0451 0.1608 0.1035 6.9998 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	3.1225 0.0550 1.4797	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
9	Earthen Backfill	--	--	--	--	--	--	0.85	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.15</b>	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82	0.82
		--	--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06	1.06
		--	--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68	5.68
		--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26
		--	--	--	--	--	--	--	--	--	--	--	--	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.53
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.84
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.91</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82	0.82	--
		--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06	1.06	--
		--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26	--
		--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68	5.68	--
		--	--	--	--	--	--	--	--	--	--	--	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	<b>14.66</b>	<b>14.66</b>	<b>23.68</b>	<b>22.53</b>	<b>22.53</b>	<b>22.53</b>	<b>7.87</b>	<b>7.82</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>11.73</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.43</b>	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
		--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
		--	--	--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.70	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.60	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>3.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0011</b>	
10	Riprap - Class 2	0.82	--	--	--	--	--	--	--	--	0.0151
		1.06	--	--	--	--	--	--	--	--	0.0196
		5.68	--	--	--	--	--	--	--	--	0.1051
		0.26	--	--	--	--	--	--	--	--	0.0048
		<b>7.82</b>	--	--	--	--	--	--	--	<b>0.1447</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0039</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0168
		--	--	--	--	--	--	--	--	--	0.0218
		--	--	--	--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	--	--	--	0.1164
		--	--	--	--	--	--	--	--	<b>0.1603</b>	
13	Erosion Control Seeding	--	--	--	0.15	0.15	--	--	--	--	0.0005
		--	--	--	0.10	0.10	--	--	--	--	0.0004
		--	--	--	<b>0.26</b>	<b>0.26</b>	--	--	--	<b>0.0009</b>	
		<b>7.82</b>	<b>0.18</b>	--	<b>0.26</b>	<b>0.26</b>	--	--	--	<b>0.8832</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.10	--	0.0001
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	<b>0.0038</b>	
16	Construction Site Dewatering (Pumping)	0.39	0.39	0.39	0.39	0.39	0.39	0.39	--	--	0.0235
		0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	0.0047
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	<b>0.0282</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	<b>0.0079</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	<b>0.0015</b>	

**Table L1-139. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.0703 0.0550 0.2640 3.1225 0.0901 0.0710 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.2640 0.2845 3.1225 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.2845 3.1225 1.4797	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.0703 6.9998 1.4797	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.0703 0.0550 0.2640 3.1225 0.0901 0.0710 1.4797	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.2640 0.2845 3.1225 1.4797	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.0703 3.1225 1.4797	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.1225 0.0580 1.4797 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.79	0.79	0.79	0.79	0.79	0.79	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--
		--	--	--	--	--	--	--	2.29	2.29	2.29	2.29	2.29	2.29	--	--	--	--	--	
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.33	0.33	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.55	0.55	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	2.17	2.17	--	--	--	--		
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--		
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.18	0.43	0.43	0.43	4.41	3.19	3.19	2.76	2.76	2.76	4.93	2.64	1.08	1.08	0.47	0.47	
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--		
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.79	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.29	--	--			
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.72	--	--		
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	0.56	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11	0.11	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	0.13	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.80	0.80	0.80		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	2.29	0.72	0.80	0.80	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.06	--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	
		0.10	--	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	
		0.03	--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.18	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--		

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	--	0.0126
		--	--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	<b>0.0367</b>	
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0106	
		--	--	--	--	--	--	--	--	--	0.0011	
		--	--	--	--	--	--	--	--	--	0.0030	
		--	--	--	--	--	--	--	--	--	0.0049	
		--	--	--	--	--	--	--	--	<b>0.0196</b>		
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	0.0011	
		--	--	--	--	--	--	--	--	--	0.0016	
		--	--	--	--	--	--	--	--	<b>0.0031</b>		
22	Hinged Bottom Gates	--	--	--	0.56	0.56	0.56	0.56	--	--	0.0067	
		--	--	--	0.12	0.12	0.12	0.12	--	--	0.0015	
		--	--	--	0.10	0.10	0.10	0.10	--	--	0.0013	
		--	--	--	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	--	--	<b>0.0094</b>	
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>0.18</b>	--	<b>0.1103</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.10	--	--	--	--	--	--	--	--	--	0.0001
		0.03	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0002</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.0046</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0004</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0028</b>	
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0079</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>	



**Table L1-139. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.2258	g/hp-hr
				Scraper	Scrapers	1	367	0.1193				g/hp-hr	
				Motor Grader	Graders	1	187	0.1131				g/hp-hr	
				Compactor	Rollers	1	80	0.1096				g/hp-hr	
				4000 gallon Water Truck	n/a - onroad	1	MHDT	3.1225				g/hr	
				10 TN Smooth Roller	Rollers	1	157	0.0598				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	1.4797				g/hr	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	0.2640				g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.2845				g/hp-hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.0580				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	1	MHDT	3.1225				g/hr	
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	0.2640	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.2845				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	3.1225				g/hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	1.4797				g/hr	
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	3.1225	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.0580				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	1.4797				g/hr	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0.0000				g/hr	
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0580	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	1.4797				g/hr	
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0580	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	1.4797				g/hr	
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.4797	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.4797	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.4797	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.72</b>	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.18</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>3.67</b>	<b>2.95</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		<b>0.66</b>	<b>26.47</b>	<b>26.65</b>	<b>25.82</b>	<b>18.76</b>	<b>18.03</b>	<b>28.27</b>	<b>25.72</b>	<b>25.72</b>	<b>25.29</b>	<b>10.63</b>	<b>10.58</b>	<b>20.57</b>	<b>18.28</b>	<b>16.91</b>	<b>19.02</b>	<b>16.83</b>	<b>16.91</b>	<b>15.17</b>

Table L1-139. ROG Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0099
		--	--	--	--	--	--	--	--	--	0.0116
		--	--	--	--	--	--	--	--	--	0.0056
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	<b>0.0442</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	<b>0.0083</b>
		--	--	--	--	--	--	--	--	--	<b>0.0527</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.06	--	--	--	--	--	0.06	--	0.0001
		--	0.10	--	--	--	--	--	0.10	--	0.0001
		--	0.03	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.18</b>	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>
32	CMU Building Mechanical Equipment	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>
33	Electrical Control Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
34	Electrical Power Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
35	Communication Equipment	--	--	--	--	--	0.08	0.08	--	--	0.0005
		--	--	--	--	--	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0005</b>
		--	<b>0.18</b>	<b>0.52</b>	<b>0.52</b>	<b>0.52</b>	<b>0.60</b>	<b>0.60</b>	<b>0.18</b>	--	<b>0.0084</b>
<b>GRAND TOTAL</b>		<b>8.47</b>	<b>0.84</b>	<b>0.99</b>	<b>2.03</b>	<b>2.03</b>	<b>1.85</b>	<b>1.85</b>	<b>1.44</b>	<b>0.18</b>	<b>1.0711</b>

**Table L1-140. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.5086 1.1284 1.1037 73.7154 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	1.7907 73.7154 1.6515 155.9699	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	73.7154 1.6515	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	2.4260 0.7727 1.2873 73.7154 1.6515 155.9699	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.5086 2.0086 1.1284 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	2.0086 1.6618 1.7907 73.7154 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	2.0086 73.7154 0.7943 1.6515	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-140. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	3.22	3.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.26	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.89	1.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.75	2.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>1.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.31</b>	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30
		1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>
6	Clearing and Grubbing	--	9.41	9.41	9.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.60	2.60	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.50	5.50	5.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	7.70	7.70	7.70	7.70	7.70	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	42.51	42.51	42.51	42.51	42.51	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	13.06	13.06	13.06	13.06	13.06	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	49.51	49.51	49.51	49.51	49.51	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	31.88	31.88	31.88	31.88	31.88	31.88	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	143.14	143.14	143.14	143.14	143.14	143.14	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.61	0.61	0.61	0.61	0.61	0.61	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	10.63	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>14.21</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-140. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	1.30	0.0013
		--	--	--	--	--	--	1.62	0.0016
		--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.95</b>	<b>0.0029</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0177
		--	--	--	--	--	--	--	0.0180
		--	--	--	--	--	--	--	0.0104
		--	--	--	--	--	--	--	0.0072
		--	--	--	--	--	--	--	0.0151
		--	--	--	--	--	--	0.0010	<b>0.0693</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	5.91	--	0.0118
		--	--	--	--	--	1.30	--	0.0026
		--	--	--	--	--	0.03	--	0.0001
		--	--	--	--	--	13.75	--	0.0275
		--	--	--	--	--	<b>20.99</b>	--	<b>0.0420</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0027</b>
		--	--	--	--	--	<b>20.99</b>	<b>2.95</b>	<b>0.1169</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0029</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0847
		--	--	--	--	--	--	--	0.0343
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0234
		--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	0.0495	<b>0.1984</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.1039
		--	--	--	--	--	--	--	0.5739
		--	--	--	--	--	--	--	0.1762
		--	--	--	--	--	--	--	0.6684
		--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	--	<b>1.5280</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.5739
		--	--	--	--	--	--	--	2.5766
		--	--	--	--	--	--	--	0.3189
		--	--	--	--	--	--	--	0.0702
		--	--	--	--	--	--	--	0.0110
		--	--	--	--	--	--	--	<b>3.5506</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0142</b>

**Table L1-140. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.5086 1.4049 155.9699 1.6515	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.5086 1.4049 155.9699 1.6515	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.5086 1.4049 1.6515 155.9699	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	1.1037 1.6515	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	73.7154 0.7794 1.6515	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.2288 1.6515	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.5086 2.0086 1.1284 155.9699 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	73.7154 0.7794 1.6515	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.9918 0.7794 2.2288 73.7154 1.1037 0.7461 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-140. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	--	
		--	--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	14.87	14.87	14.87	--	
		--	--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	126.54	126.54	126.54	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.61	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.43	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63.27	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>75.46</b>	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	--	--	
		--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	14.87	14.87	14.87	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	--	--	
		--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	126.54	126.54	126.54	--	--	
		--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>2.95</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>197.25</b>	<b>197.25</b>	<b>324.65</b>	<b>310.44</b>	<b>310.44</b>	<b>310.44</b>	<b>113.18</b>	<b>150.92</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>226.37</b>	<b>150.92</b>	<b>2.95</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	3.04	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>4.51</b>	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
		--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	
		--	--	--	--	--	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	3.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	21.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	6.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	24.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>56.59</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	--	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	--	--	--	--	--	--	--	--	
		--	--	--	--	--	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	--	--	--	--	--	--	--	--	
		--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	
		--	--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--	--	--	--	
		--	--	--	--	--	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	--	--	--	--	--	--	--	--	
		--	--	--	--	--	8.26	8.26	8.26	8.26	8.26	8.26	8.26	8.26	--	--	--	--	--	--	--	--	
		--	--	--	--	--	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	--	--	--	--	--	--	--	--	
		--	--	--	--	--	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	--	--	--	--	--	--	--	--	



Table L1-140. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.1706
		--	--	--	--	--	--	--	0.2750
		--	--	--	--	--	--	--	2.3409
		--	--	--	--	--	--	--	0.0054
		--	--	--	--	--	--	<b>2.7919</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0074
		--	--	--	--	--	--	--	0.0633
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0755</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.1890
		--	--	--	--	--	--	--	0.3048
		--	--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	--	2.5940
		--	--	--	--	--	--	<b>3.0938</b>	
13	Erosion Control Seeding	--	1.89	1.89	--	--	--	--	0.0066
		--	0.12	0.12	--	--	--	--	0.0004
		--	<b>2.00</b>	<b>2.00</b>	--	--	--	<b>0.0070</b>	
		--	<b>2.00</b>	<b>2.00</b>	--	--	--	<b>11.2623</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	1.30	--	0.0013
		--	--	--	--	--	1.62	--	0.0016
		--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.95</b>	--	<b>0.0029</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0117
		--	--	--	--	--	--	--	0.0273
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	<b>0.0406</b>	
16	Construction Site Dewatering (Pumping)	3.30	3.30	3.30	3.30	3.30	--	--	0.1981
		0.09	0.09	0.09	0.09	0.09	--	--	0.0052
		<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	--	--	<b>0.2034</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0077
		--	--	--	--	--	--	--	0.0425
		--	--	--	--	--	--	--	0.0131
		--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.1132</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	<b>0.0158</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0840
		--	--	--	--	--	--	--	0.0486
		--	--	--	--	--	--	--	0.0528
		--	--	--	--	--	--	--	0.0624
		--	--	--	--	--	--	--	0.0302
		--	--	--	--	--	--	--	0.1322
		--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	<b>0.4140</b>	

**Table L1-140. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.2288 1.7814 73.7154 1.6515	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.7814 73.7154 1.6515	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.9918 155.9699 1.6515	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.9918 0.7794 2.2288 73.7154 1.1037 0.7461 1.6515	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.2288 1.7814 73.7154 1.6515	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.9918 73.7154 1.6515	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.7154 0.9187 1.6515 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-140. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	9.91	9.91	--	--	--	--	9.91	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	7.80	7.80	--	--	--	--	7.80	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	--	0.61	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	19.07	19.07	--	--	--	--	19.07	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.20	5.20	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.35	0.35	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.05	6.05	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	2.95	4.51	4.51	4.51	59.98	33.77	33.77	29.26	29.26	29.26	48.33	22.46	9.44	9.44	3.39	3.39	22.46	3.39	3.39
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30	--	--	--	--	1.30	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62	--	--	--	--	1.62	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	--	--	--	--	2.95	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.25	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.89	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.26	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.87	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.36	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.87	7.87	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	2.60	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.62	10.62	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	25.87	6.36	10.62	10.62	2.95	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	1.30	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	--	--	--	--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.95	--	--	--	--	--	2.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-140. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.0892
		--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	0.0702
		--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	<b>0.1716</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	0.0260
		--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	<b>0.0303</b>	
22	Hinged Bottom Gates	--	7.87	7.87	7.87	7.87	--	--	0.0945
		--	2.75	2.75	2.75	2.75	--	--	0.0330
		--	0.12	0.12	0.12	0.12	--	--	0.0014
		--	<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	--	--	<b>0.1289</b>
		<b>3.39</b>	<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>2.95</b>	--	<b>1.1206</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0029</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	0.0165
		--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	<b>0.0517</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0032</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0276
		--	--	--	--	--	--	--	0.0091
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0372</b>	
		--	--	--	--	--	--	<b>0.0950</b>	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0029</b>	

**Table L1-140. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units		
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.6843	g/hp-hr		
				Scrapper	Scrapers	1	367							1.6618	g/hp-hr
				Motor Grader	Graders	1	187							1.7907	g/hp-hr
				Compactor	Rollers	1	80							1.3466	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT							73.7154	g/hr
				10 TN Smooth Roller	Rollers	1	157							0.7943	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							1.6515	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84							2.2288	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							1.7814	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							0.9187	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT							73.7154	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>															
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	2.2288	g/hp-hr		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							1.7814	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT							73.7154	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							1.6515	g/hr
<b>Concrete Duct Banc Subtotal</b>															
<b>19 - Buildings, Grounds, and Utilities Total</b>															
<b>20 -Permanent Operating Equipment</b>															
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	73.7154	g/hr		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							0.9187	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2							1.6515	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>															
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.9187	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							1.6515	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>															
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.9187	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							1.6515	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>															
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.6515	g/hr		
<b>Electrical Control Equipment CMU Building Subtotal</b>															
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.6515	g/hr		
<b>Electrical Power Equipment CMU Building Subtotal</b>															
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.6515	g/hr		
<b>Communication Equipment Subtotal</b>															
<b>20 -Permanent Operating Equipment Total</b>															
<b>GRAND TOTAL</b>															

Table L1-140. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
28	CMU Building and Earthwork Pad Constructi	--	7.81	7.81	7.81	7.81	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	10.76	10.76	10.76	10.76	10.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.90	1.90	1.90	1.90	1.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.62	1.62	1.62	1.62	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	6.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		2.95	36.55	36.55	36.55	42.91	36.55	2.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	
<b>GRAND TOTAL</b>		10.21	71.19	74.14	63.11	244.68	238.32	387.58	344.21	344.21	339.70	142.44	180.18	350.17	324.29	314.22	337.15	311.58	315.84	259.45	157.25	9.29	

Table L1-140. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.1172
		--	--	--	--	--	--	--	0.1613
		--	--	--	--	--	--	--	0.0886
		--	--	--	--	--	--	--	0.0285
		--	--	--	--	--	--	--	0.0195
		--	--	--	--	--	--	--	0.0330
		--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	0.0243
		--	--	--	--	--	--	0.0195	
								<b>0.5483</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0380
		--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	0.0299
		--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	<b>0.0731</b>	
		--	--	--	--	--	--	<b>0.6243</b>	
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	1.30	--	0.0013
		--	--	--	--	--	1.62	--	0.0016
		--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.95</b>	--	<b>0.0029</b>
31	Mechanical Hydraulic Cylinders & Housing	1.62	1.62	1.62	1.62	1.62	--	--	0.0243
		0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>
32	CMU Building Mechanical Equipment	1.62	1.62	1.62	1.62	1.62	--	--	0.0243
		0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>
33	Electrical Control Equipment CMU Building	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>
34	Electrical Power Equipment CMU Building	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>
35	Communication Equipment	--	--	--	0.09	0.09	--	--	0.0005
		--	--	--	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0005</b>
		<b>3.59</b>	<b>3.59</b>	<b>3.59</b>	<b>3.68</b>	<b>3.68</b>	<b>2.95</b>	--	<b>0.0573</b>
<b>GRAND TOTAL</b>		<b>6.98</b>	<b>19.72</b>	<b>19.72</b>	<b>17.81</b>	<b>17.81</b>	<b>26.89</b>	<b>2.95</b>	<b>13.2765</b>

**Table L1-141. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.6321 1.7927 2.0507 12.0888 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.7344 12.0888 12.8680 34.6908	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	12.0888 12.8680	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	2.5463 1.1116 146.1720 12.0888 12.8680 34.6908	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.6321 1.1166 1.7927 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	1.1166 1.0393 0.7344 12.0888 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	1.1166 12.0888 1.7974 12.8680	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													



Table L1-141. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	4.00	4.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.19	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.51	3.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.61	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.67</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>5.09</b>	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.42</b>
6	Clearing and Grubbing	--	9.88	9.88	9.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.43	0.43	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.72	2.72	2.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.22	1.22	1.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	9.57	9.57	9.57	9.57	9.57	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	23.63	23.63	23.63	23.63	23.63	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	20.74	20.74	20.74	20.74	20.74	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	11.01	11.01	11.01	11.01	11.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.18	3.18	3.18	3.18	3.18	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	89.52	89.52	89.52	89.52	89.52	89.52	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	7.27	7.27	7.27	7.27	7.27	7.27	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	4.77	4.77	4.77	4.77	4.77	4.77	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>11.78</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-141. CO Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.21	0.0002
		--	--	--	--	--	--	3.98	0.0040
		--	--	--	--	--	--	0.23	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>4.42</b>	<b>0.0044</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0220
		--	--	--	--	--	--	--	0.0285
		--	--	--	--	--	--	--	0.0193
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	0.0075	<b>0.0819</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	2.42	--	0.0048
		--	--	--	--	--	0.21	--	0.0004
		--	--	--	--	--	0.23	--	0.0005
		--	--	--	--	--	3.06	--	0.0061
		--	--	--	--	--	<b>5.92</b>	--	<b>0.0118</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	<b>0.0013</b>
		--	--	--	--	--	<b>5.92</b>	<b>4.42</b>	<b>0.0994</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0044</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0889
		--	--	--	--	--	--	--	0.0494
		--	--	--	--	--	--	--	0.3712
		--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	0.0245
		--	--	--	--	--	--	0.0110	<b>0.5489</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.1291
		--	--	--	--	--	--	--	0.3190
		--	--	--	--	--	--	--	0.2800
		--	--	--	--	--	--	--	0.1487
		--	--	--	--	--	--	--	0.0429
		--	--	--	--	--	--	--	<b>0.9197</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.3190
		--	--	--	--	--	--	--	1.6114
		--	--	--	--	--	--	--	0.1308
		--	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	--	0.0858
		--	--	--	--	--	--	--	<b>2.1585</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	<b>0.0118</b>

**Table L1-141. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.6321 0.9049 34.6908 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.6321 0.9049 34.6908 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.6321 0.9049 12.8680 34.6908	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	2.0507 12.8680	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	12.0888 0.7762 12.8680	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.5278 12.8680	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.6321 1.1166 1.7927 34.6908 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	12.0888 0.7762 12.8680	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.5082 0.7762 2.5278 12.0888 2.0507 0.6431 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-141. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46	11.46	11.46	--
		--	--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58	--
		--	--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	--
		--	--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	--
		--	--	--	--	--	--	--	--	--	--	--	--	51.45	51.45	51.45	51.45	51.45	51.45	51.45	51.45	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.79	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.07	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.72	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46	11.46	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58	9.58	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27	2.27	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14	28.14	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	51.45	51.45	51.45	51.45	51.45	51.45	51.45	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.42	60.99	60.99	60.99	119.92	119.92	199.82	188.05	188.05	188.05	68.13	51.45	102.90	102.90	102.90	102.90	102.90	102.90	77.17	51.45	4.42
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.36	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	4.60	4.60	4.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
		--	--	--	--	--	--	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43
17	Excavation (Wet Conditions)	--	--	--	--	--	--	4.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	11.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	10.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	5.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	34.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	4.60	4.60	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	2.69	2.69	2.69	2.69	2.69	2.69	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.03	3.03	3.03	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.51	3.51	3.51	3.51	3.51	3.51	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	7.12	7.12	7.12	7.12	7.12	7.12	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.82	1.82	1.82	1.82	1.82	1.82	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	22.55	22.55	22.55	22.55	22.55	22.55	--	--	--	--	--	--	--	--	--

Table L1-141. CO Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.2120
		--	--	--	--	--	--	--	0.1771
		--	--	--	--	--	--	--	0.5207
		--	--	--	--	--	--	--	0.0420
		--	--	--	--	--	--	<b>0.9518</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	0.0141
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	<b>0.0257</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.2349
		--	--	--	--	--	--	--	0.1963
		--	--	--	--	--	--	--	0.0465
		--	--	--	--	--	--	--	0.5770
		--	--	--	--	--	--	<b>1.0547</b>	
13	Erosion Control Seeding	--	3.51	3.51	--	--	--	--	0.0123
		--	0.91	0.91	--	--	--	--	0.0032
		--	<b>4.42</b>	<b>4.42</b>	--	--	--	--	<b>0.0155</b>
		--	<b>4.42</b>	<b>4.42</b>	--	--	--	<b>5.6911</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.21	--	0.0002
		--	--	--	--	--	3.98	--	0.0040
		--	--	--	--	--	0.23	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>4.42</b>	--	<b>0.0044</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	0.0272
		--	--	--	--	--	--	--	0.0123
		--	--	--	--	--	--	<b>0.0414</b>	
16	Construction Site Dewatering (Pumping)	3.74	3.74	3.74	3.74	3.74	--	--	0.2247
		0.68	0.68	0.68	0.68	0.68	--	--	0.0409
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	--	--	<b>0.2655</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0096
		--	--	--	--	--	--	--	0.0236
		--	--	--	--	--	--	--	0.0207
		--	--	--	--	--	--	--	0.0110
		--	--	--	--	--	--	0.0032	
		--	--	--	--	--	--	<b>0.0681</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	<b>0.0161</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0430
		--	--	--	--	--	--	--	0.0484
		--	--	--	--	--	--	--	0.0599
		--	--	--	--	--	--	--	0.0102
		--	--	--	--	--	--	--	0.0561
		--	--	--	--	--	--	--	0.1140
		--	--	--	--	--	--	0.0290	
		--	--	--	--	--	--	<b>0.3607</b>	

**Table L1-141. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.5278 1.4921 12.0888 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.4921 12.0888 12.8680	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.5082 34.6908 12.8680	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.5082 0.7762 2.5278 12.0888 2.0507 0.6431 12.8680	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.5278 1.4921 12.0888 12.8680	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.5082 12.0888 12.8680	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.0888 2.2556 12.8680 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-141. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	11.23	11.23	--	--	--	--	11.23	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.28	1.28	--	--	--	--	1.28	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	4.77	4.77	--	--	--	--	4.77	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	17.91	17.91	--	--	--	--	17.91	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.85	0.85	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.72	2.72	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.00	4.00	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	4.42	4.60	4.60	4.60	38.49	31.57	31.57	26.97	26.97	26.97	44.88	22.34	8.42	8.42	4.43	4.43	22.34	4.43	4.43
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	0.21	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	--	--	--	--	3.98	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--	0.23	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	--	--	--	--	4.42	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.69	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.03	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.64	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.51	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.12	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.82	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22.55	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.59	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.97	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.03	4.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	0.43	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	1.13	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.59	5.59	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	22.55	5.97	5.59	5.59	4.42	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.42	--	--	--	--	--	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-141. CO Exhaust Emissions from**

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.1011
		--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	--	0.0429
		--	--	--	--	--	--	<b>0.1612</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0043
		--	--	--	--	--	--	--	0.0136
		--	--	--	--	--	--	<b>0.0200</b>	
22	Hinged Bottom Gates	--	4.03	4.03	4.03	4.03	--	--	0.0484
		--	0.61	0.61	0.61	0.61	--	--	0.0073
		--	0.91	0.91	0.91	0.91	--	--	0.0109
		--	<b>5.55</b>	<b>5.55</b>	<b>5.55</b>	<b>5.55</b>	--	<b>0.0666</b>	
		<b>4.43</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>4.42</b>	<b>1.0042</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0044</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0054
		--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	0.0075
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0070
		--	--	--	--	--	--	--	0.0142
		--	--	--	--	--	--	0.0036	
		--	--	--	--	--	--	<b>0.0451</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0030</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0141
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	<b>0.0196</b>	
		--	--	--	--	--	--	<b>0.0721</b>	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0044</b>	



**Table L1-141. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.0968	g/hp-hr	
				Scraper	Scrapers	1	367						1.0393	g/hp-hr
				Motor Grader	Graders	1	187						0.7344	g/hp-hr
				Compactor	Rollers	1	80						2.0792	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT						12.0888	g/hr
				10 TN Smooth Roller	Rollers	1	157						1.7974	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						12.8680	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						2.5278	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						1.4921	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						2.2556	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT						12.0888	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	2.5278	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						1.4921	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						12.0888	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						12.8680	g/hr
<b>Concrete Duct Banc Subtotal</b>														
<b>19 - Buildings, Grounds, and Utilities Total</b>														
<b>20 -Permanent Operating Equipment</b>														
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.0888	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						2.2556	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						12.8680	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.2556	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						12.8680	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.2556	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						12.8680	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>														
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.8680	g/hr	
<b>Electrical Control Equipment CMU Building Subtotal</b>														
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.8680	g/hr	
<b>Electrical Power Equipment CMU Building Subtotal</b>														
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.8680	g/hr	
<b>Communication Equipment Subtotal</b>														
<b>20 -Permanent Operating Equipment Total</b>														
<b>GRAND TOTAL</b>														

Table L1-141. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
28	CMU Building and Earthwork Pad Constructi	--	6.10	6.10	6.10	6.10	6.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	6.73	6.73	6.73	6.73	6.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.42	2.42	2.42	2.42	2.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.93	2.93	2.93	2.93	2.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.98	3.98	3.98	3.98	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	33.11	33.11	33.11	33.11	33.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		4.42	33.11	33.11	33.11	39.08	33.11	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	
<b>GRAND TOTAL</b>		13.92	108.98	113.40	98.70	163.60	157.63	242.73	219.62	219.62	215.02	95.10	78.42	147.78	125.24	115.74	133.87	113.30	112.92	105.11	60.29	13.26	

Table L1-141. CO Exhaust Emissions from

#	Activity	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0915
		--	--	--	--	--	--	--	0.1009
		--	--	--	--	--	--	--	0.0363
		--	--	--	--	--	--	--	0.0440
		--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	0.0747
		--	--	--	--	--	--	--	0.0238
		--	--	--	--	--	--	--	0.0562
		--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	0.0597
		--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	<b>0.4967</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0431
		--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	0.0183
		--	--	--	--	--	--	--	<b>0.0687</b>
		--	--	--	--	--	--	--	<b>0.5697</b>
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.21	--	0.0002
		--	--	--	--	--	3.98	--	0.0040
		--	--	--	--	--	0.23	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>4.42</b>	--	<b>0.0044</b>
31	Mechanical Hydraulic Cylinders & Housing	3.98	3.98	3.98	3.98	3.98	--	--	0.0597
		0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
32	CMU Building Mechanical Equipment	3.98	3.98	3.98	3.98	3.98	--	--	0.0597
		0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
33	Electrical Control Equipment CMU Building	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
34	Electrical Power Equipment CMU Building	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
35	Communication Equipment	--	--	--	0.68	0.68	--	--	0.0041
		--	--	--	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0041</b>
		<b>10.68</b>	<b>10.68</b>	<b>10.68</b>	<b>11.36</b>	<b>11.36</b>	<b>4.42</b>	--	<b>0.1687</b>
<b>GRAND TOTAL</b>		<b>15.11</b>	<b>25.07</b>	<b>25.07</b>	<b>21.34</b>	<b>21.34</b>	<b>14.76</b>	<b>4.42</b>	<b>7.6052</b>

**Table L1-142. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.0032 0.0035 0.0037 0.1721 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0039 0.1721 0.0474 0.2281	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	0.1721 0.0474	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.0043 0.0026 0.0163 0.1721 0.0474 0.2281	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.0032 0.0033 0.0035 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.0033 0.0040 0.0039 0.1721 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.0033 0.1721 0.0036 0.0474	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1-142. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-142. SO2 Exhaust Emissions from

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.01</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0003</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	<b>0.04</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0005</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.0033</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0062
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	<b>0.0083</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0000</b>

**Table L1-142. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.0032 0.0036 0.2281 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.0032 0.0036 0.2281 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.0032 0.0036 0.0474 0.2281	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.0037 0.0474	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.1721 0.0048 0.0474	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.0049 0.0474	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0032 0.0033 0.0035 0.2281 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.1721 0.0048 0.0474	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.0024 0.0048 0.0049 0.1721 0.0037 0.0032 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-142. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.46</b>	<b>0.46</b>	<b>0.74</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.24</b>	<b>0.29</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.43</b>	<b>0.29</b>	<b>0.01</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		--	--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--



Table L1-142. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0053</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	<b>0.0059</b>	
13	Erosion Control Seeding	--	0.01	0.01	--	--	--	--	0.0000
		--	0.00	0.00	--	--	--	--	0.0000
		--	<b>0.01</b>	<b>0.01</b>	--	--	--	--	<b>0.0000</b>
		--	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0236</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0002</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	--	--	0.0004
		0.00	0.00	0.00	0.00	0.00	--	--	0.0002
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0006</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0002</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	<b>0.0015</b>	

**Table L1-142. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.0049 0.0038 0.1721 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0038 0.1721 0.0474	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.0024 0.2281 0.0474	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.0024 0.0048 0.0049 0.1721 0.0037 0.0032 0.0474	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.0049 0.0038 0.1721 0.0474	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.0024 0.1721 0.0474	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.1721 0.0040 0.0474 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-142. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	0.03	0.03	0.03	0.13	0.13	0.13	0.11	0.11	0.11	0.17	0.07	0.03	0.03	0.01	0.01	0.07	0.01	0.01
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	--	<b>0.01</b>	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-142. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0005</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0001</b>	
22	Hinged Bottom Gates	--	0.02	0.02	0.02	0.02	--	--	0.0002
		--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0003</b>
		<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.01</b>	--	<b>0.0037</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0002</b>
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0001</b>
		--	--	--	--	--	--	--	<b>0.0003</b>
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>

**Table L1-142. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.0038	g/hp-hr	
				Scraper	Scrapers	1	367						0.0040	g/hp-hr
				Motor Grader	Graders	1	187						0.0039	g/hp-hr
				Compactor	Rollers	1	80						0.0037	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT						0.1721	g/hr
				10 TN Smooth Roller	Rollers	1	157						0.0036	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.0474	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						0.0049	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0038	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0040	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT						0.1721	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	0.0049	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0038	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						0.1721	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.0474	g/hr
<b>Concrete Duct Banc Subtotal</b>														
<b>19 - Buildings, Grounds, and Utilities Total</b>														
<b>20 -Permanent Operating Equipment</b>														
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.1721	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0040	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						0.0474	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.0474	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0040	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.0474	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>														
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0474	g/hr	
<b>Electrical Control Equipment CMU Building Subtotal</b>														
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.0474	g/hr	
<b>Electrical Power Equipment CMU Building Subtotal</b>														
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.0474	g/hr	
<b>Communication Equipment Subtotal</b>														
<b>20 -Permanent Operating Equipment Total</b>														
<b>GRAND TOTAL</b>														

Table L1-142. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
28	CMU Building and Earthwork Pad Constructi	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.01	0.09	0.09	0.09	0.11	0.09	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	
<b>GRAND TOTAL</b>		0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.84	0.84	0.81	0.35	0.39	0.74	0.65	0.62	0.71	0.61	0.62	0.53	0.31	0.03	

Table L1-142. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	<b>0.0014</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0002</b>	
		--	--	--	--	--	--	<b>0.0016</b>	
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
32	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
33	Electrical Control Equipment CMU Building	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
34	Electrical Power Equipment CMU Building	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
35	Communication Equipment	--	--	--	0.00	0.00	--	--	0.0000
		--	--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.03</b>	<b>0.07</b>	<b>0.07</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0300</b>

**Table L1-143. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.0170 0.0617 0.0651 2.4742 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0567 2.4742 0.8623 1.8973	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	2.4742 0.8623	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.1997 0.0303 0.2300 2.4742 0.8623 1.8973	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.0170 0.0917 0.0617 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.0917 0.0647 0.0567 2.4742 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.0917 2.4742 0.0365 0.8623	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	



Table L1-143. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.20</b>	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>
6	Clearing and Grubbing	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.94	1.94	1.94	1.94	1.94	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.71	0.71	0.71	0.71	0.71	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.60	0.60	0.60	0.60	0.60	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.46	1.46	1.46	1.46	1.46	1.46	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	5.57	5.57	5.57	5.57	5.57	5.57	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.32	0.32	0.32	0.32	0.32	0.32	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.49	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.68</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-143. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.12</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	<b>0.0031</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.19	--	0.0004
		--	--	--	--	--	0.04	--	0.0001
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.17	--	0.0003
		--	--	--	--	--	<b>0.41</b>	--	<b>0.0008</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0001</b>
		--	--	--	--	--	<b>0.41</b>	<b>0.12</b>	<b>0.0042</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0070
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	0.0006	
		--	--	--	--	--	--	--	<b>0.0119</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0035
		--	--	--	--	--	--	--	0.0262
		--	--	--	--	--	--	--	0.0096
		--	--	--	--	--	--	--	0.0081
		--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	<b>0.0503</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0262
		--	--	--	--	--	--	--	0.1002
		--	--	--	--	--	--	--	0.0101
		--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	<b>0.1447</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0007</b>

**Table L1-143. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.0170 0.0553 1.8973 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.0170 0.0553 1.8973 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.0170 0.0553 0.8623 1.8973	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.0651 0.8623	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.4742 0.0236 0.8623	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.1259 0.8623	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0170 0.0917 0.0617 1.8973 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.4742 0.0236 0.8623	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.0399 0.0236 0.1259 2.4742 0.0651 0.0274 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-143. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.77	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.29</b>	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	--
		--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	--
		--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	--
		--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	--
		--	--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	<b>8.04</b>	<b>8.04</b>	<b>12.44</b>	<b>11.76</b>	<b>11.76</b>	<b>11.76</b>	<b>3.73</b>	<b>2.59</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>3.88</b>	<b>2.59</b>
		<b>0.12</b>	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	<b>8.04</b>	<b>8.04</b>	<b>12.44</b>	<b>11.76</b>	<b>11.76</b>	<b>11.76</b>	<b>3.73</b>	<b>2.59</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>3.88</b>	<b>2.59</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.86</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	--	--	--	--	--	--	--	--	--

Table L1-143. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0108
		--	--	--	--	--	--	--	0.0285
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	<b>0.0478</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0013</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	0.0120
		--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	0.0316
		--	--	--	--	--	--	<b>0.0530</b>	
13	Erosion Control Seeding	--	0.11	0.11	--	--	--	--	0.0004
		--	0.06	0.06	--	--	--	--	0.0002
		--	<b>0.17</b>	<b>0.17</b>	--	--	--	--	<b>0.0006</b>
		--	<b>0.17</b>	<b>0.17</b>	--	--	--	<b>0.3104</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0020</b>	
16	Construction Site Dewatering (Pumping)	0.19	0.19	0.19	0.19	0.19	--	--	0.0112
		0.05	0.05	0.05	0.05	0.05	--	--	0.0027
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	<b>0.0139</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0037</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0008</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	<b>0.0185</b>	

**Table L1-143. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.1259 0.0696 2.4742 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0696 2.4742 0.8623	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.0399 1.8973 0.8623	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.0399 0.0236 0.1259 2.4742 0.0651 0.0274 0.8623	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.1259 0.0696 2.4742 0.8623	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.0399 2.4742 0.8623	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.4742 0.0356 0.8623 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-143. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	--	--	--	--	0.56	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	0.26	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.32	0.32	--	--	--	--	0.32	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.38	0.38	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.12	0.23	0.23	0.23	2.10	1.62	1.62	1.39	1.39	1.39	2.56	1.40	0.61	0.61	0.23	0.23	1.40	0.23	0.23
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	0.12	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.16	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	0.32	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.48	0.48	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	1.16	0.39	0.48	0.48	0.12	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.12	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-143. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	<b>0.0105</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	<b>0.0019</b>	
22	Hinged Bottom Gates	--	0.32	0.32	0.32	0.32	--	--	0.0038
		--	0.03	0.03	0.03	0.03	--	--	0.0004
		--	0.06	0.06	0.06	0.06	--	--	0.0007
		--	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	--	--	<b>0.0049</b>
		<b>0.23</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.12</b>	--	<b>0.0565</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0023</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0002</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0017</b>	
		--	--	--	--	--	--	<b>0.0043</b>	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	



**Table L1-143. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units		
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.1527	g/hp-hr		
				Scraper	Scrapers	1	367							0.0647	g/hp-hr
				Motor Grader	Graders	1	187							0.0567	g/hp-hr
				Compactor	Rollers	1	80							0.0823	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT							2.4742	g/hr
				10 TN Smooth Roller	Rollers	1	157							0.0365	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							0.8623	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84							0.1259	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							0.0696	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							0.0356	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT							2.4742	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>															
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	0.1259	g/hp-hr		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							0.0696	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT							2.4742	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							0.8623	g/hr
<b>Concrete Duct Banc Subtotal</b>															
<b>19 - Buildings, Grounds, and Utilities Total</b>															
<b>20 -Permanent Operating Equipment</b>															
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.4742	g/hr		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							0.0356	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2							0.8623	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>															
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0356	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							0.8623	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>															
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0356	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							0.8623	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>															
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.8623	g/hr		
<b>Electrical Control Equipment CMU Building Subtotal</b>															
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.8623	g/hr		
<b>Electrical Power Equipment CMU Building Subtotal</b>															
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.8623	g/hr		
<b>Communication Equipment Subtotal</b>															
<b>20 -Permanent Operating Equipment Total</b>															
<b>GRAND TOTAL</b>															

Table L1-143. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
28	CMU Building and Earthwork Pad Constructi	--	0.44	0.44	0.44	0.44	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.42	0.42	0.42	0.42	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.72	1.72	1.72	1.72	1.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.12	1.72	1.72	1.72	2.11	1.72	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	
<b>GRAND TOTAL</b>		0.44	3.61	3.73	3.27	10.37	9.98	14.66	13.38	13.38	13.15	5.12	3.97	7.73	6.57	5.90	6.94	5.79	5.88	5.76	2.94	0.48	

Table L1-143. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0067
		--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	0.0007	
								<b>0.0258</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0045</b>	
		--	--	--	--	--	--	<b>0.0304</b>	
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.05	0.05	0.05	0.05	0.05	--	--	0.0007
		<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>
32	CMU Building Mechanical Equipment	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.05	0.05	0.05	0.05	0.05	--	--	0.0007
		<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>
33	Electrical Control Equipment CMU Building	0.05	0.05	0.05	0.05	0.05	--	--	0.0007
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
34	Electrical Power Equipment CMU Building	0.05	0.05	0.05	0.05	0.05	--	--	0.0007
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>
35	Communication Equipment	--	--	--	0.05	0.05	--	--	0.0003
		--	--	--	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0003</b>
		<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.35</b>	<b>0.35</b>	<b>0.12</b>	--	<b>0.0050</b>
<b>GRAND TOTAL</b>		<b>0.54</b>	<b>1.12</b>	<b>1.12</b>	<b>1.00</b>	<b>1.00</b>	<b>0.66</b>	<b>0.12</b>	<b>0.4109</b>

**Table L1-144. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.0157 0.0568 0.0599 1.2073 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.0522 1.2073 0.4490 0.9593	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	1.2073 0.4490	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.1837 0.0279 0.2116 1.2073 0.4490 0.9593	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.0157 0.0844 0.0568 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.0844 0.0595 0.0522 1.2073 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.0844 1.2073 0.0336 0.4490	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-144. PM2.5 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>
6	Clearing and Grubbing	--	0.71	0.71	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.14	0.14	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.79	1.79	1.79	1.79	1.79	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.34	1.34	1.34	1.34	1.34	1.34	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	5.12	5.12	5.12	5.12	5.12	5.12	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.52	0.52	0.52	0.52	0.52	0.52	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.45	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.58</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-144. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.09</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	<b>0.0025</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.17	--	0.0003
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.08	--	0.0002
		--	--	--	--	--	<b>0.29</b>	--	<b>0.0006</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0001</b>
		--	--	--	--	--	<b>0.29</b>	<b>0.09</b>	<b>0.0032</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0064
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	<b>0.0097</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	0.0241
		--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	0.0041
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	<b>0.0418</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0241
		--	--	--	--	--	--	--	0.0922
		--	--	--	--	--	--	--	0.0093
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	<b>0.1298</b>
9	Earthen Backfill	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0006</b>

**Table L1-144. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.0157 0.0509 0.9593 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.0157 0.0509 0.9593 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.0157 0.0509 0.4490 0.9593	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.0599 0.4490	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	1.2073 0.0217 0.4490	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.1159 0.4490	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.0157 0.0844 0.0568 0.9593 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	1.2073 0.0217 0.4490	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.0367 0.0217 0.1159 1.2073 0.0599 0.0252 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-144. PM2.5 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--
														<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--
																			<b>0.84</b>			
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	0.28	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78	0.78	--	--	
												<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>				
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.09</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>7.21</b>	<b>7.21</b>	<b>10.89</b>	<b>10.30</b>	<b>10.30</b>	<b>10.30</b>	<b>3.10</b>	<b>1.68</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>2.52</b>	<b>1.68</b>	<b>0.09</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				<b>0.09</b>																		
15	Construction Site Dewatering (Temporary Co	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
					<b>0.15</b>	<b>0.15</b>	<b>0.15</b>															
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
		--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	
								<b>1.55</b>														
18	Sheet Pile Wall	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	
								<b>0.15</b>	<b>0.15</b>													
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	--	--	--	--	--	--	--	--	
								<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>									



Table L1-144. PM2.5 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	--	0.0100
		--	--	--	--	--	--	--	0.0144
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	<b>0.0311</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0008</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	0.0110
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0160
		--	--	--	--	--	--	<b>0.0344</b>	
13	Erosion Control Seeding	--	0.10	0.10	--	--	--	--	0.0004
		--	0.03	0.03	--	--	--	--	0.0001
		--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	<b>0.0005</b>
		--	<b>0.13</b>	<b>0.13</b>	--	--	--	<b>0.2488</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.0014</b>	
16	Construction Site Dewatering (Pumping)	0.17	0.17	0.17	0.17	0.17	--	--	0.0103
		0.02	0.02	0.02	0.02	0.02	--	--	0.0014
		<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	--	--	<b>0.0117</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0031</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0005</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	0.0010	
		--	--	--	--	--	--	<b>0.0153</b>	

**Table L1-144. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.1159 0.0640 1.2073 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.0640 1.2073 0.4490	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.0367 0.9593 0.4490	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.0367 0.0217 0.1159 1.2073 0.0599 0.0252 0.4490	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.1159 0.0640 1.2073 0.4490	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.0367 1.2073 0.4490	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.2073 0.0327 0.4490 0.0000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-144. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	0.17	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	--	--	--	--	<b>0.84</b>	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.09</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>1.74</b>	<b>1.31</b>	<b>1.31</b>	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	<b>1.99</b>	<b>1.03</b>	<b>0.39</b>	<b>0.39</b>	<b>0.20</b>	<b>0.20</b>	<b>1.03</b>	<b>0.20</b>	<b>0.20</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	--	<b>0.09</b>	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.37</b>	<b>0.37</b>	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.96</b>	<b>0.28</b>	<b>0.37</b>	<b>0.37</b>	<b>0.09</b>	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-144. PM2.5 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	<b>0.0075</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0010</b>	
22	Hinged Bottom Gates	--	0.29	0.29	0.29	0.29	--	--	0.0035
		--	0.02	0.02	0.02	0.02	--	--	0.0002
		--	0.03	0.03	0.03	0.03	--	--	0.0004
		--	<b>0.34</b>	<b>0.34</b>	<b>0.34</b>	<b>0.34</b>	--	--	<b>0.0041</b>
		<b>0.20</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.09</b>	--	<b>0.0448</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0019</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0013</b>	
		--	--	--	--	--	--	<b>0.0035</b>	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	

**Table L1-144. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.1405	g/hp-hr	
				Scraper	Scrapers	1	367						0.0595	g/hp-hr
				Motor Grader	Graders	1	187						0.0522	g/hp-hr
				Compactor	Rollers	1	80						0.0757	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT						1.2073	g/hr
				10 TN Smooth Roller	Rollers	1	157						0.0336	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.4490	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						0.1159	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0640	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0327	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT						1.2073	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	0.1159	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.0640	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						1.2073	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.4490	g/hr
<b>Concrete Duct Banc Subtotal</b>														
<b>19 - Buildings, Grounds, and Utilities Total</b>														
<b>20 -Permanent Operating Equipment</b>														
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	1.2073	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.0327	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						0.4490	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.0000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0327	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.4490	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.0327	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.4490	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>														
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.4490	g/hr	
<b>Electrical Control Equipment CMU Building Subtotal</b>														
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.4490	g/hr	
<b>Electrical Power Equipment CMU Building Subtotal</b>														
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.4490	g/hr	
<b>Communication Equipment Subtotal</b>														
<b>20 -Permanent Operating Equipment Total</b>														
<b>GRAND TOTAL</b>														

Table L1-144. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
28	CMU Building and Earthwork Pad Constructi	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.38	0.38	0.38	0.38	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	1.50	1.50	1.50	1.50	1.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.09	1.50	1.50	1.50	1.78	1.50	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	
<b>GRAND TOTAL</b>		0.30	3.04	3.12	2.74	9.14	8.87	12.72	11.61	11.61	11.46	4.25	2.83	5.35	4.39	3.84	4.71	3.83	3.93	3.92	1.96	0.37	

Table L1-144. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	0.0003	
								<b>0.0225</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	<b>0.0032</b>	
		--	--	--	--	--	--	<b>0.0258</b>	
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
32	CMU Building Mechanical Equipment	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
33	Electrical Control Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
34	Electrical Power Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
35	Communication Equipment	--	--	--	0.02	0.02	--	--	0.0001
		--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0001</b>
		<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.23</b>	<b>0.23</b>	<b>0.09</b>	--	<b>0.0034</b>
<b>GRAND TOTAL</b>		<b>0.41</b>	<b>0.88</b>	<b>0.88</b>	<b>0.77</b>	<b>0.77</b>	<b>0.46</b>	<b>0.09</b>	<b>0.3294</b>

**Table L1-145. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2



Table L1-145. GHG Exhaust Emissions from

#	Activity	Emission Factors					Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e	Units	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>							<b>1.08</b>
2	Fremont Weir Demo	323.936	0.01421	0	324.292	g/hp-hr	10.25
		306.887	0.01857	0	307.351	g/hp-hr	4.44
		312.57	0.01854	0	313.034	g/hp-hr	2.67
		24743.4	0	0	24743.4	g/hr	2.18
		36496.5	0	0	36496.5	g/hr	3.21
		8716.75	0	0	8716.75	g/hr	4.60
<b>Fremont Weir Demo Subtotal</b>							<b>27.34</b>
3	Levee O&M Road Regrading (6" AB)	346.669	0.01722	0	347.099	g/hp-hr	2.08
		24743.4	0	0	24743.4	g/hr	0.79
		8716.75	0	0	8716.75	g/hr	0.28
		36496.5	0	0	36496.5	g/hr	5.84
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>							<b>8.99</b>
4	Temporary Electrical Power	24743.4	0	0	24743.4	g/hr	0.79
		8716.75	0	0	8716.75	g/hr	0.56
<b>Temporary Electrical Power Subtotal</b>							<b>1.35</b>
<b>02 - Relocations Total</b>							<b>38.76</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>							<b>1.08</b>
6	Clearing and Grubbing	363.718	0.03898	0	364.692	g/hp-hr	11.55
		227.324	0.0068	0	227.494	g/hp-hr	9.17
		395.091	0	0	395.091	g/hp-hr	0.91
		24743.4	0	0	24743.4	g/hr	7.13
		8716.75	0	0	8716.75	g/hr	15.06
		36496.5	0	0	36496.5	g/hr	10.51
<b>Clearing and Grubbing Subtotal</b>							<b>54.34</b>
7	Excavation (Wet Conditions)	323.936	0.01421	0	324.292	g/hp-hr	60.10
		335.303	0.02493	0	335.926	g/hp-hr	87.07
		306.887	0.01857	0	307.351	g/hp-hr	43.55
		36496.5	0	0	36496.5	g/hr	141.90
		8716.75	0	0	8716.75	g/hr	26.36
<b>Excavation (Wet Conditions) Subtotal</b>							<b>358.98</b>
8	Excavation/Grading (Dry Conditions)	335.303	0.02493	0	335.926	g/hp-hr	87.07
		409.183	0.02415	0	409.787	g/hp-hr	576.40
		346.669	0.01722	0	347.099	g/hp-hr	56.08
		24743.4	0	0	24743.4	g/hr	21.38
		8716.75	0	0	8716.75	g/hr	52.72
<b>Excavation/Grading (Dry Conditions) Subtotal</b>							<b>793.65</b>
9	Earthen Backfill	335.303	0.02493	0	335.926	g/hp-hr	1.61
		24743.4	0	0	24743.4	g/hr	0.40
		318.253	0.01911	0	318.731	g/hp-hr	0.80
		8716.75	0	0	8716.75	g/hr	0.42
<b>Earthen Backfill Subtotal</b>							<b>3.23</b>

**Table L1-145. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
15	Construction Site Dewatering (Temporary Co	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32

Table L1-145. GHG Exhaust Emissions from

#	Activity	Emission Factors					Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e	Units	
10	Riprap - Class 2	323.936	0.01421	0	324.292	g/hp-hr	98.68
		363.718	0.02114	0	364.246	g/hp-hr	64.69
		36496.5	0	0	36496.5	g/hr	496.94
		8716.75	0	0	8716.75	g/hr	25.80
<b>Riprap - Class 2 Subtotal</b>						<b>686.11</b>	
11	Riprap - Class 3	323.936	0.01421	0	324.292	g/hp-hr	2.67
		363.718	0.02114	0	364.246	g/hp-hr	1.75
		36496.5	0	0	36496.5	g/hr	13.43
		8716.75	0	0	8716.75	g/hr	0.70
<b>Riprap - Class 3 Subtotal</b>						<b>18.54</b>	
12	RSP Bedding Material	323.936	0.01421	0	324.292	g/hp-hr	109.35
		363.718	0.02114	0	364.246	g/hp-hr	71.68
		8716.75	0	0	8716.75	g/hr	28.59
		36496.5	0	0	36496.5	g/hr	550.66
<b>RSP Bedding Material Subtotal</b>						<b>760.28</b>	
13	Erosion Control Seeding	312.57	0.01854	0	313.034	g/hp-hr	1.70
		8716.75	0	0	8716.75	g/hr	1.95
<b>Erosion Control Seeding Subtotal</b>						<b>3.65</b>	
<b>09 - Channels and Canals Total</b>						<b>2,679.86</b>	
<b>15 - Floodway Control and Diversion Structures</b>							
14	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
15	Construction Site Dewatering (Temporary Cofferdam)	24743.4	0	0	24743.4	g/hr	3.56
		426.232	0.00931	0	426.465	g/hp-hr	13.57
		8716.75	0	0	8716.75	g/hr	7.53
<b>Site Dewatering (Temporary Cofferdam) Subtotal</b>						<b>24.67</b>	
16	Construction Site Dewatering (Pumping)	420.549	0.02382	0	421.145	g/hp-hr	33.96
		8716.75	0	0	8716.75	g/hr	25.10
<b>Construction Site Dewatering (Pumping) Subtotal</b>						<b>59.07</b>	
17	Excavation (Wet Conditions)	323.936	0.01421	0	324.292	g/hp-hr	4.45
		335.303	0.02493	0	335.926	g/hp-hr	6.45
		306.887	0.01857	0	307.351	g/hp-hr	3.23
		36496.5	0	0	36496.5	g/hr	10.51
		8716.75	0	0	8716.75	g/hr	1.95
<b>Excavation (Wet Conditions) Subtotal</b>						<b>26.59</b>	
18	Sheet Pile Wall	24743.4	0	0	24743.4	g/hr	1.39
		426.232	0.00931	0	426.465	g/hp-hr	5.28
		8716.75	0	0	8716.75	g/hr	2.93
<b>Sheet Pile Wall Subtotal</b>						<b>9.59</b>	
19	Headworks Structure Concrete Piles	244.373	0.01266	0	244.69	g/hp-hr	18.79
		426.232	0.00931	0	426.465	g/hp-hr	24.13
		420.549	0.02382	0	421.145	g/hp-hr	9.06
		24743.4	0	0	24743.4	g/hr	19.00
		312.57	0.01854	0	313.034	g/hp-hr	7.77
		323.936	0.01518	0	324.316	g/hp-hr	52.14
8716.75	0	0	8716.75	g/hr	17.85		
<b>Headworks Structure Concrete Piles Subtotal</b>						<b>148.74</b>	

**Table L1-145. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24
<b>15 -</b>											
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1
<b>Pedestrian Bri</b>											
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2

Table L1-145. GHG Exhaust Emissions from

#	Activity	Emission Factors					Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e	Units	
20	Headworks Structure	420.549	0.02382	0	421.145	g/hp-hr	15.28
		244.373	0.02567	0	245.015	g/hp-hr	0.85
		24743.4	0	0	24743.4	g/hr	21.38
		8716.75	0	0	8716.75	g/hr	26.36
<b>Headworks Structure Subtotal</b>						<b>63.87</b>	
21	Headworks Channel Transition	244.373	0.02567	0	245.015	g/hp-hr	0.31
		24743.4	0	0	24743.4	g/hr	7.92
		8716.75	0	0	8716.75	g/hr	8.37
<b>Headworks Channel Transition Subtotal</b>						<b>16.60</b>	
22	Hinged Bottom Gates	244.373	0.01266	0	244.69	g/hp-hr	21.14
		36496.5	0	0	36496.5	g/hr	7.01
		8716.75	0	0	8716.75	g/hr	6.69
<b>Hinged Bottom Gates Subtotal</b>						<b>34.84</b>	
<b>Floodway Control and Diversion Structures Total</b>						<b>385.05</b>	
<b>08 - Roads, Railroads, and Bridges</b>							
23	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
24	Pedestrian Bridge Concrete Piles	244.373	0.01266	0	244.69	g/hp-hr	2.35
		426.232	0.00931	0	426.465	g/hp-hr	3.02
		420.549	0.02382	0	421.145	g/hp-hr	1.13
		24743.4	0	0	24743.4	g/hr	2.38
		312.57	0.01854	0	313.034	g/hp-hr	0.97
		323.936	0.01518	0	324.316	g/hp-hr	6.52
8716.75	0	0	8716.75	g/hr	2.23		
<b>Pedestrian Bridge Concrete Piles Subtotal</b>						<b>18.59</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	420.549	0.02382	0	421.145	g/hp-hr	0.28
		244.373	0.02567	0	245.015	g/hp-hr	0.02
		24743.4	0	0	24743.4	g/hr	0.40
		8716.75	0	0	8716.75	g/hr	0.49
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>						<b>1.18</b>	
26	Pedestrian Bridge Span Installation	244.373	0.01266	0	244.69	g/hp-hr	6.17
		24743.4	0	0	24743.4	g/hr	2.77
		8716.75	0	0	8716.75	g/hr	2.44
<b>Pedestrian Bridge Span Installation Subtotal</b>						<b>11.38</b>	
<b>08 - Roads, Railroads, and Bridges Total</b>						<b>32.24</b>	
<b>19 - Buildings, Grounds, and Utilities</b>							
27	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	

**Table L1-145. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scrapper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30
											<b>CMU B</b>
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30
											<b>Me</b>
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30
											<b>Ele</b>
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30
											<b>EI</b>
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12
<b>GRAND TOTAL</b>											

Table L1-145. GHG Exhaust Emissions from

#	Activity	Emission Factors					Annual Emissions, MTCO2e/yr
		CO2	CH4	N2O	CO2e	Units	
28	CMU Building and Earthwork Pad Construction	335.303	0.03353	0	336.141	g/hp-hr	13.31
		409.183	0.02415	0	409.787	g/hp-hr	36.09
		346.669	0.01722	0	347.099	g/hp-hr	15.58
		318.253	0.02578	0	318.898	g/hp-hr	6.12
		24743.4	0	0	24743.4	g/hr	5.94
		318.253	0.01911	0	318.731	g/hp-hr	12.01
		8716.75	0	0	8716.75	g/hr	14.64
		420.549	0.02382	0	421.145	g/hp-hr	8.49
		244.373	0.02567	0	245.015	g/hp-hr	0.47
		340.986	0.02272	0	341.554	g/hp-hr	8.20
		24743.4	0	0	24743.4	g/hr	5.94
<b>Building and Earthwork Pad Construction Subtotal</b>						<b>126.79</b>	
29	Concrete Duct Banc	420.549	0.02382	0	421.145	g/hp-hr	6.51
		244.373	0.02567	0	245.015	g/hp-hr	0.36
		24743.4	0	0	24743.4	g/hr	9.11
		8716.75	0	0	8716.75	g/hr	11.23
<b>Concrete Duct Banc Subtotal</b>						<b>27.20</b>	
<b>19 - Buildings, Grounds, and Utilities Total</b>						<b>155.08</b>	
<b>20 -Permanent Operating Equipment</b>							
30	Mobilization and Demobilization	24743.4	0	0	24743.4	g/hr	0.40
		340.986	0.02272	0	341.554	g/hp-hr	0.55
		8716.75	0	0	8716.75	g/hr	0.14
		0	0	0	0	g/hr	0.00
<b>Mobilization and Demobilization Subtotal</b>						<b>1.08</b>	
31	Mechanical Hydraulic Cylinders & Housing	340.986	0.02272	0	341.554	g/hp-hr	8.20
		8716.75	0	0	8716.75	g/hr	6.28
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>						<b>14.47</b>	
32	CMU Building Mechanical Equipment	340.986	0.02272	0	341.554	g/hp-hr	8.20
		8716.75	0	0	8716.75	g/hr	6.28
<b>CMU Building Mechanical Equipment Subtotal</b>						<b>14.47</b>	
33	Electrical Control Equipment CMU Building	8716.75	0	0	8716.75	g/hr	6.28
<b>Electrical Control Equipment CMU Building Subtotal</b>						<b>6.28</b>	
34	Electrical Power Equipment CMU Building	8716.75	0	0	8716.75	g/hr	6.28
<b>Electrical Power Equipment CMU Building Subtotal</b>						<b>6.28</b>	
35	Communication Equipment	8716.75	0	0	8716.75	g/hr	2.51
<b>Communication Equipment Subtotal</b>						<b>2.51</b>	
<b>20 -Permanent Operating Equipment Total</b>						<b>45.09</b>	
<b>GRAND TOTAL</b>						<b>3,336.08</b>	

## Construction Worker Commuting Exhaust Emissions Summary

**Table L1-146. Maximum Daily Construction Worker Commuting Emissions (Alternative 2)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.02	0.10	1.03	0.00	0.46	0.12
09 - Channels and Canals	0.23	1.14	11.49	0.04	5.13	1.38
15 - Floodway Control and Diversion Structures	0.10	0.51	5.13	0.02	2.29	0.62
08 - Roads, Railroads, and Bridges	0.03	0.13	1.33	0.01	0.60	0.16
19 - Buildings, Grounds, and Utilities	0.04	0.19	1.95	0.01	0.87	0.23
20 -Permanent Operating Equipment	0.04	0.20	2.05	0.01	0.92	0.25
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>0.32</b>	<b>1.58</b>	<b>15.90</b>	<b>0.06</b>	<b>7.10</b>	<b>1.91</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-147. Annual Construction Worker Commuting Emissions (Alternative 2)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.00	0.01	0.00	0.00	0.00	2.96
09 - Channels and Canals	0.01	0.03	0.35	0.00	0.16	0.04	123.54
15 - Floodway Control and Diversion Structures	0.00	0.01	0.10	0.00	0.04	0.01	34.73
08 - Roads, Railroads, and Bridges	0.00	0.00	0.01	0.00	0.00	0.00	2.17
19 - Buildings, Grounds, and Utilities	0.00	0.00	0.03	0.00	0.01	0.00	9.49
20 -Permanent Operating Equipment	0.00	0.00	0.03	0.00	0.01	0.00	9.62
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.01</b>	<b>0.05</b>	<b>0.52</b>	<b>0.00</b>	<b>0.23</b>	<b>0.06</b>	<b>182.51</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.



**Table L1-148. ROG Emissions from Construction Worker Commuting (Alternative 2)**

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	2	1.55E-02	0.0102	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	11	1.55E-02	--	0.0205	0.0205	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	4	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	4	1.55E-02	0.0061	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.0164</b>	<b>0.0205</b>	<b>0.0205</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	2	1.55E-02	0.1086	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	18	1.55E-02	--	0.0369	0.0369	0.0369	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	27	1.55E-02	--	--	--	--	--	0.0820	0.0820	0.0820	0.0820	0.0820	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	36	1.55E-02	--	--	--	--	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	--	--	--	--	--	--	--	--	
9	Earthen Backfill	2	1.55E-02	--	--	--	--	--	0.0082	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	37	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	
11	Riprap - Class 3	2	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0574	
12	RSP Bedding Material	41	1.55E-02	--	--	--	--	--	--	--	--	--	--	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	
13	Erosion Control Seeding	7	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>0.1086</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0492</b>	<b>0.0492</b>	<b>0.1393</b>	<b>0.1311</b>	<b>0.1311</b>	<b>0.1311</b>	<b>0.0820</b>	<b>0.1148</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.1721</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	2	1.55E-02	--	--	0.1025	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	1.55E-02	--	--	--	0.0143	0.0143	0.0143	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	1.55E-02	--	--	--	--	--	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	
17	Excavation (Wet Conditions)	4	1.55E-02	--	--	--	--	--	0.0410	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	1.55E-02	--	--	--	--	--	0.0143	0.0143	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	1.55E-02	--	--	--	--	--	0.0266	0.0266	0.0266	0.0266	0.0266	0.0266	0.0266	--	--	--	--	--	--	
20	Headworks Structure	18	1.55E-02	--	--	--	--	--	--	--	--	--	--	0.0553	0.0553	--	--	--	--	--	0.0553	
21	Headworks Channel Transition	10	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	0.0328	0.0328	--	--	--	--	
22	Hinged Bottom Gates	24	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>--</b>	<b>--</b>	<b>0.1025</b>	<b>0.0143</b>	<b>0.0143</b>	<b>0.0143</b>	<b>0.0471</b>	<b>0.0471</b>	<b>0.0471</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0881</b>	<b>0.0615</b>	<b>0.0389</b>	<b>0.0389</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0615</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	2	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0102	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0266	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0184	--	--	
26	Pedestrian Bridge Span Installation	7	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0143	0.0143	
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.0102</b>	<b>0.0266</b>	<b>0.0184</b>	<b>0.0143</b>	<b>0.0143</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	2	1.55E-02	0.0184	--	--	--	--	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	1.55E-02	--	0.0205	0.0205	0.0205	0.0205	0.0205	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	23	1.55E-02	--	--	--	--	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.0184</b>	<b>0.0205</b>	<b>0.0205</b>	<b>0.0205</b>	<b>0.0389</b>	<b>0.0205</b>	<b>0.0184</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	2	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>				<b>0.1434</b>	<b>0.0779</b>	<b>0.1803</b>	<b>0.0717</b>	<b>0.1025</b>	<b>0.0840</b>	<b>0.2049</b>	<b>0.1783</b>	<b>0.1783</b>	<b>0.1639</b>	<b>0.1148</b>	<b>0.1475</b>	<b>0.3176</b>	<b>0.2910</b>	<b>0.2787</b>	<b>0.2951</b>	<b>0.2541</b>	<b>0.2500</b>	<b>0.2479</b>

Table L1-148. ROG Emissions from C

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0102	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0001
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0164	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0164</b>	<b>0.0102</b>	<b>0.0002</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.1086	--	--	--	--	--	--	--	0.0001
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0003
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0011
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0009
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.1148	--	--	--	--	--	--	--	--	0.0021
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0001
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0024
13	Erosion Control Seeding	--	--	--	0.0082	0.0082	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.1148</b>	<b>0.1086</b>	--	<b>0.0082</b>	<b>0.0082</b>	--	--	--	--	<b>0.0070</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.1025	--	0.0001
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0001
16	Construction Site Dewatering (Pumping)	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	--	--	0.0004
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0001
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0005
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0002
22	Hinged Bottom Gates	--	--	--	0.0123	0.0123	0.0123	0.0123	--	--	0.0001
	<b>15 - Floodway Control and Div</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.1025</b>	--	<b>0.0020</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0102	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
	<b>08 - Roads, Railro</b>	<b>0.0102</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0003
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0002
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0005</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0041	--	--	--	--	--	0.0041	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
32	CMU Building Mechanical Equipment	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
33	Electrical Control Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
34	Electrical Power Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
35	Communication Equipment	--	--	--	--	0.0082	0.0082	--	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0041</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0410</b>	<b>0.0410</b>	<b>0.0041</b>	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		<b>0.1311</b>	<b>0.1189</b>	<b>0.0389</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.1229</b>	<b>0.0102</b>	<b>0.0103</b>



Table L1-149. NOx Emissions from Cc

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0510	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0816	--	0.0002
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0816</b>	<b>0.0510</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.5407	--	--	--	--	--	--	--	0.0005
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0017
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0055
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0044
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.5713	--	--	--	--	--	--	--	--	0.0106
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0117
13	Erosion Control Seeding	--	--	--	0.0408	0.0408	--	--	--	--	0.0001
	<b>09 - Cha</b>	<b>0.5713</b>	<b>0.5407</b>	--	<b>0.0408</b>	<b>0.0408</b>	--	--	--	--	<b>0.0349</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.5101	--	0.0005
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0006
16	Construction Site Dewatering (Pumping)	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	--	--	0.0018
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0021
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0025
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0008
22	Hinged Bottom Gates	--	--	--	0.0612	0.0612	0.0612	0.0612	--	--	0.0007
	<b>15 - Floodway Control and Div</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.5101</b>	--	<b>0.0098</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0510	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0002
	<b>08 - Roads, Railro</b>	<b>0.0510</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0015
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0011
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0027</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0204	--	--	--	--	--	0.0204	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
32	CMU Building Mechanical Equipment	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
33	Electrical Control Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
34	Electrical Power Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
35	Communication Equipment	--	--	--	--	--	0.0408	0.0408	--	--	0.0002
	<b>20 -Permanent Ope</b>	--	<b>0.0204</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.2040</b>	<b>0.2040</b>	<b>0.0204</b>	--	<b>0.0027</b>
<b>GRAND TOTAL</b>		<b>0.6529</b>	<b>0.5917</b>	<b>0.1938</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.6121</b>	<b>0.0510</b>	<b>0.0515</b>



**Table L1-150. CO Emissions from Cor**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.5129	0.0005
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0056
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.8207	--	0.0016
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	<b>0.8207</b>	<b>0.5129</b>	<b>0.0084</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	5.4371	--	--	--	--	--	--	--	0.0054
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0166
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0554
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0443
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0004
10	Riprap - Class 2	5.7448	--	--	--	--	--	--	--	--	0.1063
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0029
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.1178
13	Erosion Control Seeding	--	--	--	0.4103	0.4103	--	--	--	--	0.0014
	<b>09 - Cha</b>	<b>5.7448</b>	<b>5.4371</b>	--	<b>0.4103</b>	<b>0.4103</b>	--	--	--	--	<b>0.3505</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	5.1293	--	0.0051
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0065
16	Construction Site Dewatering (Pumping)	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	--	--	0.0185
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0041
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0025
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0213
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0249
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0082
22	Hinged Bottom Gates	--	--	--	0.6155	0.6155	0.6155	0.6155	--	--	0.0074
	<b>15 - Floodway Control and Div</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>5.1293</b>	--	<b>0.0985</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.5129	--	--	--	--	--	--	--	--	0.0005
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0027
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0005
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0025
	<b>08 - Roads, Railro</b>	<b>0.5129</b>	--	--	--	--	--	--	--	--	<b>0.0062</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0009
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0154
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0106
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0269</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.2052	--	--	--	--	--	0.2052	--	0.0002
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
32	CMU Building Mechanical Equipment	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
33	Electrical Control Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
34	Electrical Power Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
35	Communication Equipment	--	--	--	--	--	0.4103	0.4103	--	--	0.0025
	<b>20 -Permanent Ope</b>	--	<b>0.2052</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>2.0517</b>	<b>2.0517</b>	<b>0.2052</b>	--	<b>0.0273</b>
<b>GRAND TOTAL</b>		<b>6.5655</b>	<b>5.9500</b>	<b>1.9491</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>6.1552</b>	<b>0.5129</b>	<b>0.5179</b>



Table L1-151. SOx Emissions from Cc

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0020	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0032	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0032</b>	<b>0.0020</b>	<b>0.0000</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.0212	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0001
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0002
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0002
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.0224	--	--	--	--	--	--	--	--	0.0004
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0000
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0005
13	Erosion Control Seeding	--	--	--	0.0016	0.0016	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.0224</b>	<b>0.0212</b>	--	<b>0.0016</b>	<b>0.0016</b>	--	--	--	--	<b>0.0014</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0200	--	0.0000
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0000
16	Construction Site Dewatering (Pumping)	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	--	--	0.0001
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0000
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0000
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0001
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0000
22	Hinged Bottom Gates	--	--	--	0.0024	0.0024	0.0024	0.0024	--	--	0.0000
	<b>15 - Floodway Control and Div</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0200</b>	--	<b>0.0004</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0020	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0000
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0000
	<b>08 - Roads, Railro</b>	<b>0.0020</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0001
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0008	--	--	--	--	--	0.0008	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
32	CMU Building Mechanical Equipment	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
33	Electrical Control Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
34	Electrical Power Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
35	Communication Equipment	--	--	--	--	--	0.0016	0.0016	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0008</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0080</b>	<b>0.0080</b>	<b>0.0008</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>0.0256</b>	<b>0.0232</b>	<b>0.0076</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0240</b>	<b>0.0020</b>	<b>0.0020</b>





**Table L1-152. PM10 Emissions from C**

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.2292	0.0002
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0025
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.3667	--	0.0007
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	<b>0.3667</b>	<b>0.2292</b>	<b>0.0038</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	2.4292	--	--	--	--	--	--	--	0.0024
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0074
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0248
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0198
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0002
10	Riprap - Class 2	2.5667	--	--	--	--	--	--	--	--	0.0475
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0013
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0526
13	Erosion Control Seeding	--	--	--	0.1833	0.1833	--	--	--	--	0.0006
<b>09 - Cha</b>		<b>2.5667</b>	<b>2.4292</b>	--	<b>0.1833</b>	<b>0.1833</b>	--	--	--	--	<b>0.1566</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	2.2917	--	0.0023
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0029
16	Construction Site Dewatering (Pumping)	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	--	--	0.0083
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0018
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0011
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0095
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0111
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0037
22	Hinged Bottom Gates	--	--	--	0.2750	0.2750	0.2750	0.2750	--	--	0.0033
<b>15 - Floodway Control and Div</b>		<b>0.1375</b>	<b>0.1375</b>	<b>0.1375</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>2.2917</b>	--	<b>0.0440</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.2292	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0012
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0011
<b>08 - Roads, Railro</b>		<b>0.2292</b>	--	--	--	--	--	--	--	--	<b>0.0028</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0069
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0047
<b>19 - Buildings, Grou</b>		--	--	--	--	--	--	--	--	--	<b>0.0120</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0917	--	--	--	--	--	0.0917	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
32	CMU Building Mechanical Equipment	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
33	Electrical Control Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
34	Electrical Power Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
35	Communication Equipment	--	--	--	--	0.1833	0.1833	--	--	--	0.0011
<b>20 -Permanent Ope</b>		--	<b>0.0917</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.9167</b>	<b>0.9167</b>	<b>0.0917</b>	--	<b>0.0122</b>
<b>GRAND TOTAL</b>		<b>2.9334</b>	<b>2.6584</b>	<b>0.8708</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>2.7500</b>	<b>0.2292</b>	<b>0.2314</b>

Table L1-153. PM2.5 Emissions from Construction Worker Commuting (Alternative 2)

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	2	9.31E-02	0.0616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	11	9.31E-02	--	0.1232	0.1232	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	4	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	4	9.31E-02	0.0369	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.0985</b>	<b>0.1232</b>	<b>0.1232</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	2	9.31E-02	0.6527	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	18	9.31E-02	--	0.2217	0.2217	0.2217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	27	9.31E-02	--	--	--	--	--	0.4926	0.4926	0.4926	0.4926	0.4926	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	36	9.31E-02	--	--	--	--	0.2956	0.2956	0.2956	0.2956	0.2956	0.2956	--	--	--	--	--	--	--	--	
9	Earthen Backfill	2	9.31E-02	--	--	--	--	--	0.0493	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	37	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	0.6897	0.6897	0.6897	0.6897	0.6897	0.6897	0.6897	
11	Riprap - Class 3	2	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3448	
12	RSP Bedding Material	41	9.31E-02	--	--	--	--	--	--	--	--	--	--	0.6897	0.6897	0.6897	0.6897	0.6897	0.6897	0.6897	0.6897	
13	Erosion Control Seeding	7	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>0.6527</b>	<b>0.2217</b>	<b>0.2217</b>	<b>0.2217</b>	<b>0.2956</b>	<b>0.2956</b>	<b>0.8375</b>	<b>0.7882</b>	<b>0.7882</b>	<b>0.7882</b>	<b>0.4926</b>	<b>0.6897</b>	<b>1.3793</b>	<b>1.3793</b>	<b>1.3793</b>	<b>1.3793</b>	<b>1.3793</b>	<b>1.0345</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	2	9.31E-02	--	--	0.6158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	9.31E-02	--	--	--	0.0862	0.0862	0.0862	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	9.31E-02	--	--	--	--	--	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	
17	Excavation (Wet Conditions)	4	9.31E-02	--	--	--	--	--	0.2463	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	9.31E-02	--	--	--	--	--	0.0862	0.0862	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	9.31E-02	--	--	--	--	--	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	0.1601	--	--	--	--	--	--	
20	Headworks Structure	18	9.31E-02	--	--	--	--	--	--	--	--	--	--	0.3325	0.3325	--	--	--	--	--	0.3325	
21	Headworks Channel Transition	10	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	0.1970	0.1970	--	--	--	--	--	
22	Hinged Bottom Gates	24	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				--	--	<b>0.6158</b>	<b>0.0862</b>	<b>0.0862</b>	<b>0.0862</b>	<b>0.2833</b>	<b>0.2833</b>	<b>0.2833</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.5296</b>	<b>0.3695</b>	<b>0.2340</b>	<b>0.2340</b>	<b>0.0369</b>	<b>0.0369</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	2	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	0.0616	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1601	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1108	--	--	--	
26	Pedestrian Bridge Span Installation	7	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0862	0.0862	0.0862	
<b>08 - Roads, Railroads, and Bridges Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0616</b>	<b>0.1601</b>	<b>0.1108</b>	<b>0.0862</b>	<b>0.0862</b>	<b>0.0862</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	2	9.31E-02	0.1108	--	--	--	--	0.1108	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	9.31E-02	--	0.1232	0.1232	0.1232	0.1232	0.1232	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	23	9.31E-02	--	--	--	--	0.1108	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.1108</b>	<b>0.1232</b>	<b>0.1232</b>	<b>0.1232</b>	<b>0.2340</b>	<b>0.1232</b>	<b>0.1108</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	2	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	9.31E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>				<b>0.8621</b>	<b>0.4680</b>	<b>1.0838</b>	<b>0.4310</b>	<b>0.6158</b>	<b>0.5049</b>	<b>1.2316</b>	<b>1.0715</b>	<b>1.0715</b>	<b>0.9852</b>	<b>0.6897</b>	<b>0.8867</b>	<b>1.9089</b>	<b>1.7488</b>	<b>1.6749</b>	<b>1.7734</b>	<b>1.5271</b>	<b>1.5025</b>	<b>1.4902</b>

Table L1-153. PM2.5 Emissions from (

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0616	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0007
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0985	--	0.0002
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0985</b>	<b>0.0616</b>	<b>0.0010</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.6527	--	--	--	--	--	--	--	0.0007
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0020
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0067
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0053
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.6897	--	--	--	--	--	--	--	--	0.0128
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0141
13	Erosion Control Seeding	--	--	--	0.0493	0.0493	--	--	--	--	0.0002
<b>09 - Cha</b>		<b>0.6897</b>	<b>0.6527</b>	--	<b>0.0493</b>	<b>0.0493</b>	--	--	--	--	<b>0.0421</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.6158	--	0.0006
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0008
16	Construction Site Dewatering (Pumping)	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	--	--	0.0022
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0005
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0003
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0026
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0030
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0010
22	Hinged Bottom Gates	--	--	--	0.0739	0.0739	0.0739	0.0739	--	--	0.0009
<b>15 - Floodway Control and Div</b>		<b>0.0369</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.6158</b>	--	<b>0.0118</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0616	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0001
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0003
<b>08 - Roads, Railro</b>		<b>0.0616</b>	--	--	--	--	--	--	--	--	<b>0.0007</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0018
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0013
<b>19 - Buildings, Grou</b>		--	--	--	--	--	--	--	--	--	<b>0.0032</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0246	--	--	--	--	--	0.0246	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
32	CMU Building Mechanical Equipment	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
33	Electrical Control Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
34	Electrical Power Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
35	Communication Equipment	--	--	--	--	--	0.0493	0.0493	--	--	0.0003
<b>20 -Permanent Ope</b>		--	<b>0.0246</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.2463</b>	<b>0.2463</b>	<b>0.0246</b>	--	<b>0.0033</b>
<b>GRAND TOTAL</b>		<b>0.7882</b>	<b>0.7143</b>	<b>0.2340</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.7389</b>	<b>0.0616</b>	<b>0.0622</b>

**Table L1-154. GHG Emissions from Construction Worker Commuting (Alternative 2)**

#	Activity	Estimated Duration, Days	CO2 Emission Factor, (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	2	301.29	0.18
2	Fremont Weir Concrete Demo	11	301.29	1.99
3	Levee O&M Road Regrading (6" AB)	4	301.29	0.58
4	Temporary Electrical Power	4	301.29	0.22
<b>02 - Relocations Total</b>				<b>2.96</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	2	301.29	1.92
6	Clearing and Grubbing	18	301.29	5.86
7	Excavation (Wet Conditions)	27	301.29	19.52
8	Excavation/Grading (Dry Conditions)	36	301.29	15.62
9	Earthen Backfill	2	301.29	0.14
10	Riprap - Class 2	37	301.29	37.46
11	Riprap - Class 3	2	301.29	1.01
12	RSP Bedding Material	41	301.29	41.51
13	Erosion Control Seeding	7	301.29	0.51
<b>09 - Channels and Canals Total</b>				<b>123.54</b>
<b>15 - Floodway Control and Diversion Structures</b>				
14	Mobilization and Demobilization	2	301.29	1.81
15	Construction Site Dewatering (Temporary Co	18	301.29	2.28
16	Construction Site Dewatering (Pumping)	120	301.29	6.51
17	Excavation (Wet Conditions)	4	301.29	1.45
18	Sheet Pile Wall	7	301.29	0.89
19	Headworks Structure Concrete Piles	32	301.29	7.52
20	Headworks Structure	18	301.29	8.79
21	Headworks Channel Transition	10	301.29	2.89
22	Hinged Bottom Gates	24	301.29	2.60
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>34.73</b>
<b>08 - Roads, Railroads, and Bridges</b>				
23	Mobilization and Demobilization	2	301.29	0.18
24	Pedestrian Bridge Concrete Piles	4	301.29	0.94
25	Pedestrian Bridge Concrete Abutments and V	1	301.29	0.16
26	Pedestrian Bridge Span Installation	7	301.29	0.89
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>2.17</b>
<b>19 - Buildings, Grounds, and Utilities</b>				
27	Mobilization and Demobilization	2	301.29	0.33
28	CMU Building and Earthwork Pad Constructi	30	301.29	5.42
29	Concrete Duct Bank	23	301.29	3.74
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>9.49</b>
<b>20 -Permanent Operating Equipment</b>				
30	Mobilization and Demobilization	2	301.29	0.07
31	Mechanical Hydraulic Cylinders & Housing	30	301.29	2.17
32	CMU Building Mechanical Equipment	30	301.29	2.17
33	Electrical Control Equipment CMU Building	30	301.29	2.17
34	Electrical Power Equipment CMU Building	30	301.29	2.17
35	Communication Equipment	12	301.29	0.87
<b>20 -Permanent Operating Equipment Total</b>				<b>9.62</b>
<b>GRAND TOTAL</b>				<b>182.51</b>

## Haul Truck Exhaust Emissions Summary

**Table L1-155. Maximum Daily Haul Truck Emissions (Alternative 2)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.48	13.93	2.94	0.06	1.64	0.50
09 - Channels and Canals	7.06	206.09	43.45	0.89	24.25	7.38
15 - Floodway Control and Diversion Structures	0.32	9.48	2.00	0.04	1.12	0.34
08 - Roads, Railroads, and Bridges	0.09	2.72	0.57	0.01	0.32	0.10
19 - Buildings, Grounds, and Utilities	0.11	3.19	0.67	0.01	0.38	0.11
20 -Permanent Operating Equipment	0.02	0.49	0.10	0.00	0.06	0.02
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>7.39</b>	<b>215.57</b>	<b>45.45</b>	<b>0.93</b>	<b>25.37</b>	<b>7.72</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-156. Annual Haul Truck Emissions (Alternative 2)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.03	0.01	0.00	0.00	0.00	13.76
09 - Channels and Canals	0.14	4.11	0.87	0.02	0.48	0.15	1,696.89
15 - Floodway Control and Diversion Structures	0.00	0.13	0.03	0.00	0.01	0.00	52.27
08 - Roads, Railroads, and Bridges	0.00	0.00	0.00	0.00	0.00	0.00	1.24
19 - Buildings, Grounds, and Utilities	0.00	0.04	0.01	0.00	0.00	0.00	15.90
20 -Permanent Operating Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.20
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.15</b>	<b>4.31</b>	<b>0.91</b>	<b>0.02</b>	<b>0.51</b>	<b>0.15</b>	<b>1,780.25</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

Table L1-157. ROG Emissions from Haul Trucks (Alternative 2)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum																	
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul					
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	-	-	10	21	2	0.1207	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--				
2	Fremont Weir Demo	420	CY	54	22	11	0.1207	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--				
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	0.1207	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	-	-	106	21	2	0.1207	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--				
6	Clearing and Grubbing	70	ACR	700	22	18	0.1207	--	0.23	0.23	0.23	--	--	--	--	--	--	--	--	--	--				
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	0.1207	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--				
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	0.1207	--	--	--	--	--	--	--	n/a	--	--	--	--	--	--				
9	Earthen Backfill	1,010	CY	n/a	n/a	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
10	Riprap - Class 2	87,580	TN	8,110	66	37	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	3.85				
11	Riprap - Class 3	1,530	TN	142	66	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
12	RSP Bedding Material	81,050	TN	7,506	66	41	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	3.22	3.22				
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>09 - Channels and Canals Total</b>								<b>0.30</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	<b>3.22</b>	<b>7.06</b>					
<b>15 - Floodway Control and Diversion Structures</b>																									
14	Mobilization and Demobilization	-	-	48	21	2	0.1207	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--				
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1207	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--				
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1207	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1207	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--				
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1207	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--				
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1207	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
20	Headworks Structure	3,140	CY	628	35	18	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32				
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>				
<b>08 - Roads, Railroads, and Bridges</b>																									
23	Mobilization and Demobilization	-	-	20	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																									
27	Mobilization and Demobilization	-	-	22	21	2	0.1207	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--				
28	CMU Building	1	EA	n/a	n/a	30	0.1207	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--				
29	Concrete Duct Banc	1,350	CY	270	35	23	0.1207	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--				
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																									
30	Mobilization and Demobilization	-	-	6	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
35	Communication Equipment	-	-	n/a	n/a	12	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
<b>GRAND TOTAL</b>								<b>0.39</b>	<b>0.26</b>	<b>0.39</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.22</b>	<b>7.39</b>				

Table L1-157. ROG Emissions from Haul T

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	0.48	--	--	0.0010
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	0.48	0.03	--	<b>0.0011</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0020
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	3.85	3.85	3.85	3.85	3.85	3.85	3.85	--	--	--	--	--	--	--	--	0.0712
11	Riprap - Class 3	--	--	--	--	--	--	1.25	--	--	--	--	--	--	--	--	0.0012
12	RSP Bedding Material	3.22	3.22	3.22	3.22	3.22	--	--	--	--	--	--	--	--	--	--	0.0659
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>7.06</b>	<b>7.06</b>	<b>7.06</b>	<b>7.06</b>	<b>7.06</b>	<b>5.10</b>	<b>3.85</b>	<b>0.30</b>	--	--	--	--	--	--	--	<b>0.1407</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.32	--	--	--	--	--	0.32	--	--	--	--	--	--	--	--	0.0029
21	Headworks Channel Transition	--	0.26	0.26	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>0.32</b>	<b>0.26</b>	<b>0.26</b>	--	--	<b>0.32</b>	--	--	--	--	--	--	--	<b>0.13</b>	--	<b>0.0043</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.06</b>	--	<b>0.09</b>	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0013</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	<b>0.02</b>	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>7.39</b>	<b>7.38</b>	<b>7.32</b>	<b>7.16</b>	<b>7.06</b>	<b>5.42</b>	<b>3.91</b>	<b>0.31</b>	--	--	--	--	--	<b>0.63</b>	<b>0.03</b>	<b>0.1476</b>



Table L1-158. NOx Emissions from Haul Trucks (Alternative 2)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Month													
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul		
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	-	-	10	21	2	3.5212	0.82	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	420	CY	54	22	11	3.5212	--	0.84	0.84	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	3.5212	n/a	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.82</b>	<b>0.84</b>	<b>0.84</b>	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	-	-	106	21	2	3.5212	8.64	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	70	ACR	700	22	18	3.5212	--	6.64	6.64	6.64	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	3.5212	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	3.5212	--	--	--	--	--	--	--	--	--	n/a	--	--	--	
9	Earthen Backfill	1,010	CY	n/a	n/a	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	87,580	TN	8,110	66	37	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	1,530	TN	142	66	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	81,050	TN	7,506	66	41	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	93.80	
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>8.64</b>	<b>6.64</b>	<b>6.64</b>	--	--	--	--	--	--	--	--	--	--	<b>93.80</b>
<b>15 - Floodway Control and Diversion Structures</b>																					
14	Mobilization and Demobilization	-	-	48	21	2	3.5212	--	--	3.91	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	3.5212	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	3.5212	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	3.5212	--	--	--	--	--	n/a	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	3.5212	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	3.5212	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,140	CY	628	35	18	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Channel Transition	1,370	CY	274	35	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>3.91</b>	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges</b>																					
23	Mobilization and Demobilization	-	-	20	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																					
27	Mobilization and Demobilization	-	-	22	21	2	3.5212	1.79	--	--	--	--	--	1.79	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	3.5212	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	1,350	CY	270	35	23	3.5212	--	--	--	--	3.19	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.19</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>20 -Permanent Operating Equipment</b>																					
30	Mobilization and Demobilization	-	-	6	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
<b>GRAND TOTAL</b>								<b>11.25</b>	<b>7.48</b>	<b>11.39</b>	<b>--</b>	<b>3.19</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>93.80</b>	

Table L1-158. NOx Emissions from Haul Tr

#	Activity	Maximum Daily Emissions, lbs/day															Annual Emissions, tpy	
		8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct		21-Oct
<b>02 - Relocations</b>																		
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.0008
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0046
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	13.93	--	--	0.0279
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
															13.93	0.82		<b>0.0333</b>
<b>09 - Channels and Canals</b>																		
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	8.64	--	--	--	--	--	--	--	0.0086
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0598
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	112.30	112.30	112.30	112.30	112.30	112.30	112.30	112.30	--	--	--	--	--	--	--	--	2.0775
11	Riprap - Class 3	--	--	--	--	--	--	36.38	--	--	--	--	--	--	--	--	--	0.0364
12	RSP Bedding Material	93.80	93.80	93.80	93.80	93.80	93.80	--	--	--	--	--	--	--	--	--	--	1.9228
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		206.09	206.09	206.09	206.09	206.09	206.09	148.68	112.30	8.64	--	--	--	--	--	--	--	<b>4.1051</b>
<b>15 - Floodway Control and Diversion Structures</b>																		
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	3.91	--	--	0.0039
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	9.48	9.48	--	--	--	--	9.48	--	--	--	--	--	--	--	--	--	0.0853
21	Headworks Channel Transition	--	--	7.44	7.44	--	--	--	--	--	--	--	--	--	--	--	--	0.0372
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		9.48	9.48	7.44	7.44	--	--	9.48	--	--	--	--	--	--	3.91	--	--	<b>0.1264</b>
<b>08 - Roads, Railroads, and Bridges</b>																		
23	Mobilization and Demobilization	--	--	1.63	--	--	--	--	1.63	--	--	--	--	--	--	--	--	0.0016
24	Pedestrian Bridge Concrete Piles	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	2.72	--	--	--	--	--	--	--	--	--	--	--	0.0014
26	Pedestrian Bridge Span Installation	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	n/a
				1.63	--	2.72	--	--	1.63	--	--	--	--	--	--	--	--	<b>0.0030</b>
<b>19 - Buildings, Grounds, and Utilities</b>																		
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0018
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0367
																		<b>0.0385</b>
<b>20 -Permanent Operating Equipment</b>																		
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.49	--	--	--	--	--	0.49	--	0.0005
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
										0.49	--	--	--	--	--	0.49	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		215.57	215.57	215.17	213.54	208.81	206.09	158.15	113.93	9.13	--	--	--	--	--	18.33	0.82	<b>4.3068</b>

**Table L1-159. CO Emissions from Haul Trucks (Alternative 2)**

																			<b>Maximum</b>			
#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.7423	0.17	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	420	CY	54	22	11	0.7423	--	0.18	0.18	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	0.7423	n/a	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.7423	1.82	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	70	ACR	700	22	18	0.7423	--	1.40	1.40	1.40	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	0.7423	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--		
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	0.7423	--	--	--	--	--	--	--	--	--	n/a	--	--	--		
9	Earthen Backfill	1,010	CY	n/a	n/a	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
10	Riprap - Class 2	87,580	TN	8,110	66	37	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	23.68		
11	Riprap - Class 3	1,530	TN	142	66	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	81,050	TN	7,506	66	41	0.7423	--	--	--	--	--	--	--	--	--	--	--	19.77	19.77		
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>1.82</b>	<b>1.40</b>	<b>1.40</b>	--	--	--	--	--	--	--	--	--	<b>19.77</b>	<b>43.45</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.7423	--	--	0.82	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co)	21,000	SF	n/a	n/a	18	0.7423	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.7423	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.7423	--	--	--	--	--	--	n/a	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.7423	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.7423	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,140	CY	628	35	18	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	2.00		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.82</b>	--	--	--	--	--	--	--	--	--	--	--	<b>2.00</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.7423	0.38	--	--	--	--	--	0.38	--	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.7423	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--		
29	Concrete Duct Banc	1,350	CY	270	35	23	0.7423	--	--	--	--	0.67	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.38</b>	--	--	--	<b>0.67</b>	--	<b>0.38</b>	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>								<b>2.37</b>	<b>1.58</b>	<b>2.40</b>	--	<b>0.67</b>	--	<b>0.38</b>	--	--	--	--	--	<b>19.77</b>	<b>45.45</b>	

Table L1-159. CO Emissions from Haul Tru

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.0002
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0010
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.94	--	0.0059
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.94	0.17	<b>0.0070</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	1.82	--	--	--	--	--	--	--	0.0018
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0126
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	23.68	23.68	23.68	23.68	23.68	23.68	23.68	--	--	--	--	--	--	--	--	0.4380
11	Riprap - Class 3	--	--	--	--	--	7.67	--	--	--	--	--	--	--	--	--	0.0077
12	RSP Bedding Material	19.77	19.77	19.77	19.77	19.77	--	--	--	--	--	--	--	--	--	--	0.4054
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>43.45</b>	<b>43.45</b>	<b>43.45</b>	<b>43.45</b>	<b>43.45</b>	<b>31.34</b>	<b>23.68</b>	<b>1.82</b>	--	--	--	--	--	--	--	<b>0.8655</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	--	0.0008
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	2.00	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	0.0180
21	Headworks Channel Transition	--	1.57	1.57	--	--	--	--	--	--	--	--	--	--	--	--	0.0078
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>2.00</b>	<b>1.57</b>	<b>1.57</b>	--	--	<b>2.00</b>	--	--	--	--	--	--	--	<b>0.82</b>	--	<b>0.0267</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.34	--	--	--	--	0.34	--	--	--	--	--	--	--	--	0.0003
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	0.0003
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.34</b>	--	<b>0.57</b>	--	--	<b>0.34</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0077
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0081</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.10	--	--	--	--	--	0.10	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	<b>0.10</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>45.45</b>	<b>45.36</b>	<b>45.02</b>	<b>44.02</b>	<b>43.45</b>	<b>33.34</b>	<b>24.02</b>	<b>1.92</b>	--	--	--	--	--	<b>3.86</b>	<b>0.17</b>	<b>0.9080</b>

**Table L1-160. SOx Emissions from Haul Trucks (Alternative 2)**

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	
<b>02 - Relocations</b>																		
1	Mobilization and Demobilization	-	-	10	21	2	0.0152	0.00	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	420	CY	54	22	11	0.0152	--	0.00	0.00	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.0152	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	0.0152	n/a	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																		
5	Mobilization and Demobilization	-	-	106	21	2	0.0152	0.04	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	70	ACR	700	22	18	0.0152	--	0.03	0.03	0.03	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	0.0152	--	--	--	--	--	--	--	--	--	n/a	
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	0.0152	--	--	--	--	--	--	--	--	--	n/a	
9	Earthen Backfill	1,010	CY	n/a	n/a	2	0.0152	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	87,580	TN	8,110	66	37	0.0152	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	1,530	TN	142	66	2	0.0152	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	81,050	TN	7,506	66	41	0.0152	--	--	--	--	--	--	--	--	--	--	
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	0.0152	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures</b>																		
14	Mobilization and Demobilization	-	-	48	21	2	0.0152	--	--	0.02	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.0152	--	--	n/a	n/a	n/a	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.0152	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.0152	--	--	--	--	--	n/a	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.0152	--	--	--	--	--	--	n/a	n/a	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.0152	--	--	--	--	--	--	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,140	CY	628	35	18	0.0152	--	--	--	--	--	--	--	--	--	--	
21	Headworks Channel Transition	1,370	CY	274	35	10	0.0152	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.0152	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.02</b>	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges</b>																		
23	Mobilization and Demobilization	-	-	20	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.0152	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.0152	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	0.0152	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																		
27	Mobilization and Demobilization	-	-	22	21	2	0.0152	0.01	--	--	--	--	--	0.01	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	0.0152	--	n/a	n/a	n/a	n/a	n/a	--	--	--	--	
29	Concrete Duct Banc	1,350	CY	270	35	23	0.0152	--	--	--	--	0.01	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>20 -Permanent Operating Equipment</b>																		
30	Mobilization and Demobilization	-	-	6	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	0.0152	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>0.05</b>	<b>0.03</b>	<b>0.05</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Table L1-160. SOx Emissions from Haul Tr

#	Activity	Maximum Daily Emissions, lbs/day																	Annual Emissions, tpy	
		24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct		21-Oct
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.00	0.0001
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	--	--	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	--	--	--	--	--	--	--	--	0.0090
11	Riprap - Class 3	--	--	--	--	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	0.0002
12	RSP Bedding Material	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	0.0083
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		--	0.41	0.89	0.89	0.89	0.89	0.89	0.89	0.64	0.49	0.04	--	--	--	--	--	--	--	0.0177
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	0.0000
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	--	--	0.04	0.04	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	0.0004
21	Headworks Channel Transition	--	--	--	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a
		--	--	0.04	0.04	0.03	0.03	--	--	0.04	--	--	--	--	--	--	--	0.02	--	0.0005
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	0.01	--	0.01	--	--	0.01	--	--	--	--	--	--	--	--	0.0000
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
<b>GRAND TOTAL</b>		--	0.41	0.93	0.93	0.93	0.92	0.90	0.89	0.68	0.49	0.04	--	--	--	--	--	0.08	0.00	0.0186

Table L1-161. PM10 Emissions from Haul Trucks (Alternative 2)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum																
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul				
<b>02 - Relocations</b>																								
1	Mobilization and Demobilization	-	-	10	21	2	0.4144	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--			
2	Fremont Weir Demo	420	CY	54	22	11	0.4144	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--			
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	0.4144	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>02 - Relocations Total</b>								<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																								
5	Mobilization and Demobilization	-	-	106	21	2	0.4144	1.02	--	--	--	--	--	--	--	--	--	--	--	--	--			
6	Clearing and Grubbing	70	ACR	700	22	18	0.4144	--	0.78	0.78	0.78	--	--	--	--	--	--	--	--	--	--			
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	0.4144	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--			
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	0.4144	--	--	--	--	--	--	--	--	n/a	--	--	--	--	--			
9	Earthen Backfill	1,010	CY	n/a	n/a	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
10	Riprap - Class 2	87,580	TN	8,110	66	37	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	13.22			
11	Riprap - Class 3	1,530	TN	142	66	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
12	RSP Bedding Material	81,050	TN	7,506	66	41	0.4144	--	--	--	--	--	--	--	--	--	--	--	11.04	11.04	--			
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals Total</b>								<b>1.02</b>	<b>0.78</b>	<b>0.78</b>	--	--	--	--	--	--	--	--	11.04	11.04	11.04	24.25		
<b>15 - Floodway Control and Diversion Structures</b>																								
14	Mobilization and Demobilization	-	-	48	21	2	0.4144	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.4144	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.4144	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.4144	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--			
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.4144	--	--	--	--	--	--	n/a	n/a	n/a	--	--	--	--	--			
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.4144	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
20	Headworks Structure	3,140	CY	628	35	18	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	1.12			
21	Headworks Channel Transition	1,370	CY	274	35	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--	--	<b>1.12</b>		
<b>08 - Roads, Railroads, and Bridges</b>																								
23	Mobilization and Demobilization	-	-	20	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																								
27	Mobilization and Demobilization	-	-	22	21	2	0.4144	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--			
28	CMU Building	1	EA	n/a	n/a	30	0.4144	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	1,350	CY	270	35	23	0.4144	--	--	--	0.38	--	--	--	--	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.21</b>	--	--	--	<b>0.38</b>	--	<b>0.21</b>	--	--	--	--	--	--	--	--	--	--
<b>20 - Permanent Operating Equipment</b>																								
30	Mobilization and Demobilization	-	-	6	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	-	-	n/a	n/a	12	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 - Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>1.32</b>	<b>0.88</b>	<b>1.34</b>	--	<b>0.38</b>	--	<b>0.21</b>	--	--	--	--	--	--	11.04	11.04	11.04	<b>25.37</b>

Table L1-161. PM10 Emissions from Haul 1

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.0001
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0005
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	1.64	--	--	0.0033
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
														<b>1.64</b>	<b>0.10</b>	<b>0.0039</b>	
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	1.02	--	--	--	--	--	--	--	0.0010
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0070
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	13.22	13.22	13.22	13.22	13.22	13.22	13.22	--	--	--	--	--	--	--	0.2445	
11	Riprap - Class 3	--	--	--	--	--	4.28	--	--	--	--	--	--	--	--	0.0043	
12	RSP Bedding Material	11.04	11.04	11.04	11.04	11.04	--	--	--	--	--	--	--	--	--	0.2263	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a	
		<b>24.25</b>	<b>24.25</b>	<b>24.25</b>	<b>24.25</b>	<b>24.25</b>	<b>17.50</b>	<b>13.22</b>	<b>1.02</b>	--	--	--	--	--	--	<b>0.4831</b>	
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	0.0005	
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
20	Headworks Structure	1.12	--	--	--	--	1.12	--	--	--	--	--	--	--	--	0.0100	
21	Headworks Channel Transition	--	0.88	0.88	--	--	--	--	--	--	--	--	--	--	--	0.0044	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a	
		<b>1.12</b>	<b>0.88</b>	<b>0.88</b>	--	--	<b>1.12</b>	--	--	--	--	--	--	<b>0.46</b>	--	<b>0.0149</b>	
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.19	--	--	--	--	0.19	--	--	--	--	--	--	--	0.0002	
24	Pedestrian Bridge Concete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	n/a	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	0.0002	
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	n/a	
		--	<b>0.19</b>	--	<b>0.32</b>	--	--	<b>0.19</b>	--	--	--	--	--	--	--	<b>0.0004</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002	
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0043	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0045</b>	
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	--	--	--	0.06	--	0.0001	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a	
		--	--	--	--	--	--	--	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	<b>0.0001</b>	
<b>GRAND TOTAL</b>		<b>25.37</b>	<b>25.32</b>	<b>25.13</b>	<b>24.57</b>	<b>24.25</b>	<b>18.61</b>	<b>13.41</b>	<b>1.07</b>	--	--	--	--	<b>2.16</b>	<b>0.10</b>	<b>0.5068</b>	



Table L1-162. PM2.5 Emissions from Haul Trucks (Alternative 2)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum															
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul			
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	-	-	10	21	2	0.1262	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	420	CY	54	22	11	0.1262	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	0.1262	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	-	-	106	21	2	0.1262	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	70	ACR	700	22	18	0.1262	--	0.24	0.24	0.24	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	0.1262	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--		
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	0.1262	--	--	--	--	--	--	--	--	n/a	--	--	--	--	--		
9	Earthen Backfill	1,010	CY	n/a	n/a	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10	Riprap - Class 2	87,580	TN	8,110	66	37	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	4.02		
11	Riprap - Class 3	1,530	TN	142	66	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	81,050	TN	7,506	66	41	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	3.36	3.36		
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>0.31</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--	--	--	--	<b>3.36</b>	<b>7.38</b>			
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	-	-	48	21	2	0.1262	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1262	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1262	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1262	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1262	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1262	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,140	CY	628	35	18	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	0.34		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	<b>0.34</b>		
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	-	-	20	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	-	-	22	21	2	0.1262	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.1262	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	1,350	CY	270	35	23	0.1262	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	-	-	6	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>0.40</b>	<b>0.27</b>	<b>0.41</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.36</b>	<b>7.72</b>		

Table L1-162. PM2.5 Emissions from Haul

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	0.0010
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.03	<b>0.0012</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.31	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0021
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	--	--	--	--	--	--	--	0.0744
11	Riprap - Class 3	--	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	0.0013
12	RSP Bedding Material	3.36	3.36	3.36	3.36	3.36	--	--	--	--	--	--	--	--	--	--	0.0689
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		<b>7.38</b>	<b>7.38</b>	<b>7.38</b>	<b>7.38</b>	<b>7.38</b>	<b>5.33</b>	<b>4.02</b>	<b>0.31</b>	--	--	--	--	--	--	--	<b>0.1471</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.34	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	0.0031
21	Headworks Channel Transition	--	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a
		<b>0.34</b>	<b>0.27</b>	<b>0.27</b>	--	--	<b>0.34</b>	--	--	--	--	--	--	--	<b>0.14</b>	--	<b>0.0045</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.06</b>	--	<b>0.10</b>	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	<b>0.02</b>	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>7.72</b>	<b>7.71</b>	<b>7.65</b>	<b>7.48</b>	<b>7.38</b>	<b>5.67</b>	<b>4.08</b>	<b>0.33</b>	--	--	--	--	--	<b>0.66</b>	<b>0.03</b>	<b>0.1543</b>

Table L1-163. GHG Emissions from Haul Trucks (Alternative 2)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	CO2 Emission Factor (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	-	-	10	21	2	1604.388845	0.34
2	Fremont Weir Demo	420	CY	54	22	11	1604.388845	1.91
3	Levee O&M Road Regrading (6" AB)	119,000	SF	276	26	4	1604.388845	11.51
4	Temporary Electrical Power	5,280	LF	n/a	n/a	4	1604.388845	n/a
<b>02 - Relocations Total</b>								<b>13.76</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	-	-	106	21	2	1604.388845	3.57
6	Clearing and Grubbing	70	ACR	700	22	18	1604.388845	24.71
7	Excavation (Wet Conditions)	93,610	CY	n/a	n/a	27	1604.388845	n/a
8	Excavation/Grading (Dry Conditions)	372,680	CY	n/a	n/a	36	1604.388845	n/a
9	Earthen Backfill	1,010	CY	n/a	n/a	2	1604.388845	n/a
10	Riprap - Class 2	87,580	TN	8,110	66	37	1604.388845	858.77
11	Riprap - Class 3	1,530	TN	142	66	2	1604.388845	15.04
12	RSP Bedding Material	81,050	TN	7,506	66	41	1604.388845	794.81
13	Erosion Control Seeding	13	ACR	n/a	n/a	7	1604.388845	n/a
<b>09 - Channels and Canals Total</b>								<b>1,696.89</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization	-	-	48	21	2	1604.388845	1.62
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	1604.388845	n/a
16	Construction Site Dewatering(Pumping)	-	-	n/a	n/a	120	1604.388845	n/a
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	1604.388845	n/a
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	1604.388845	n/a
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	1604.388845	n/a
20	Headworks Structure	3,140	CY	628	35	18	1604.388845	35.26
21	Headworks Channel Transition	1,370	CY	274	35	10	1604.388845	15.39
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	1604.388845	n/a
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>52.27</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization	-	-	20	21	2	1604.388845	0.67
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	1604.388845	n/a
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	1604.388845	0.56
26	Pedestrian Bridge Span Installation	2,720	SF	n/a	n/a	7	1604.388845	n/a
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>1.24</b>
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization	-	-	22	21	2	1604.388845	0.74
28	CMU Building	1	EA	n/a	n/a	30	1604.388845	n/a
29	Concrete Duct Banc	1,350	CY	270	35	23	1604.388845	15.16
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>15.90</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization	-	-	6	21	2	1604.388845	0.20
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	1604.388845	n/a
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	1604.388845	n/a
33	Electrical Control Equipment CMUBuilding	-	-	n/a	n/a	30	1604.388845	n/a
34	Electrical Power Equipment CMUBuilding	-	-	n/a	n/a	30	1604.388845	n/a
35	Communication Equipment	-	-	n/a	n/a	12	1604.388845	n/a
<b>20 -Permanent Operating Equipment Total</b>								<b>0.20</b>
<b>GRAND TOTAL</b>								<b>1,780.25</b>

Table L1-164. PM10 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM10 Daily Emissions Summary, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
02 - Relocations																									
1	Mobilization and Demobilization	n/a																							
	Material Handling	n/a																							
	Grading	n/a																							
	Bulldozing	n/a																							
	Unpaved Road Dust	n/a																							
	Paved Road Dust	n/a																							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																								
	Material Handling		0.13	0.13																					
	Grading		n/a	n/a																					
	Bulldozing		n/a	n/a																					
	Unpaved Road Dust		n/a	n/a																					
	Paved Road Dust																								
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																								
	Material Handling																								
	Grading																								
	Bulldozing																								
	Unpaved Road Dust																								
	Paved Road Dust																								
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																								
	Material Handling	n/a																							
	Grading	n/a																							
	Bulldozing	n/a																							
	Unpaved Road Dust	n/a																							
	Paved Road Dust	n/a																							
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09 - Channels and Canals																									
5	Mobilization and Demobilization																								
	Material Handling	n/a																							n/a
	Grading	n/a																							n/a
	Bulldozing	n/a																							n/a
	Unpaved Road Dust	n/a																							n/a
	Paved Road Dust	n/a																							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																								
	Material Handling		n/a	n/a	n/a																				
	Grading			1.06	1.06	1.06																			
	Bulldozing		n/a	n/a	n/a																				
	Unpaved Road Dust		n/a	n/a	n/a																				
	Paved Road Dust																								
	<b>Clearing and Grubbing Subtotal</b>	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																								
	Material Handling							n/a	n/a	n/a	n/a	n/a													
	Grading							n/a	n/a	n/a	n/a	n/a													
	Bulldozing							n/a	n/a	n/a	n/a	n/a													
	Unpaved Road Dust							220.41	220.41	220.41	220.41	220.41													
	Paved Road Dust																								
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-164. PM10 Emissions Summary from Fugitive I**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>							
1	Mobilization and Demobilization						
	Material Handling				n/a	n/a	n/a
	Grading				n/a	n/a	n/a
	Bulldozing				n/a	n/a	n/a
	Unpaved Road Dust				n/a	n/a	n/a
	Paved Road Dust				n/a	n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--
2	Fremont Weir Demo						0.00
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)						
	Material Handling				n/a	n/a	n/a
	Grading				0.53	0.00	0.00
	Bulldozing				n/a	n/a	n/a
	Unpaved Road Dust				n/a	n/a	n/a
	Paved Road Dust				n/a	n/a	n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	<b>0.53</b>	--	<b>0.00</b>
4	Temporary Electrical Power						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	<b>0.53</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>							
5	Mobilization and Demobilization						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--
6	Clearing and Grubbing						
	Material Handling						n/a
	Grading						0.01
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	<b>0.01</b>
7	Excavation (Wet Conditions)						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						2.87
	Paved Road Dust						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	<b>2.87</b>

Table L1-164. PM10 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM10 Daily Emissions Summary, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
8	Excavation/Grading (Dry Conditions)																								
	Material Handling					1.89	1.89	1.89	1.89	1.89	1.89														
	Grading					15.91	15.91	15.91	15.91	15.91	15.91														
	Bulldozing					7.05	7.05	7.05	7.05	7.05	7.05														
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a														
	Paved Road Dust																								
<b>Excavation/Grading (Dry Conditions) Subtotal</b>		--	--	--	--	24.84	24.84	24.84	24.84	24.84	24.84	--	--	--	--	--	--	--	--	--	--	--	--		
9	Earthen Backfill																								
	Material Handling									0.18															
	Grading									0.53															
	Bulldozing									2.35															
	Unpaved Road Dust									n/a															
	Paved Road Dust																								
<b>Earthen Backfill Subtotal</b>		--	--	--	--	--	--	3.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10	Riprap - Class 2																								
	Material Handling													3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30				
	Grading													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Bulldozing													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
<b>Riprap - Class 2 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	--		
11	Riprap - Class 3																								
	Material Handling																				1.65				
	Grading																			n/a					
	Bulldozing																			n/a					
	Unpaved Road Dust																			n/a					
	Paved Road Dust																			n/a					
<b>Riprap - Class 3 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	--	--	--		
12	RSP Bedding Material																								
	Material Handling													3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30				
	Grading													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Bulldozing													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				
<b>RSP Bedding Material Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	--			
13	Erosion Control Seeding																								
	Material Handling																						n/a		
	Grading																						n/a		
	Bulldozing																						n/a		
	Unpaved Road Dust																						n/a		
	Paved Road Dust																						n/a		
<b>Erosion Control Seeding Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>		--	1.06	1.06	1.06	24.84	24.84	248.30	245.25	245.25	245.25	220.41	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95	3.30	--	--		
<b>15 - Floodway Control and Diversion Structures</b>																									
14	Mobilization and Demobilization																								
	Material Handling																								
	Grading																								
	Bulldozing																								
	Unpaved Road Dust																								
	Paved Road Dust																								
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Cofferdam)																								
	Material Handling					n/a	n/a	n/a																	
	Grading					n/a	n/a	n/a																	
	Bulldozing					n/a	n/a	n/a																	
	Unpaved Road Dust					n/a	n/a	n/a																	
	Paved Road Dust																								
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)																								
	Material Handling													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		

Table L1-164. PM10 Emissions Summary from Fugitive I

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)						
	Material Handling						0.03
	Grading						0.29
	Bulldozing						0.13
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Excavation/Grading (Dry Conditions) Subtotal</b>		--	--	--	--	--	<b>0.45</b>
9	Earthen Backfill						
	Material Handling						0.00
	Grading						0.00
	Bulldozing						0.00
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Earthen Backfill Subtotal</b>		--	--	--	--	--	<b>0.00</b>
10	Riprap - Class 2						
	Material Handling						0.07
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Riprap - Class 2 Subtotal</b>		--	--	--	--	--	<b>0.07</b>
11	Riprap - Class 3						
	Material Handling						0.00
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Riprap - Class 3 Subtotal</b>		--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material						
	Material Handling						0.07
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>RSP Bedding Material Subtotal</b>		--	--	--	--	--	<b>0.07</b>
13	Erosion Control Seeding						
	Material Handling	n/a					n/a
	Grading	n/a					n/a
	Bulldozing	n/a					n/a
	Unpaved Road Dust	n/a					n/a
	Paved Road Dust	n/a					n/a
<b>Erosion Control Seeding Subtotal</b>		--	--	--	--	--	<b>--</b>
<b>09 - Channels and Canals Total</b>		--	--	--	--	--	<b>3.47</b>
<b>15 - Floodway Control and Diversion Structures</b>							
14	Mobilization and Demobilization						
	Material Handling				n/a		n/a
	Grading				n/a		n/a
	Bulldozing				n/a		n/a
	Unpaved Road Dust				n/a		n/a
	Paved Road Dust				n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>		--	--	--	--	--	<b>--</b>
16	Construction Site Dewatering (Pumping)						
	Material Handling	n/a	n/a	n/a			n/a

Table L1-164. PM10 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM10 Daily Emissions Summary, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Excavation (Wet Conditions)																								
	Material Handling							n/a																	
	Grading							n/a																	
	Bulldozing							n/a																	
	Unpaved Road Dust							112.65																	
	Paved Road Dust																								
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	112.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall																								
	Material Handling								n/a	n/a															
	Grading								n/a	n/a															
	Bulldozing								n/a	n/a															
	Unpaved Road Dust								n/a	n/a															
	Paved Road Dust																								
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles																								
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a											
	Grading								n/a	n/a	n/a	n/a	n/a	n/a											
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a											
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a											
	Paved Road Dust																								
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	Headworks Structure																								
	Material Handling													n/a	n/a						n/a				
	Grading													n/a	n/a					n/a					
	Bulldozing													n/a	n/a					n/a					
	Unpaved Road Dust													n/a	n/a					n/a					
	Paved Road Dust																				n/a				
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Channel Transition																								
	Material Handling															n/a	n/a								
	Grading															n/a	n/a								
	Bulldozing															n/a	n/a								
	Unpaved Road Dust															n/a	n/a								
	Paved Road Dust																								
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates																								
	Material Handling																							n/a	
	Grading																							n/a	
	Bulldozing																							n/a	
	Unpaved Road Dust																							n/a	
	Paved Road Dust																								
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	112.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges</b>																									
23	Mobilization and Demobilization																								
	Material Handling																n/a				n/a				
	Grading																n/a				n/a				
	Bulldozing																n/a				n/a				
	Unpaved Road Dust																n/a				n/a				
	Paved Road Dust																								
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



Table L1-164. PM10 Emissions Summary from Fugitive I

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--
17	Excavation (Wet Conditions)						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						0.20
	Paved Road Dust						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	<b>0.20</b>
18	Sheet Pile Wall						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--
19	Headworks Structure Concrete Piles						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--
20	Headworks Structure						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--
21	Headworks Channel Transition						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--
22	Hinged Bottom Gates						
	Material Handling	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	<b>0.20</b>
<b>08 - Roads, Railroads, and Bridges</b>							
23	Mobilization and Demobilization						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--



Table L1-164. PM10 Emissions Summary from Fugitive I

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concrete Piles						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--
26	Pedestrian Bridge Span Installation						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>							
27	Mobilization and Demobilization						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction						
	Material Handling						n/a
	Grading						0.03
	Bulldozing						0.04
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	<b>0.07</b>
29	Concrete Duct Banc						
	Material Handling						n/a
	Grading						n/a
	Bulldozing						n/a
	Unpaved Road Dust						n/a
	Paved Road Dust						n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	<b>0.07</b>
<b>20 -Permanent Operating Equipment</b>							
30	Mobilization and Demobilization						
	Material Handling				n/a		n/a
	Grading				n/a		n/a
	Bulldozing				n/a		n/a
	Unpaved Road Dust				n/a		n/a
	Paved Road Dust				n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing						
	Material Handling	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--

Table L1-164. PM10 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM10 Daily Emissions Summary, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	
32	CMU Building Mechanical Equipment																								
	Material Handling																						n/a	n/a	
	Grading																						n/a	n/a	
	Bulldozing																						n/a	n/a	
	Unpaved Road Dust																						n/a	n/a	
	Paved Road Dust																						n/a	n/a	
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building																								
	Material Handling																						n/a	n/a	
	Grading																						n/a	n/a	
	Bulldozing																						n/a	n/a	
	Unpaved Road Dust																						n/a	n/a	
	Paved Road Dust																						n/a	n/a	
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building																								
	Material Handling																						n/a	n/a	
	Grading																						n/a	n/a	
	Bulldozing																						n/a	n/a	
	Unpaved Road Dust																						n/a	n/a	
	Paved Road Dust																						n/a	n/a	
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment																								
	Material Handling																								
	Grading																								
	Bulldozing																								
	Unpaved Road Dust																								
	Paved Road Dust																								
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		--	5.66	5.66	5.53	29.31	29.31	360.96	245.25	245.25	245.25	220.41	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95	3.30	--	--	--	

**Table L1-164. PM10 Emissions Summary from Fugitive I**

#	Activity						Annual Emissions, tpy
		23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
32	CMU Building Mechanical Equipment						
	Material Handling	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building						
	Material Handling	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building						
	Material Handling	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a			n/a
	Paved Road Dust						
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--
35	Communication Equipment						
	Material Handling		n/a	n/a			n/a
	Grading		n/a	n/a			n/a
	Bulldozing		n/a	n/a			n/a
	Unpaved Road Dust		n/a	n/a			n/a
	Paved Road Dust						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	--	--	<b>0.53</b>	--	<b>3.73</b>

Table L1-165. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																					
	Material Handling		0.02	0.02																		
	Grading	n/a	n/a																			
	Bulldozing	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a																			
	Paved Road Dust																					
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																					
	Material Handling																					
	Grading																					
	Bulldozing																					
	Unpaved Road Dust																					
	Paved Road Dust																					
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization																					
	Material Handling	n/a																				n/a
	Grading	n/a																				n/a
	Bulldozing	n/a																				n/a
	Unpaved Road Dust	n/a																				n/a
	Paved Road Dust																					
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																					
	Material Handling	n/a	n/a	n/a																		
	Grading		0.11	0.11	0.11																	
	Bulldozing	n/a	n/a	n/a																		
	Unpaved Road Dust	n/a	n/a	n/a																		
	Paved Road Dust																					
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																					
	Material Handling							n/a	n/a	n/a	n/a	n/a										
	Grading							n/a	n/a	n/a	n/a	n/a										
	Bulldozing							n/a	n/a	n/a	n/a	n/a										
	Unpaved Road Dust							22.04	22.04	22.04	22.04	22.04										
	Paved Road Dust																					
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-165. PM2.5 Emissions Summary from Fugitive**

#	Activity	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a		n/a
	Grading					0.06		0.00
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
7	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.29
	Paved Road Dust							n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.29</b>





**Table L1-165. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.01
	Grading							0.03
	Bulldozing							0.07
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.11</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.00
	Bulldozing							0.00
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
10	Riprap - Class 2							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust							n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>0.42</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	<b>--</b>

Table L1-165. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							11.27															
	Paved Road Dust																						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust								n/a	n/a													
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling													n/a	n/a						n/a		
	Grading													n/a	n/a						n/a		
	Bulldozing													n/a	n/a						n/a		
	Unpaved Road Dust													n/a	n/a						n/a		
	Paved Road Dust													n/a	n/a						n/a		
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling															n/a	n/a						
	Grading															n/a	n/a						
	Bulldozing															n/a	n/a						
	Unpaved Road Dust															n/a	n/a						
	Paved Road Dust															n/a	n/a						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08 - Roads, Railroads, and Bridges																							
23	Mobilization and Demobilization																						
	Material Handling															n/a					n/a		
	Grading															n/a					n/a		
	Bulldozing															n/a					n/a		
	Unpaved Road Dust															n/a					n/a		
	Paved Road Dust															n/a					n/a		
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-165. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.02
	Paved Road Dust							
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	--	<b>0.02</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	<b>0.02</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

Table L1-165. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a															
	Grading		0.23	0.23	0.23	0.23	0.23	0.23															
	Bulldozing		1.29	1.29	1.29	1.29	1.29	1.29															
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a															
	Paved Road Dust																						
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	1.52	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							n/a															
	Paved Road Dust																						
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	1.52	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-165. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	<b>0.02</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	<b>0.02</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-165. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	1.65	1.65	1.63	7.40	7.40	40.56	27.92	27.92	27.92	22.04	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.50	--	--

**Table L1-165. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust							
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	--	--	--	0.06	--	0.46

## Alternative 2: Central Small Gated Notch Fugitive Dust Emissions - Material Handling (Truck Loading/Unloading)

Equation (AP-42, Chapter 13.2.4):

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$

where:

- E = emission factor, pound per ton
- k = particle size multiplier
- U = mean wind speed, miles per hour
- M = material moisture content, %

Average Wind Speed 8.59 mph

Source: MesoWest, Station KSMF (Sacramento International Airport), 2015 data. Site accessed October 27, 2016. mesowest.utah.edu.

### k values

PM10	0.35
PM2.5	0.053

### Material Moisture Content (%)

Spoils	12	Source: CalEEMod 2016.3.1 User's Guide; default values
Limestone	2.1	Source: AP-42, Table 13.2.4-1; various limestone products
Demolition	2	Source: CalEEMod 2016.3.1 User's Guide; default values

**Table L1-166. Material Handling Emissions (Alternative 2)**

Activity	Total Daily Output, Quantity,		Total Daily Output, Quantity,		Type	PM10 EF, PM2.5 EF,		PM10, PM2.5,		PM10, PM2.5,	
	cy/day	cy/year	ton/day	ton/year		lb/ton	lb/ton	lbs/day	lbs/day	tpy	tpy
<b>02 - Relocations</b>											
Fremont Weir Demo	40	420	50	525	Demolition	2.26E-03	3.43E-04	0.1	0.0	0.00	0.00
<b>09 - Channels and Canals</b>											
Excavation/Grading (Dry Conditions)	10,500	372,680	13,125	465,850	Spoils	1.84E-04	2.79E-05	1.9	0.3	0.03	0.01
Earthen Backfill	1,000	1,010	1,250	1,263	Spoils	1.84E-04	2.79E-05	0.2	0.0	0.00	0.00
Riprap - Class 2	n/a	n/a	2,000	87,580	Limestone	2.11E-03	3.20E-04	3.3	0.5	0.07	0.01
Riprap - Class 3	n/a	n/a	1,000	1,530	Limestone	2.11E-03	3.20E-04	1.6	0.2	0.00	0.00
RSP Bedding Material	n/a	n/a	2,000	81,050	Limestone	2.11E-03	3.20E-04	3.3	0.5	0.07	0.01
<b>09 - Channels and Canals Total</b>	<b>10,500</b>	<b>372,680</b>	<b>13,125</b>	<b>465,850</b>				<b>10.3</b>	<b>1.6</b>	<b>0.17</b>	<b>0.03</b>

Source: HDR. 2016. Draft Technical Memorandum: Constructability and Construction Considerations. Yolo Bypass Salmonid Habitat Restoration & Fish Passage Project - 10% Design. August 31.



Note:

Emissions assume that standard construction practice of watering is used.

Fremont weir demolition emissions assume that there is an additional "drop" from the mechanical dismemberment of the structure; method is consistent with CalEEMod 2016.3.1.

No emissions assumed to occur with wet excavation activities because spoils would be waterlogged.

Density

1.25 tons per cubic yard

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Number of Drops

2 drops per truck      *(one drop at borrow site and one drop at dam site)*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

Conversion

2,000 pounds per ton

**Alternative 2: Central Small Gated Notch  
Fugitive Dust Emissions - Grading**

Equations (AP-42, Chapter 11.9):

$$TSP = 0.040(S)^{2.5} \quad \text{and} \quad PM_{15} = 0.051(S)^{2.0}$$

where:

S = mean vehicle speed, miles per hour

Scaling Factors

PM10 0.60 (multiply the 15-micron equation by this fraction to determine emissions)  
 PM2.5 0.031 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

PM10 1.54 lb/VMT  
 PM2.5 0.17 lb/VMT

Mileage Calculation (CalEEMod 2016.3.1 User's Guide, Appendix A):

$$VMT = As/Wb \times 43,560 \left(\frac{sqft}{acre}\right) / 5,280 \left(\frac{ft}{mile}\right)$$

**Table L1-167. Maximum Daily Disturbed Area**

Equipment Type	Acres/8hr-day
Crawler Tractors	0.5
Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

**Table L1-168. Grading Emissions (Alternative 2)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>02 - Relocations</b>												
Levee O&M Road Regrading (6" AB)	12' Blade Grader	Graders	1	1	4	0.5	2.0	1.4	0.5	0.1	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	4	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	1	1	4	--	--	--	--	--	--	--
	16 CY 3 Axle Dump Truck	n/a - onroad	5	1	4	--	--	--	--	--	--	--
						<b>Levee O&amp;M Road Regrading (6" AB) Total</b>	<b>0.5</b>	<b>2.0</b>	<b>1.4</b>	<b>0.5</b>	<b>0.1</b>	<b>0.0</b>
<b>09 - Channels and Canals</b>												
Clearing and Grubbing	1.5 CY Front End Loader Crawler	Crawler Tractors	1	2	18	1.0	18.0	12.4	1.1	0.1	0.0	0.0
	Trailer Mounted Brush Chipper	Shredders	1	2	18	--	--	--	--	--	--	--
	Chainsaw	Chainsaws	1	2	18	--	--	--	--	--	--	--
	4000 gallon Water Truck	n/a - onroad	1	2	18	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	6	2	18	--	--	--	--	--	--	--
	16 CY 3 Axle Dump Truck	n/a - onroad	1	2	18	--	--	--	--	--	--	--
						<b>Clearing and Grubbing Total</b>	<b>1.0</b>	<b>18.0</b>	<b>12.4</b>	<b>1.1</b>	<b>0.1</b>	<b>0.0</b>

**Table L1-168. Grading Emissions (Alternative 2)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
Excavation/Grading (Dry Conditions)	300 HP Dozer	Rubber Tired Dozers	1	3	36	1.5	54.0	37.1	1.6	0.2	0.0	0.0
	21 CY Scrapers	Scrapers	4	3	36	12.0	432.0	297.0	12.7	1.4	0.2	0.0
	12' Blade Grader	Graders	1	3	36	1.5	54.0	37.1	1.6	0.2	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	3	36	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	3	36	--	--	--	--	--	--	--
<b>Excavation/Grading (Dry Conditions) Total</b>						<b>15.0</b>	<b>540.0</b>	<b>371.3</b>	<b>15.9</b>	<b>1.7</b>	<b>0.3</b>	<b>0.0</b>
Earthen Backfill	300 HP Dozer	Rubber Tired Dozers	1	1	2	0.5	1.0	0.7	0.5	0.1	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	2	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	2	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	3	1	2	--	--	--	--	--	--	--
<b>Earthen Backfill Total</b>						<b>0.5</b>	<b>1.0</b>	<b>0.7</b>	<b>0.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
<b>19 - Buildings, Grounds, and Utilities</b>												
CMU Building and Earthwork Pad Construction	165 HP Dozer	Rubber Tired Dozers	1	1	30	0.5	15.0	10.3	0.5	0.1	0.0	0.0
	Scraper	Scrapers	1	1	30	1.0	30.0	20.6	1.1	0.1	0.0	0.0
	Motor Grader	Graders	1	1	30	0.5	15.0	10.3	0.5	0.1	0.0	0.0
	Compactor	Rollers	1	1	30	--	--	--	--	--	--	--
	4000 gallon Water Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	30	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	1	30	--	--	--	--	--	--	--
	Concrete Pump Boom Truck Mounted	Pumps	1	1	30	--	--	--	--	--	--	--
	2.5" Dia. Concrete Vibrator	Plate Compactors	1	1	30	--	--	--	--	--	--	--
	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	1	30	--	--	--	--	--	--	--
	Concrete Mixer Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
<b>CMU Building and Earthwork Pad Construction Total</b>						<b>2.0</b>	<b>60.0</b>	<b>41.3</b>	<b>2.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>

Blade Width

12 feet

Scraper Speed

7.1 mph (AP-42 default)

Conversions

43,560 square feet per acre  
 5,280 feet per mile  
 2,000 pounds per ton

Levee O&M Road Regrading (6" AB)  
 Clearing and Grubbing

Excavation/Grading (Dry Conditions)

CMU Building and Earthwork Pad Construction

Dust Control

61% reduction from watering at least 3 times per day  
 Source: CalEEMod

**Alternative 2: Central Small Gated Notch  
Fugitive Dust Emissions - Bulldozing**

Equations (AP-42, Chapter 11.9):

$$TSP = \frac{5.7(s)^{1.2}}{M^{1.3}} \quad \text{and} \quad PM15 = \frac{1.0(s)^{1.5}}{M^{1.4}}$$

where:

s = silt content                      6.9 %              (AP-42, Table 11.9-3, Overburden)  
 M = material moisture content      7.9 %              (AP-42, Table 11.9-3, Overburden)

Scaling Factors

PM10              0.75 (multiply the 15-micron equation by this fraction to determine emissions)  
 PM2.5            0.105 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

PM10              0.75 lb/hr  
 PM2.5            0.41 lb/hr

**Table L1-169. Bulldozing Emissions (Alternative 2)**

Activity	Crew / Equipment	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>								
Excavation/Grading (Dry Conditions)	300 HP Dozer	1	3	36	7.05	3.87	0.13	0.07
Earthen Backfill	300 HP Dozer	1	1	2	2.35	1.29	0.00	0.00
<b>19 - Buildings, Grounds, and Utilities</b>								
CMU Building and Earthwork Pad Construct	165 HP Dozer	1	1	30	2.35	1.29	0.04	0.02

Operating Schedule

8 hr/day

Conversion

2,000 pounds per ton

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

## Alternative 2: Central Small Gated Notch Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

### Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	4.3 (CalEEMod default)
W, tons	180 loaded 74 unloaded

**Table L1-170. Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	3.76	0.38
Unloaded	2.52	0.25
Average	3.14	0.31

**Table L1-171. Unpaved Road Dust Emissions (Alternative 2)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	3,600	93,610	CY	27	180	4,684	220.4	22.0	2.9	0.3
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,460	CY	4	92	324	112.7	11.3	0.2	0.02

**Notes:**

Assumes payload of each truck is 100 tons.

Half of truck trips will be loaded and other half will be unloaded.

Only includes materials that will be transported to spoil site by dump trucks.

**Distance to borrow area**

2 miles (spoils site located within a 1-mile radius of the project access point(s) and it is an average of 1 mile travel distance from point of excavation)

**Density**

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

**Dust Control**

61% reduction from watering at least 3 times per day

Source: CalEEMod

Prepared by: Gwen Pelletier; February 7, 2017  
 Reviewed by: XX, Date

## Alternative 2: Central Small Gated Notch Fugitive Dust Emissions - Paved Road Dust (Haul Roads and Worker Commuting)

Equation (AP-42, Chapter 13.2.1):

$$E = k(SL)^{0.91} \times (W)^{1.02}$$

where:

E = particulate emission factor, lb/VMT

k = particle size multiplier, lb/VMT

sL = road surface silt loading (g/m<sup>2</sup>)

W = average weight (tons) of the vehicles traveling the road

### Variables

k (PM10) 0.0022 lb/VMT

k (PM2.5) 0.00054 lb/VMT

sL 0.1 g/m<sup>2</sup> (CalEEMod 2016.3.1 default)

W 2.4 tons (CalEEMod 2016.3.1 default)

### Emission Factors

PM10 6.61E-04 lb/VMT

PM2.5 1.62E-04 lb/VMT

Note: Because construction would occur during dry season, no natural mitigation from precipitation was applied to emission

## Mitigated Offroad Exhaust Emissions Summary

**Table L1-172. Maximum Daily Mitigated Offroad Construction Equipment Emissions (Alternative 2)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.60	13.08	13.94	0.05	0.21	0.10
09 - Channels and Canals	21.53	219.92	148.77	0.74	3.07	1.41
15 - Floodway Control and Diversion Structures	2.46	25.06	42.00	0.16	0.95	0.51
08 - Roads, Railroads, and Bridges	1.06	7.95	21.15	0.10	0.32	0.19
19 - Buildings, Grounds, and Utilities	1.30	11.64	34.58	0.11	0.46	0.26
20 -Permanent Operating Equipment	0.46	2.23	10.60	0.03	0.22	0.11
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>23.08</b>	<b>241.72</b>	<b>184.47</b>	<b>0.88</b>	<b>4.03</b>	<b>1.92</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-18%</i>	<i>-38%</i>	<i>-24%</i>	<i>0%</i>	<i>-73%</i>	<i>-85%</i>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-173. Annual Mitigated Offroad Construction Equipment Emissions (Alternative 2)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.06	0.09	0.00	0.00	0.00	38.14
09 - Channels and Canals	0.51	5.42	4.69	0.02	0.09	0.05	2,608.19
15 - Floodway Control and Diversion Structures	0.05	0.46	0.92	0.00	0.02	0.01	375.53
08 - Roads, Railroads, and Bridges	0.00	0.03	0.07	0.00	0.00	0.00	32.13
19 - Buildings, Grounds, and Utilities	0.02	0.16	0.50	0.00	0.01	0.00	154.82
20 -Permanent Operating Equipment	0.01	0.04	0.16	0.00	0.00	0.00	44.78
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.59</b>	<b>6.17</b>	<b>6.42</b>	<b>0.03</b>	<b>0.13</b>	<b>0.07</b>	<b>3,253.59</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-44%</i>	<i>-53%</i>	<i>-16%</i>	<i>-1%</i>	<i>-70%</i>	<i>-80%</i>	<i>-2%</i>

Notes:

Total may not add exactly because of rounding.



**Table L1-174. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.022581 0.028045 0.031110 2.056521 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.024641 2.056521 1.384720 5.196787	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	2.056521 1.384720	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.033695 0.075360 72.563285 2.056521 1.384720 5.196787	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.022581 0.030388 0.028045 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.030388 0.028213 0.024641 2.056521 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																	
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug
<b>02 - Relocations</b>																			
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.14	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.55</b>	<b>0.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.19</b>	<b>0.55</b>	<b>0.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																			
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	20.48	20.48	20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.29	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>21.53</b>	<b>21.53</b>	<b>21.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.34	0.34	0.34	0.34	0.34	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.32	0.32	0.32	0.32	0.32	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.65	1.65	1.65	1.65	1.65	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.34	0.34	0.34	0.34	0.34	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.48	0.48	0.48	0.48	0.48	0.48	--	--	--	--	--	--	--	--
		--	--	--	--	2.43	2.43	2.43	2.43	2.43	2.43	--	--	--	--	--	--	--	--
		--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	--	--	--	--	--	--	--	--
		--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--
		--	--	--	--	0.51	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--
		--	--	--	--	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	--	--	--	--	--	--	--	--

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	--	--	0.05	0.0000
		--	--	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.11</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	<b>0.0030</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.08	--	0.0002
		--	--	--	--	--	--	--	0.04	--	0.0001
		--	--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	0.46	--	0.0009
		--	--	--	--	--	--	<b>0.60</b>	--	<b>0.0012</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
		--	--	--	--	--	--	--	<b>0.60</b>	<b>0.11</b>	<b>0.0045</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	--	0.04	--	--	--	--	--	--	--	0.0000
		--	0.05	--	--	--	--	--	--	--	0.0000
		--	0.02	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.11</b>	--	--	--	--	--	--	<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	0.1843
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	<b>0.1938</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	0.0087
		--	--	--	--	--	--	--	--	--	0.0044
		--	--	--	--	--	--	--	--	--	0.0223
		--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	<b>0.0446</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0087
		--	--	--	--	--	--	--	--	--	0.0437
		--	--	--	--	--	--	--	--	--	0.0044
		--	--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	--	0.0092
		--	--	--	--	--	--	--	--	<b>0.0680</b>	

**Table L1-174. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.030388 2.056521 0.017849 1.384720	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.022581 0.024068 5.196787 1.384720	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.022581 0.024068 5.196787 1.384720	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.022581 0.024068 1.384720 5.196787	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.031110 1.384720	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.056521 0.026622 1.384720	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.081819 1.384720	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.022581 0.030388 0.028045 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.056521 0.026622 1.384720	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

**Table L1-174. ROG Exhaust Emissions from Offroad C**

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
9	Earthen Backfill	--	--	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41
		--	--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	0.25	0.25
		--	--	--	--	--	--	--	--	--	--	--	--	4.22	4.22	4.22	4.22	4.22	4.22	4.22
		--	--	--	--	--	--	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24
		--	--	--	--	--	--	--	--	--	--	--	--	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.11
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.56</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--
		--	--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	0.25	0.25	--
		--	--	--	--	--	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	--
		--	--	--	--	--	--	--	--	--	--	--	4.22	4.22	4.22	4.22	4.22	4.22	4.22	--
		--	--	--	--	--	--	--	--	--	--	--	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	<b>21.53</b>	<b>21.53</b>	<b>21.53</b>	<b>3.78</b>	<b>3.78</b>	<b>7.40</b>	<b>7.08</b>	<b>7.08</b>	<b>7.08</b>	<b>3.30</b>	<b>5.12</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>7.69</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
		--	--	--	--	--	--	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.65</b>	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.15	0.15	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	--	--	--

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0003</b>
10	Riprap - Class 2	0.41	--	--	--	--	--	--	--	--	0.0076
		0.25	--	--	--	--	--	--	--	--	0.0047
		4.22	--	--	--	--	--	--	--	--	0.0780
		0.24	--	--	--	--	--	--	--	--	0.0045
		<b>5.12</b>	--	--	--	--	--	--	--	--	<b>0.0948</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0026</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	0.0084
		--	--	--	--	--	--	--	--	--	0.0052
		--	--	--	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	--	--	--	0.0864
		--	--	--	--	--	--	--	--	--	<b>0.1051</b>
13	Erosion Control Seeding	--	--	--	0.05	0.05	--	--	--	--	0.0002
		--	--	--	0.10	0.10	--	--	--	--	0.0003
		--	--	--	<b>0.15</b>	<b>0.15</b>	--	--	--	--	<b>0.0005</b>
		<b>5.12</b>	<b>0.11</b>	--	<b>0.15</b>	<b>0.15</b>	--	--	--	--	<b>0.5097</b>
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	--	--	0.05	--	0.0000
		--	--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.11</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	<b>0.0026</b>
16	Construction Site Dewatering (Pumping)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	--	--	0.0073
		0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	0.0044
		<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	--	--
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0033</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0010</b>

**Table L1-174. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.015815 0.026622 0.081819 2.056521 0.031110 0.035193 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.081819 0.284451 2.056521 1.384720	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.284451 2.056521 1.384720	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.015815 5.196787 1.384720	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.015815 0.026622 0.081819 2.056521 0.031110 0.035193 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.081819 0.284451 2.056521 1.384720	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.015815 2.056521 1.384720	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.20	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.36	0.36	--	--	--	--	0.36
		--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	0.12
		--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--	--	0.22
		--	--	--	--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51
		--	--	--	--	--	--	--	--	--	--	--	<b>1.21</b>	<b>1.21</b>	--	--	--	--	<b>1.21</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.52</b>	<b>0.52</b>	--	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.11	0.29	0.29	0.29	1.84	1.54	1.54	1.25	1.25	1.25	2.46	1.41	0.71	0.71	0.19	0.19	1.41
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.06</b>	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.40</b>	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	0.13	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	0.07	0.07
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	0.12	0.12
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	<b>0.32</b>
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	<b>1.06</b>	<b>0.40</b>	<b>0.32</b>	<b>0.32</b>



Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0062
		--	--	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	--	--	<b>0.0169</b>
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	<b>0.0109</b>
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	<b>0.0026</b>
22	Hinged Bottom Gates	--	--	--	0.08	0.08	0.08	0.08	--	--	0.0010
		--	--	--	0.09	0.09	0.09	0.09	--	--	0.0011
		--	--	--	0.10	0.10	0.10	0.10	--	--	0.0012
		--	--	--	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	--	--	<b>0.0033</b>
		<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.11</b>	--	<b>0.0524</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	0.0000
		0.05	--	--	--	--	--	--	--	--	0.0000
		0.02	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.0021</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.0011</b>
		<b>0.11</b>	--	--	--	--	--	--	--	--	<b>0.0035</b>

**Table L1-174. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.032807 0.028213 0.024641 0.025876 2.056521 0.017849 1.384720 0.081819 0.284451 0.025548 2.056521	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	0.081819 0.284451 2.056521 1.384720	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.025548 1.384720	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.025548 1.384720	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.384720	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.384720	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.384720	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	
		0.05	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.11</b>	--	--	--	--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Construction	--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.40</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.11</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>1.30</b>	<b>0.90</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		<b>0.40</b>	<b>22.98</b>	<b>23.08</b>	<b>22.71</b>	<b>5.36</b>	<b>4.96</b>	<b>9.35</b>	<b>8.62</b>	<b>8.62</b>	<b>8.33</b>	<b>4.55</b>	<b>6.37</b>	<b>12.71</b>	<b>11.66</b>	<b>11.07</b>	<b>12.02</b>	<b>10.85</b>	<b>10.76</b>	<b>9.42</b>

Table L1-174. ROG Exhaust Emissions from Offroad C

#	Activity										Annual Emissions , tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	--	<b>0.0134</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	--	0.0020
		--	--	--	--	--	--	--	--	--	--	<b>0.0047</b>
		--	--	--	--	--	--	--	--	--	--	<b>0.0182</b>
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.04	--	--	--	--	--	0.04	--	--	0.0000
		--	0.05	--	--	--	--	--	0.05	--	--	0.0000
		--	0.02	--	--	--	--	--	0.02	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.11</b>	--	--	--	--	--	<b>0.11</b>	--	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	0.0007
		--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	<b>0.0018</b>
32	CMU Building Mechanical Equipment	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	0.0007
		--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	--	--	--	<b>0.0018</b>
33	Electrical Control Equipment CMU Building	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	--	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0011</b>
34	Electrical Power Equipment CMU Building	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0011
		--	--	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0011</b>
35	Communication Equipment	--	--	--	--	--	0.07	0.07	--	--	--	0.0004
		--	--	--	--	--	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0004</b>
		--	<b>0.11</b>	<b>0.38</b>	<b>0.38</b>	<b>0.38</b>	<b>0.46</b>	<b>0.46</b>	<b>0.11</b>	--	--	<b>0.0063</b>
<b>GRAND TOTAL</b>		<b>5.42</b>	<b>0.41</b>	<b>0.58</b>	<b>1.00</b>	<b>1.00</b>	<b>0.92</b>	<b>0.92</b>	<b>0.81</b>	<b>0.11</b>	<b>0.11</b>	<b>0.5946</b>

**Table L1-175. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.101596 0.098858 0.508963 62.840307 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.106728 62.840307 1.232384 131.528002	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	62.840307 1.232384	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.586666 0.772717 1.287320 62.840307 1.232384 131.528002	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.101596 0.107731 0.098858 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.107731 0.128185 0.106728 62.840307 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													

Table L1-175. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	0.64	0.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.87	0.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	2.32	2.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>5.36</b>	<b>5.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>1.15</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>3.24</b>	<b>5.36</b>	<b>5.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	
		0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	
6	Clearing and Grubbing	--	2.28	2.28	2.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	2.22	2.22	2.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.26	0.26	0.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	4.64	4.64	4.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>13.57</b>	<b>13.57</b>	<b>13.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	2.28	2.28	2.28	2.28	2.28	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.14	1.14	1.14	1.14	1.14	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	41.75	41.75	41.75	41.75	41.75	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.71	1.71	1.71	1.71	1.71	1.71	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	11.04	11.04	11.04	11.04	11.04	11.04	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	3.32	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.46	0.46	0.46	0.46	0.46	0.46	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	--	--	--	--	--	--	--	--	--	--	

Table L1-175. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	1.11	0.0011
		--	--	--	--	--	--	0.95	0.0010
		--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.08</b>	<b>0.0021</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0035
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	0.0128
		--	--	--	--	--	--	0.0007	<b>0.0295</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.35	--	0.0007
		--	--	--	--	--	1.11	--	0.0022
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	11.60	--	0.0232
		--	--	--	--	--	<b>13.08</b>	--	<b>0.0262</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0023</b>
		--	--	--	--	--	<b>13.08</b>	<b>2.08</b>	<b>0.0600</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0021</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0205
		--	--	--	--	--	--	--	0.0343
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0199
		--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	0.0418	<b>0.1222</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0208
		--	--	--	--	--	--	--	0.0308
		--	--	--	--	--	--	--	0.0154
		--	--	--	--	--	--	--	0.5637
		--	--	--	--	--	--	--	0.0041
		--	--	--	--	--	--	--	<b>0.6348</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0308
		--	--	--	--	--	--	--	0.1987
		--	--	--	--	--	--	--	0.0190
		--	--	--	--	--	--	--	0.0598
		--	--	--	--	--	--	--	0.0082
		--	--	--	--	--	--	--	<b>0.3166</b>

**Table L1-175. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.107731 62.840307 0.097718 1.232384	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.101596 0.112912 131.528002 1.232384	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.101596 0.112912 131.528002 1.232384	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.101596 0.112912 1.232384 131.528002	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.508963 1.232384	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	62.840307 0.131129 1.232384	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.998932 1.232384	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.101596 0.107731 0.098858 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	62.840307 0.131129 1.232384	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													



Table L1-175. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
9	Earthen Backfill	--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	--
		--	--	--	--	--	--	--	--	--	--	--	--	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	--
		--	--	--	--	--	--	--	--	--	--	--	--	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.92	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.60	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53.35	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>54.98</b>	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	--	--
		--	--	--	--	--	--	--	--	--	--	--	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	--	--
		--	--	--	--	--	--	--	--	--	--	--	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.08</b>	<b>13.57</b>	<b>13.57</b>	<b>13.57</b>	<b>17.59</b>	<b>17.59</b>	<b>66.62</b>	<b>64.61</b>	<b>64.61</b>	<b>64.61</b>	<b>47.02</b>	<b>109.96</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>164.94</b>	<b>109.96</b>	<b>2.08</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
		--	--	--	--	--	--	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	20.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>23.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	--	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-175. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0020</b>	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0341
		--	--	--	--	--	--	--	0.0221
		--	--	--	--	--	--	--	1.9741
		--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	<b>2.0343</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0534
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0550</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0378
		--	--	--	--	--	--	--	0.0245
		--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	--	2.1875
		--	--	--	--	--	--	<b>2.2542</b>	
13	Erosion Control Seeding	--	0.87	0.87	--	--	--	--	0.0030
		--	0.09	0.09	--	--	--	--	0.0003
		--	<b>0.96</b>	<b>0.96</b>	--	--	--	<b>0.0034</b>	
		--	<b>0.96</b>	<b>0.96</b>	--	--	--	<b>5.4244</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	1.11	--	0.0011
		--	--	--	--	--	0.95	--	0.0010
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.08</b>	--	<b>0.0021</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0100
		--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0157</b>	
16	Construction Site Dewatering (Pumping)	1.48	1.48	1.48	1.48	1.48	--	--	0.0888
		0.07	0.07	0.07	0.07	0.07	--	--	0.0039
		<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	--	--	<b>0.0927</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0418
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0470</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0039
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0061</b>	

**Table L1-175. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.077156 0.131129 0.998932 62.840307 0.508963 0.106961 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.998932 1.781339 62.840307 1.232384	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.781339 62.840307 1.232384	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.077156 131.528002 1.232384	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.077156 0.131129 0.998932 62.840307 0.508963 0.106961 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.998932 1.781339 62.840307 1.232384	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.077156 62.840307 1.232384	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-175. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.51	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	1.48	1.48	1.48	1.48	1.48	1.48	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.32	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.87	0.87	0.87	0.87	0.87	0.87	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	1.18	1.18	1.18	1.18	1.18	1.18	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	--	--	--	--	--	--	--	
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	4.44	4.44	--	--	--	--	4.44	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75	--	
		--	--	--	--	--	--	--	--	--	--	--	--	6.65	6.65	--	--	--	--	6.65	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.46	0.46	--	--	--	--	0.46	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>12.30</b>	<b>12.30</b>	--	--	--	--	<b>12.30</b>	--	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.43	4.43	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>5.20</b>	<b>5.20</b>	--	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>2.08</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>25.06</b>	<b>11.25</b>	<b>11.25</b>	<b>9.50</b>	<b>9.50</b>	<b>9.50</b>	<b>21.80</b>	<b>13.85</b>	<b>6.74</b>	<b>6.74</b>	<b>1.55</b>	<b>1.55</b>	<b>13.85</b>	<b>1.55</b>	<b>1.55</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--	--	--	1.11	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	--	--	--	0.95	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	0.02	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	--	--	--	<b>2.08</b>	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.51	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.32	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.87	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.18	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>7.95</b>	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.22	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.10</b>	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.22	2.22	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.94</b>	<b>2.94</b>	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>	<b>7.95</b>	<b>4.10</b>	<b>2.94</b>	<b>2.94</b>	<b>2.08</b>	--

Table L1-175. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0065	
		--	--	--	--	--	--	--	0.0082	
		--	--	--	--	--	--	--	0.0237	
		--	--	--	--	--	--	--	0.0532	
		--	--	--	--	--	--	--	0.0139	
		--	--	--	--	--	--	--	0.0190	
		--	--	--	--	--	--	--	0.0028	
		--	--	--	--	--	--	<b>0.1273</b>		
20	Headworks Structure	--	--	--	--	--	--	--	0.0400	
		--	--	--	--	--	--	--	0.0068	
		--	--	--	--	--	--	--	0.0598	
		--	--	--	--	--	--	--	0.0041	
		--	--	--	--	--	--	<b>0.1107</b>		
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0025	
		--	--	--	--	--	--	--	0.0222	
		--	--	--	--	--	--	--	0.0013	
		--	--	--	--	--	--	<b>0.0260</b>		
22	Hinged Bottom Gates	--	0.41	0.41	0.41	0.41	--	--	0.0049	
		--	2.32	2.32	2.32	2.32	--	--	0.0278	
		--	0.09	0.09	0.09	0.09	--	--	0.0010	
		--	<b>2.81</b>	<b>2.81</b>	<b>2.81</b>	<b>2.81</b>	--	--	<b>0.0338</b>	
		1.55	4.36	4.36	4.36	4.36	2.08	--	<b>0.4614</b>	
<b>08 - Roads, Railroads, and Bridges</b>										
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0021</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	<b>0.0159</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0020</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	<b>0.0103</b>	
		--	--	--	--	--	--	--	<b>0.0303</b>	

**Table L1-175. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.109795 0.128185 0.106728 0.508783 62.840307 0.097718 1.232384 0.998932 1.781339 0.541091 62.840307	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	0.998932 1.781339 62.840307 1.232384	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.541091 1.232384	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.541091 1.232384	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.232384	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.232384	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.232384	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-175. NOx Exhaust Emissions for

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	1.11	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.95	--	--	--	--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.08</b>	--	--	--	--	--	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Constructi	--	0.32	0.32	0.32	0.32	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.83	0.83	0.83	0.83	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.72	0.72	0.72	0.72	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.27	0.27	0.27	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.48	1.48	1.48	1.48	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.95	0.95	0.95	0.95	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	2.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>4.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.08</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>11.64</b>	<b>7.54</b>	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.08</b>
<b>GRAND TOTAL</b>		<b>7.40</b>	<b>26.47</b>	<b>28.56</b>	<b>22.87</b>	<b>30.98</b>	<b>26.88</b>	<b>93.76</b>	<b>75.86</b>	<b>75.86</b>	<b>74.11</b>	<b>56.52</b>	<b>119.46</b>	<b>241.72</b>	<b>233.77</b>	<b>228.75</b>	<b>234.62</b>	<b>225.57</b>	<b>224.41</b>	<b>181.72</b>	<b>113.59</b>	<b>5.71</b>

Table L1-175. NOx Exhaust Emissions for

#	Activity								Annual Emissions, tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>										
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0021</b>
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	--	0.0124
		--	--	--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	--	--	0.0108
		--	--	--	--	--	--	--	--	0.0166
		--	--	--	--	--	--	--	--	0.0041
		--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	0.0222
		--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	0.0143
		--	--	--	--	--	--	--	--	0.0166
		--	--	--	--	--	--	--	--	<b>0.1132</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	0.0170
		--	--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	--	0.0255
		--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	<b>0.0471</b>
		--	--	--	--	--	--	--	--	<b>0.1624</b>
<b>20 -Permanent Operating Equipment</b>										
30	Mobilization and Demobilization	--	--	--	--	--	1.11	--	--	0.0011
		--	--	--	--	--	0.95	--	--	0.0010
		--	--	--	--	--	0.02	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>2.08</b>	--	--	<b>0.0021</b>
31	Mechanical Hydraulic Cylinders & Housing	0.95	0.95	0.95	0.95	0.95	--	--	--	0.0143
		0.07	0.07	0.07	0.07	0.07	--	--	--	0.0010
		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	--	--	--	<b>0.0153</b>
32	CMU Building Mechanical Equipment	0.95	0.95	0.95	0.95	0.95	--	--	--	0.0143
		0.07	0.07	0.07	0.07	0.07	--	--	--	0.0010
		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	--	--	--	<b>0.0153</b>
33	Electrical Control Equipment CMU Building	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0010
		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0010</b>
34	Electrical Power Equipment CMU Building	0.07	0.07	0.07	0.07	0.07	--	--	--	0.0010
		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0010</b>
35	Communication Equipment	--	--	--	0.07	0.07	--	--	--	0.0004
		--	--	--	<b>0.07</b>	<b>0.07</b>	--	--	--	<b>0.0004</b>
		<b>2.17</b>	<b>2.17</b>	<b>2.17</b>	<b>2.23</b>	<b>2.23</b>	<b>2.08</b>	--	--	<b>0.0350</b>
<b>GRAND TOTAL</b>		<b>3.71</b>	<b>7.49</b>	<b>7.49</b>	<b>6.59</b>	<b>6.59</b>	<b>17.25</b>	<b>2.08</b>	--	<b>6.1736</b>



**Table L1-176. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.597461 1.656533 1.915350 10.564784 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.641123 10.564784 12.471053 33.018220	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	10.564784 12.471053	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	2.267364 1.111618 146.172429 10.564784 12.471053 33.018220	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.597461 0.627356 1.656533 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.627356 0.737650 0.641123 10.564784 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													

Table L1-176. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	3.78	3.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.79	4.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.28	3.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.58	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>13.94</b>	<b>13.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.63</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.68</b>	<b>13.94</b>	<b>13.94</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19
		3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65
		0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>
6	Clearing and Grubbing	--	8.80	8.80	8.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.64	2.64	2.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.16	1.16	1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>59.71</b>	<b>59.71</b>	<b>59.71</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	9.04	9.04	9.04	9.04	9.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	13.28	13.28	13.28	13.28	13.28	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	19.17	19.17	19.17	19.17	19.17	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	10.48	10.48	10.48	10.48	10.48	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.08	3.08	3.08	3.08	3.08	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>55.05</b>	<b>55.05</b>	<b>55.05</b>	<b>55.05</b>	<b>55.05</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	9.96	9.96	9.96	9.96	9.96	9.96	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	63.54	63.54	63.54	63.54	63.54	63.54	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	6.34	6.34	6.34	6.34	6.34	6.34	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	4.62	4.62	4.62	4.62	4.62	4.62	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>85.02</b>	<b>85.02</b>	<b>85.02</b>	<b>85.02</b>	<b>85.02</b>	<b>85.02</b>	--	--	--	--	--	--	--	--	--	--

Table L1-176. CO Exhaust Emissions from

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.19	0.0002
		--	--	--	--	--	--	3.65	0.0036
		--	--	--	--	--	--	0.22	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>4.06</b>	<b>0.0041</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0208
		--	--	--	--	--	--	--	0.0264
		--	--	--	--	--	--	--	0.0180
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	0.0073	
		--	--	--	--	--	--	<b>0.0767</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	2.11	--	0.0042
		--	--	--	--	--	0.19	--	0.0004
		--	--	--	--	--	0.22	--	0.0004
		--	--	--	--	--	2.91	--	0.0058
		--	--	--	--	--	<b>5.43</b>	--	<b>0.0109</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	<b>0.0013</b>
		--	--	--	--	--	<b>5.43</b>	<b>4.06</b>	<b>0.0928</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0041</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0792
		--	--	--	--	--	--	--	0.0494
		--	--	--	--	--	--	--	0.3712
		--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	0.0238
		--	--	--	--	--	--	0.0105	
		--	--	--	--	--	--	--	<b>0.5374</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.1221
		--	--	--	--	--	--	--	0.1792
		--	--	--	--	--	--	--	0.2587
		--	--	--	--	--	--	--	0.1415
		--	--	--	--	--	--	--	0.0416
		--	--	--	--	--	--	--	<b>0.7431</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.1792
		--	--	--	--	--	--	--	1.1437
		--	--	--	--	--	--	--	0.1142
		--	--	--	--	--	--	--	0.0101
		--	--	--	--	--	--	--	0.0831
		--	--	--	--	--	--	--	<b>1.5303</b>

**Table L1-176. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.627356 10.564784 1.640464 12.471053	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.597461 0.659700 33.018220 12.471053	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.597461 0.659700 33.018220 12.471053	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.597461 0.659700 12.471053 33.018220	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	1.915350 12.471053	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	10.564784 0.766004 12.471053	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.332930 12.471053	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.597461 0.627356 1.656533 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	10.564784 0.766004 12.471053	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

Table L1-176. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
9	Earthen Backfill	--	--	--	--	--	--	3.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>8.71</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	--
		--	--	--	--	--	--	--	--	--	--	--	--	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	--
		--	--	--	--	--	--	--	--	--	--	--	--	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	--
		--	--	--	--	--	--	--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.42	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.49	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.39	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>23.40</b>	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	10.83	10.83	10.83	10.83	10.83	10.83	10.83	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	6.98	6.98	6.98	6.98	6.98	6.98	6.98	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	2.20	2.20	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	26.79	26.79	26.79	26.79	26.79	26.79	26.79	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.06</b>	<b>59.71</b>	<b>59.71</b>	<b>59.71</b>	<b>85.02</b>	<b>85.02</b>	<b>148.77</b>	<b>140.06</b>	<b>140.06</b>	<b>140.06</b>	<b>55.05</b>	<b>46.80</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>70.20</b>	<b>46.80</b>	<b>4.06</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.32	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>4.49</b>	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46
		--	--	--	--	--	--	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
		--	--	--	--	--	--	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	6.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	9.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	5.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>27.52</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-176. CO Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	<b>0.0087</b>	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.2004
		--	--	--	--	--	--	--	0.1291
		--	--	--	--	--	--	--	0.4956
		--	--	--	--	--	--	--	0.0407
		--	--	--	--	--	--	<b>0.8658</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0054
		--	--	--	--	--	--	--	0.0035
		--	--	--	--	--	--	--	0.0134
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	<b>0.0234</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.2221
		--	--	--	--	--	--	--	0.1431
		--	--	--	--	--	--	--	0.0451
		--	--	--	--	--	--	--	0.5491
		--	--	--	--	--	--	<b>0.9594</b>	
13	Erosion Control Seeding	--	3.28	3.28	--	--	--	--	0.0115
		--	0.88	0.88	--	--	--	--	0.0031
		--	<b>4.16</b>	<b>4.16</b>	--	--	--	<b>0.0145</b>	
		--	<b>4.16</b>	<b>4.16</b>	--	--	--	<b>4.6868</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.19	--	0.0002
		--	--	--	--	--	3.65	--	0.0036
		--	--	--	--	--	0.22	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>4.06</b>	<b>0.0041</b>	
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0269
		--	--	--	--	--	--	--	0.0119
		--	--	--	--	--	--	<b>0.0404</b>	
16	Construction Site Dewatering (Pumping)	3.46	3.46	3.46	3.46	3.46	--	--	0.2074
		0.66	0.66	0.66	0.66	0.66	--	--	0.0396
		<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	--	--	<b>0.2470</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0090
		--	--	--	--	--	--	--	0.0133
		--	--	--	--	--	--	--	0.0192
		--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	<b>0.0550</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0104
		--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	<b>0.0157</b>	

**Table L1-176. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.438595 0.766004 2.332930 10.564784 1.915350 0.612915 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.332930 1.492060 10.564784 12.471053	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.492060 10.564784 12.471053	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.438595 33.018220 12.471053	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.438595 0.766004 2.332930 10.564784 1.915350 0.612915 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.332930 1.492060 10.564784 12.471053	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.438595 10.564784 12.471053	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-176. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																						
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	2.32	2.32	2.32	2.32	2.32	2.32	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	2.99	2.99	2.99	2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.46	3.46	3.46	3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	3.28	3.28	3.28	3.28	3.28	3.28	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	6.79	6.79	6.79	6.79	6.79	6.79	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	1.76	1.76	1.76	1.76	1.76	1.76	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	21.15	21.15	21.15	21.15	21.15	21.15	--	--	--	--	--	--	--	--		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	10.37	10.37	--	--	--	--	10.37	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	1.12	1.12	--	--	--	--	1.12	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	4.62	4.62	--	--	--	--	4.62	--	--		
		--	--	--	--	--	--	--	--	--	--	--	16.74	16.74	--	--	--	--	16.74	--	--			
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.64	2.64	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	3.81	3.81	--	--	--	--	--			
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	4.06	4.49	4.49	4.49	31.64	29.75	29.75	25.26	25.26	25.26	42.00	20.85	7.92	7.92	4.12	4.12	20.85	4.12	4.12		
<b>08 - Roads, Railroads, and Bridges</b>																								
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	0.19	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	--	--	--	--	3.65	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--	--	0.22	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.06	--	--	--	--	4.06	--			
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.32	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.99	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.28	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.79	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.76	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	21.15	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.54	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	5.58	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.48	3.48	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	0.37	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	1.10	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.95	4.95	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.06	21.15	5.58	4.95	4.95	4.06	--			



Table L1-176. CO Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0371
		--	--	--	--	--	--	--	0.0478
		--	--	--	--	--	--	--	0.0553
		--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	0.0524
		--	--	--	--	--	--	--	0.1086
		--	--	--	--	--	--	--	0.0282
		--	--	--	--	--	--	<b>0.3383</b>	
20	Headworks Structure	--	--	--	--	--	--	--	0.0933
		--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	0.0101
		--	--	--	--	--	--	--	0.0416
		--	--	--	--	--	--	<b>0.1506</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	0.0132
		--	--	--	--	--	--	<b>0.0190</b>	
22	Hinged Bottom Gates	--	2.32	2.32	2.32	2.32	--	--	0.0278
		--	0.58	0.58	0.58	0.58	--	--	0.0070
		--	0.88	0.88	0.88	0.88	--	--	0.0106
		--	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	--	--	<b>0.0454</b>
		<b>4.12</b>	<b>7.90</b>	<b>7.90</b>	<b>7.90</b>	<b>7.90</b>	<b>4.06</b>	--	<b>0.9156</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0041</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	--	0.0069
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	0.0136
		--	--	--	--	--	--	--	0.0035
		--	--	--	--	--	--	<b>0.0423</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0028</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0122
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	<b>0.0173</b>	
		--	--	--	--	--	--	<b>0.0665</b>	

**Table L1-176. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	1.969023 0.737650 0.641123 1.853667 10.564784 1.640464 12.471053 2.332930 1.492060 2.069261 10.564784	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	2.332930 1.492060 10.564784 12.471053	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	2.069261 12.471053	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	2.069261 12.471053	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.471053	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.471053	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.471053	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-176. CO Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.19	--	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.65	--	--	--	--	--	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.22	--	--	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.06</b>	--	--	--	--	--	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Constructi	--	5.73	5.73	5.73	5.73	5.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.77	4.77	4.77	4.77	4.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.11	2.11	2.11	2.11	2.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.62	2.62	2.62	2.62	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.54	4.54	4.54	4.54	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.46	3.46	3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.65	3.65	3.65	3.65	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>5.58</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.06</b>	<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	<b>34.58</b>	<b>29.01</b>	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.06</b>
<b>GRAND TOTAL</b>		<b>12.79</b>	<b>102.66</b>	<b>106.71</b>	<b>93.21</b>	<b>124.09</b>	<b>118.52</b>	<b>184.47</b>	<b>169.82</b>	<b>169.82</b>	<b>165.33</b>	<b>80.31</b>	<b>72.06</b>	<b>135.60</b>	<b>114.45</b>	<b>105.58</b>	<b>122.67</b>	<b>103.29</b>	<b>102.67</b>	<b>96.01</b>	<b>54.97</b>	<b>12.23</b>

Table L1-176. CO Exhaust Emissions from

#	Activity								Annual Emissions, tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>										
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0041</b>
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	0.0859
		--	--	--	--	--	--	--	--	0.0716
		--	--	--	--	--	--	--	--	0.0317
		--	--	--	--	--	--	--	--	0.0392
		--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	0.0681
		--	--	--	--	--	--	--	--	0.0231
		--	--	--	--	--	--	--	--	0.0518
		--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	0.0547
		--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	<b>0.4351</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	0.0397
		--	--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	--	0.0043
		--	--	--	--	--	--	--	--	0.0177
		--	--	--	--	--	--	--	--	<b>0.0642</b>
		--	--	--	--	--	--	--	--	<b>0.5033</b>
<b>20 -Permanent Operating Equipment</b>										
30	Mobilization and Demobilization	--	--	--	--	--	0.19	--	--	0.0002
		--	--	--	--	--	3.65	--	--	0.0036
		--	--	--	--	--	0.22	--	--	0.0002
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>4.06</b>	--	--	<b>0.0041</b>
31	Mechanical Hydraulic Cylinders & Housing	3.65	3.65	3.65	3.65	3.65	--	--	--	0.0547
		0.66	0.66	0.66	0.66	0.66	--	--	--	0.0099
		<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	--	--	--	<b>0.0646</b>
32	CMU Building Mechanical Equipment	3.65	3.65	3.65	3.65	3.65	--	--	--	0.0547
		0.66	0.66	0.66	0.66	0.66	--	--	--	0.0099
		<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	--	--	--	<b>0.0646</b>
33	Electrical Control Equipment CMU Building	0.66	0.66	0.66	0.66	0.66	--	--	--	0.0099
		<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	--	--	--	<b>0.0099</b>
34	Electrical Power Equipment CMU Building	0.66	0.66	0.66	0.66	0.66	--	--	--	0.0099
		<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	--	--	--	<b>0.0099</b>
35	Communication Equipment	--	--	--	0.66	0.66	--	--	--	0.0040
		--	--	--	<b>0.66</b>	<b>0.66</b>	--	--	--	<b>0.0040</b>
		<b>9.94</b>	<b>9.94</b>	<b>9.94</b>	<b>10.60</b>	<b>10.60</b>	<b>4.06</b>	--	--	<b>0.1571</b>
<b>GRAND TOTAL</b>		<b>14.05</b>	<b>21.99</b>	<b>21.99</b>	<b>18.50</b>	<b>18.50</b>	<b>13.54</b>	<b>4.06</b>	--	<b>6.4221</b>

**Table L1-177. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.003179 0.003453 0.003667 0.171769 0.220605 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.003901 0.171769 0.046775 0.220605	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	0.171769 0.046775	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.004267 0.002558 0.016272 0.171769 0.046775 0.220605	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.003179 0.003291 0.003453 0.220605 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.003291 0.004016 0.003901 0.171769 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	

Table L1-177. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--

Table L1-177. SO2 Exhaust Emissions from

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.01</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0003</b>	<b>0.0003</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	<b>0.04</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0005</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.0032</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0062
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	<b>0.0083</b>

**Table L1-177. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.003291 0.171769 0.003581 0.046775	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.003179 0.003570 0.220605 0.046775	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.003179 0.003570 0.220605 0.046775	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.003179 0.003570 0.046775 0.220605	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.003667 0.046775	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.171769 0.004804 0.046775	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.004934 0.046775	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003179 0.003291 0.003453 0.220605 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.171769 0.004804 0.046775	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													



Table L1-177. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
9	Earthen Backfill	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.46</b>	<b>0.46</b>	<b>0.74</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.24</b>	<b>0.28</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.42</b>	<b>0.28</b>	<b>0.01</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		--	--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-177. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0052</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	<b>0.0058</b>	
13	Erosion Control Seeding	--	0.01	0.01	--	--	--	--	0.0000
		--	0.00	0.00	--	--	--	--	0.0000
		--	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0000</b>	
		--	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0233</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0002</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	--	--	0.0004
		0.00	0.00	0.00	0.00	0.00	--	--	0.0001
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0006</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0002</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	

**Table L1-177. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002399 0.004804 0.004934 0.171769 0.003667 0.003180 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.004934 0.003802 0.171769 0.046775	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.003802 0.171769 0.046775	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002399 0.220605 0.046775	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002399 0.004804 0.004934 0.171769 0.003667 0.003180 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.004934 0.003802 0.171769 0.046775	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.002399 0.171769 0.046775	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-177. SO2 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.16</b>	<b>0.07</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	<b>0.01</b>	<b>0.07</b>	<b>0.01</b>	<b>0.01</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	--	<b>0.01</b>	--	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--

Table L1-177. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0015</b>	
20	Headworks Structure	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0005</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
22	Hinged Bottom Gates	--	0.01	0.01	0.01	0.01	--	--	0.0002
		--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0002</b>
		<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0036</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0002</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
		--	--	--	--	--	--	<b>0.0003</b>	

**Table L1-177. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.003859 0.004016 0.003901 0.003733 0.171769 0.003581 0.046775 0.004934 0.003802 0.004000 0.171769	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	0.004934 0.003802 0.171769 0.046775	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.004000 0.046775	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.004000 0.046775	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.046775	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.046775	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.046775	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													



Table L1-177. SO2 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0014</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0002</b>
		--	--	--	--	--	--	--	<b>0.0016</b>
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
32	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
33	Electrical Control Equipment CMU Building	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
34	Electrical Power Equipment CMU Building	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
35	Communication Equipment	--	--	--	0.00	0.00	--	--	0.0000
		--	--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.03</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0296</b>



**Table L1-178. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.003593 0.003840 0.004034 2.205086 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.003797 2.205086 0.771382 1.595198	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	2.205086 0.771382	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.004510 0.030333 0.230004 2.205086 0.771382 1.595198	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.003593 0.003973 0.003840 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.003973 0.004525 0.003797 2.205086 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													

Table L1-178. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.13</b>	<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.53</b>	<b>0.53</b>	<b>0.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	--	--	--	--	--	--	--	--	--	--

Table L1-178. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.06</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	0.0004	<b>0.0010</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.04	--	0.0001
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.14	--	0.0003
		--	--	--	--	--	<b>0.21</b>	--	<b>0.0004</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0001</b>
		--	--	--	--	--	<b>0.21</b>	<b>0.06</b>	<b>0.0016</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	0.0005	<b>0.0048</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	0.0026	<b>0.0119</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0070
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	0.0051	<b>0.0161</b>

**Table L1-178. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.003973 2.205086 0.003412 0.771382	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.003593 0.003966 1.595198 0.771382	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.003593 0.003966 1.595198 0.771382	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.003593 0.003966 0.771382 1.595198	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.004034 0.771382	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.205086 0.004572 0.771382	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.007132 0.771382	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003593 0.003973 0.003840 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.205086 0.004572 0.771382	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													

Table L1-178. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
9	Earthen Backfill	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	--	
		--	--	--	--	--	--	--	--	--	--	--	--	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	--	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.65	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.77</b>	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	0.14	0.14	0.14	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	1.29	1.29	1.29	1.29	1.29	1.29	1.29	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.06</b>	<b>0.53</b>	<b>0.53</b>	<b>0.53</b>	<b>0.89</b>	<b>0.89</b>	<b>1.88</b>	<b>1.77</b>	<b>1.77</b>	<b>1.77</b>	<b>0.88</b>	<b>1.54</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>2.31</b>	<b>1.54</b>	<b>0.06</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
		--	--	--	--	--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-178. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0239
		--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	<b>0.0284</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0008</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	0.0265
		--	--	--	--	--	--	<b>0.0315</b>	
13	Erosion Control Seeding	--	0.01	0.01	--	--	--	--	0.0000
		--	0.05	0.05	--	--	--	--	0.0002
		--	<b>0.06</b>	<b>0.06</b>	--	--	--	<b>0.0002</b>	
		--	<b>0.06</b>	<b>0.06</b>	--	--	--	<b>0.0938</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.06</b>	<b>0.0001</b>	
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	<b>0.0012</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	--	--	0.0006
		0.04	0.04	0.04	0.04	0.04	--	--	0.0024
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0031</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0009</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0005</b>	

**Table L1-178. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002694 0.004572 0.007132 2.205086 0.004034 0.004072 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.007132 0.069607 2.205086 0.771382	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.069607 2.205086 0.771382	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002694 1.595198 0.771382	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002694 0.004572 0.007132 2.205086 0.004034 0.004072 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.007132 0.069607 2.205086 0.771382	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.002694 2.205086 0.771382	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-178. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--	--	--	--
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.23	0.23	--	--	--	--	--	0.23	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--	--	0.29	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	--	--	--	--	<b>0.58</b>	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.34</b>	<b>0.34</b>	--	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.06</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.49</b>	<b>0.51</b>	<b>0.51</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.95</b>	<b>0.63</b>	<b>0.39</b>	<b>0.39</b>	<b>0.05</b>	<b>0.05</b>	<b>0.63</b>	<b>0.05</b>	<b>0.05</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	--	--	--	--	--	<b>0.06</b>	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.19</b>	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.17</b>	<b>0.17</b>	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.32</b>	<b>0.19</b>	<b>0.17</b>	<b>0.17</b>	<b>0.06</b>	--



Table L1-178. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	<b>0.0051</b>	
20	Headworks Structure	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	<b>0.0052</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0017</b>	
22	Hinged Bottom Gates	--	0.01	0.01	0.01	0.01	--	--	0.0002
		--	0.03	0.03	0.03	0.03	--	--	0.0003
		--	0.05	0.05	0.05	0.05	--	--	0.0007
		--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	<b>0.0012</b>
		<b>0.05</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.06</b>	--	<b>0.0189</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0006</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0006</b>	
		--	--	--	--	--	--	<b>0.0014</b>	

**Table L1-178. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.004329 0.004525 0.003797 0.003693 2.205086 0.003412 0.771382 0.007132 0.069607 0.003799 2.205086	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	0.007132 0.069607 2.205086 0.771382	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.003799 0.771382	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.003799 0.771382	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.771382	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.771382	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.771382	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-178. PM10 Exhaust Emissions frc

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	--	--	--	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Constructi	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.46</b>	<b>0.27</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>
<b>GRAND TOTAL</b>		<b>0.24</b>	<b>0.99</b>	<b>1.05</b>	<b>0.94</b>	<b>1.49</b>	<b>1.30</b>	<b>2.43</b>	<b>2.28</b>	<b>2.28</b>	<b>2.14</b>	<b>1.25</b>	<b>1.91</b>	<b>4.03</b>	<b>3.71</b>	<b>3.52</b>	<b>3.78</b>	<b>3.32</b>	<b>3.29</b>	<b>3.10</b>	<b>1.65</b>	<b>0.17</b>

Table L1-178. PM10 Exhaust Emissions frc

#	Activity								Annual Emissions , tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>										
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0001</b>
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	<b>0.0040</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	<b>0.0022</b>
		--	--	--	--	--	--	--	--	<b>0.0063</b>
<b>20 -Permanent Operating Equipment</b>										
30	Mobilization and Demobilization	--	--	--	--	--	0.04	--	--	0.0000
		--	--	--	--	--	0.01	--	--	0.0000
		--	--	--	--	--	0.01	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.06</b>	--	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	0.01	--	--	--	0.0001
		0.04	0.04	0.04	0.04	0.04	--	--	--	0.0006
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	<b>0.0007</b>
32	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	0.01	--	--	--	0.0001
		0.04	0.04	0.04	0.04	0.04	--	--	--	0.0006
		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	<b>0.0007</b>
33	Electrical Control Equipment CMU Building	0.04	0.04	0.04	0.04	0.04	--	--	--	0.0006
		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	--	<b>0.0006</b>
34	Electrical Power Equipment CMU Building	0.04	0.04	0.04	0.04	0.04	--	--	--	0.0006
		<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	--	--	--	<b>0.0006</b>
35	Communication Equipment	--	--	--	0.04	0.04	--	--	--	0.0002
		--	--	--	<b>0.04</b>	<b>0.04</b>	--	--	--	<b>0.0002</b>
		<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.22</b>	<b>0.22</b>	<b>0.06</b>	--	--	<b>0.0030</b>
<b>GRAND TOTAL</b>		<b>0.23</b>	<b>0.39</b>	<b>0.39</b>	<b>0.37</b>	<b>0.37</b>	<b>0.32</b>	<b>0.06</b>	--	<b>0.1251</b>

**Table L1-179. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	0.003306 0.003532 0.003712 0.949858 0.668754 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	0.003493 0.949858 0.362050 0.668754	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	0.949858 0.362050	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	0.004149 0.027906 0.211604 0.949858 0.362050 0.668754	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	0.003306 0.003655 0.003532 0.668754 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	0.003655 0.004163 0.003493 0.949858 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													

Table L1-179. PM2.5 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.14	0.14	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.36	0.36	0.36	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	--	--	--	--	--	--	--	--	--	--

Table L1-179. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0006</b>	<b>0.0002</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	<b>0.09</b>	--	<b>0.0002</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0001</b>
		--	--	--	--	--	<b>0.09</b>	<b>0.03</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	<b>0.0031</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	0.0012	
		--	--	--	--	--	--	--	<b>0.0063</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0065
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	0.0024	
		--	--	--	--	--	--	--	<b>0.0114</b>

**Table L1-179. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	0.003655 0.949858 0.003139 0.362050	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	0.003306 0.003649 0.668754 0.362050	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	2	0.003306 0.003649 0.668754 0.362050	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	41	0.003306 0.003649 0.362050 0.668754	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	7	0.003712 0.362050	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.949858 0.004207 0.362050	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.006561 0.362050	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003306 0.003655 0.003532 0.668754 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.949858 0.004207 0.362050	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													



Table L1-179. PM2.5 Exhaust Emissions from

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
9	Earthen Backfill	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.35</b>	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--
		--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--	--
		--	--	--	--	--	--	--	--	--	--	--	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	--	--
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.64</b>	<b>0.64</b>	<b>1.17</b>	<b>1.11</b>	<b>1.11</b>	<b>1.11</b>	<b>0.47</b>	<b>0.70</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.06</b>	<b>0.70</b>	<b>0.03</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.07</b>	<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-179. PM2.5 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
10	Riprap - Class 2	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0100
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0130</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0004</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0111
		--	--	--	--	--	--	<b>0.0145</b>	
13	Erosion Control Seeding	--	0.01	0.01	--	--	--	--	0.0000
		--	0.03	0.03	--	--	--	--	0.0001
		--	<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0001</b>	
		--	<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0490</b>	
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.03</b>	<b>0.0000</b>	
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0006</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	--	--	0.0006
		0.02	0.02	0.02	0.02	0.02	--	--	0.0011
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0017</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0005</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0003</b>	

**Table L1-179. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002479 0.004207 0.006561 0.949858 0.003712 0.003746 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.006561 0.064038 0.949858 0.362050	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.064038 0.949858 0.362050	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002479 0.668754 0.362050	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002479 0.004207 0.006561 0.949858 0.003712 0.003746 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.006561 0.064038 0.949858 0.362050	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	7	0.002479 0.949858 0.362050	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													

Table L1-179. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	--	0.10	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	--	0.13	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	<b>0.29</b>	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.16</b>	<b>0.16</b>	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.03</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.29</b>	<b>0.29</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.51</b>	<b>0.32</b>	<b>0.19</b>	<b>0.19</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.03</b>	<b>0.03</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	<b>0.03</b>	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.19</b>	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.09</b>	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.19</b>	<b>0.10</b>	<b>0.09</b>	<b>0.09</b>	<b>0.03</b>	--

Table L1-179. PM2.5 Exhaust Emissions from

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	<b>0.0030</b>	
20	Headworks Structure	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	<b>0.0026</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	<b>0.0008</b>	
22	Hinged Bottom Gates	--	0.01	0.01	0.01	0.01	--	--	0.0002
		--	0.01	0.01	0.01	0.01	--	--	0.0001
		--	0.03	0.03	0.03	0.03	--	--	0.0003
		--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	<b>0.0006</b>	
		<b>0.03</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.03</b>	<b>0.0102</b>	
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0000</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0004</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0003</b>	
		--	--	--	--	--	--	<b>0.0008</b>	

**Table L1-179. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.003983 0.004163 0.003493 0.003398 0.949858 0.003139 0.362050 0.006561 0.064038 0.003495 0.949858	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	23	0.006561 0.064038 0.949858 0.362050	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.003495 0.362050	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.003495 0.362050	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.362050	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.362050	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.362050	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-179. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	--	--	--	--	--	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Constructi	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.26</b>	<b>0.17</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>
<b>GRAND TOTAL</b>		<b>0.12</b>	<b>0.62</b>	<b>0.65</b>	<b>0.59</b>	<b>0.97</b>	<b>0.87</b>	<b>1.46</b>	<b>1.39</b>	<b>1.39</b>	<b>1.32</b>	<b>0.69</b>	<b>0.92</b>	<b>1.92</b>	<b>1.73</b>	<b>1.63</b>	<b>1.79</b>	<b>1.54</b>	<b>1.52</b>	<b>1.46</b>	<b>0.76</b>	<b>0.09</b>

Table L1-179. PM2.5 Exhaust Emissions from

#	Activity								Annual Emissions, tpy	
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>19 - Buildings, Grounds, and Utilities</b>										
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0000</b>
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	<b>0.0025</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	<b>0.0011</b>
		--	--	--	--	--	--	--	--	<b>0.0036</b>
<b>20 -Permanent Operating Equipment</b>										
30	Mobilization and Demobilization	--	--	--	--	--	0.02	--	--	0.0000
		--	--	--	--	--	0.01	--	--	0.0000
		--	--	--	--	--	0.01	--	--	0.0000
		--	--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.03</b>	--	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	0.01	0.01	0.01	0.01	--	--	--	0.0001
		0.02	0.02	0.02	0.02	0.02	--	--	--	0.0003
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0004</b>
32	CMU Building Mechanical Equipment	0.01	0.01	0.01	0.01	0.01	--	--	--	0.0001
		0.02	0.02	0.02	0.02	0.02	--	--	--	0.0003
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	<b>0.0004</b>
33	Electrical Control Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	--	0.0003
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	--	<b>0.0003</b>
34	Electrical Power Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	--	0.0003
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	--	<b>0.0003</b>
35	Communication Equipment	--	--	--	0.02	0.02	--	--	--	0.0001
		--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--	<b>0.0001</b>
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.11</b>	<b>0.03</b>	--	--	<b>0.0015</b>
<b>GRAND TOTAL</b>		<b>0.12</b>	<b>0.20</b>	<b>0.20</b>	<b>0.19</b>	<b>0.19</b>	<b>0.15</b>	<b>0.03</b>	--	<b>0.0659</b>



**Table L1-180. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
2	Fremont Weir Demo	420	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	11	323.905 306.881 312.57 24535.8 34432 8626.38	0.00819 0.00646 0.00972 0 0 0	0 0 0 0 0 0	324.11 307.043 312.814 24535.8 34432 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	10.24 4.43 2.67 2.16 3.03 4.55
												<b>Fremont Weir Demo Subtotal</b>			<b>27.08</b>		
3	Levee O&M Road Regrading (6" AB)	119,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	4	346.665 24535.8 8626.38 34432	0.00749 0 0 0	0 0 0 0	346.853 24535.8 8626.38 34432	g/hp-hr g/hr g/hr g/hr	2.08 0.79 0.28 5.51
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>			<b>8.65</b>		
4	Temporary Electrical Power	5,280	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	4	24535.8 8626.38	0 0	0 0	24535.8 8626.38	g/hr g/hr	0.79 0.55
												<b>Temporary Electrical Power Subtotal</b>			<b>1.34</b>		
												<b>02 - Relocations Total</b>			<b>38.14</b>		
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
6	Clearing and Grubbing	70	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	18	363.734 227.324 395.092 24535.8 8626.38 34432	0.01221 0.0068 0 0 0 0	0 0 0 0 0 0	364.039 227.494 395.092 24535.8 8626.38 34432	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	11.53 9.17 0.91 7.07 14.91 9.92
												<b>Clearing and Grubbing Subtotal</b>			<b>53.50</b>		
7	Excavation (Wet Conditions)	93,610	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	27	323.905 335.255 306.881 34432 8626.38	0.00819 0.0091 0.00646 0 0	0 0 0 0 0	324.11 335.483 307.043 34432 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	60.07 86.96 43.51 133.87 26.09
												<b>Excavation (Wet Conditions) Subtotal</b>			<b>350.49</b>		
8	Excavation/Grading (Dry Conditions)	372,680	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	36	335.255 409.124 346.665 24535.8 8626.38	0.0091 0.00916 0.00749 0 0	0 0 0 0 0	335.483 409.353 346.853 24535.8 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	86.96 575.79 56.04 21.20 52.17
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>			<b>792.16</b>		
9	Earthen Backfill	1,010	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	2	335.255 24535.8 318.273 8626.38	0.0091 0 0.00532 0	0 0 0 0	335.483 24535.8 318.406 8626.38	g/hp-hr g/hr g/hp-hr g/hr	1.61 0.39 0.80 0.41
												<b>Earthen Backfill Subtotal</b>			<b>3.22</b>		
10	Riprap - Class 2	87,580	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	37	323.905 363.751 34432 8626.38	0.00819 0.00842 0 0	0 0 0 0	324.11 363.962 34432 8626.38	g/hp-hr g/hp-hr g/hr g/hr	98.62 64.64 468.83 25.53
												<b>Riprap - Class 2 Subtotal</b>			<b>657.62</b>		

**Table L1-180. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
11	Riprap - Class 3	1,530	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	1	1,000	2	323.905	0.00819	0	324.11	g/hp-hr	2.67
				300 HP Dozer Crawler	Crawler Tractors	1	300	363.751				0.00842	0	363.962	g/hp-hr	1.75	
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT	34432				0	0	34432	g/hr	12.67	
				Pickup Truck Conventional	n/a - onroad	5	LDT2	8626.38				0	0	8626.38	g/hr	0.69	
				<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	81,050	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	2	2,000	41	323.905	0.00819	0	324.11	g/hp-hr	109.28
				300 HP Dozer Crawler	Crawler Tractors	1	300	363.751				0.00842	0	363.962	g/hp-hr	71.63	
				Pickup Truck Conventional	n/a - onroad	5	LDT2	8626.38				0	0	8626.38	g/hr	28.29	
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT	34432				0	0	34432	g/hr	519.51	
				<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	13	ACR	0.8 CY Front End Loader Wheel	Tractors/Loaders/Backhoes	1	97	2	1	2	7	312.57	0.00972	0	312.814	g/hp-hr	1.70
				Pickup Truck Conventional	n/a - onroad	4	LDT2	8626.38				0	0	8626.38	g/hr	1.93	
<b>Erosion Control Seeding Subtotal</b>															<b>3.63</b>		
<b>09 - Channels and Canals Total</b>															<b>2,608.19</b>		
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24535.8	0	0	24535.8	g/hr	0.39
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	340.989				0.01013	0	341.242	g/hp-hr	0.55	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	8626.38				0	0	8626.38	g/hr	0.14	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0				0	0	0	g/hr	0.00	
				<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck	n/a - onroad	1	MHDT	1,200	1	1,200	18	24535.8	0	0	24535.8	g/hr	3.53
				75 TN Crane Crawler Pile Hammer	Bore/Drill Rigs	1	221	426.943				0.00799	0	427.142	g/hp-hr	13.59	
				Pickup Truck Conventional	n/a - onroad	6	LDT2	8626.38				0	0	8626.38	g/hr	7.45	
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>															<b>24.58</b>		
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive	Pumps	1	84	-	1	1	120	420.626	0.00738	0	420.811	g/hp-hr	33.93
				Pickup Truck Conventional	n/a - onroad	3	LDT2	8626.38				0	0	8626.38	g/hr	24.84	
<b>Construction Site Dewatering (Pumping) Subtotal</b>															<b>58.78</b>		
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator	Excavators	1	429	1,800	1	1,800	4	323.905	0.00819	0	324.11	g/hp-hr	4.45
				300 HP Dozer	Rubber Tired Dozers	2	300	335.255				0.0091	0	335.483	g/hp-hr	6.44	
				3.5 CY Front End Loader Wheel	Rubber Tired Loaders	2	164	306.881				0.00646	0	307.043	g/hp-hr	3.22	
				16 CY 3 Axle Dump Truck	n/a - onroad	9	HHDT	34432				0	0	34432	g/hr	9.92	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	8626.38				0	0	8626.38	g/hr	1.93	
<b>Excavation (Wet Conditions) Subtotal</b>															<b>25.96</b>		
18	Sheet Pile Wall	7,940	SF	Flatbed Truck	n/a - onroad	1	MHDT	1,200	1	1,200	7	24535.8	0	0	24535.8	g/hr	1.37
				75 TN Crane Crawler Pile Hammer	Bore/Drill Rigs	1	221	426.943				0.00799	0	427.142	g/hp-hr	5.29	
				Pickup Truck Conventional	n/a - onroad	6	LDT2	8626.38				0	0	8626.38	g/hr	2.90	
<b>Sheet Pile Wall Subtotal</b>															<b>9.56</b>		
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	32	244.429	0.00533	0	244.562	g/hp-hr	18.78
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221	426.943				0.00799	0	427.142	g/hp-hr	24.17	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	420.626				0.00738	0	420.811	g/hp-hr	9.05	
				Concrete Mixer Truck	n/a - onroad	3	MHDT	24535.8				0	0	24535.8	g/hr	18.84	
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97	312.57				0.00972	0	312.814	g/hp-hr	7.77	
				24 TN Truck End Dump	Off-Highway Trucks	2	314	323.983				0.00926	0	324.215	g/hp-hr	52.12	
				Pickup Truck Conventional	n/a - onroad	8	LDT2	8626.38				0	0	8626.38	g/hr	17.67	
				<b>Headworks Structure Concrete Piles Subtotal</b>													
20	Headworks Structure	3,140	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	420.626	0.00738	0	420.811	g/hp-hr	15.27
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	244.363				0.02567	0	245.004	g/hp-hr	0.85	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	24535.8				0	0	24535.8	g/hr	21.20	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	8626.38				0	0	8626.38	g/hr	26.09	
<b>Headworks Structure Subtotal</b>															<b>63.40</b>		
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	244.363	0.02567	0	245.004	g/hp-hr	0.31
				Concrete Mixer Truck	n/a - onroad	2	MHDT	24535.8				0	0	24535.8	g/hr	7.85	
				Pickup Truck Conventional	n/a - onroad	6	LDT2	8626.38				0	0	8626.38	g/hr	8.28	
<b>Headworks Channel Transition Subtotal</b>															<b>16.45</b>		

**Table L1-180. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	0.1	1	0.1	24	244.429	0.00533	0	244.562	g/hp-hr	14.09
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT					34432	0	0	34432	g/hr	6.61
				Pickup Truck Conventional	n/a - onroad	4	LDT2					8626.38	0	0	8626.38	g/hr	6.63
												<b>Hinged Bottom Gates Subtotal</b>					<b>27.32</b>
												<b>15 - Floodway Control and Diversion Structures Total</b>					<b>375.53</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT		1	1	2	24535.8	0	0	24535.8	g/hr	0.39
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8626.38	0	0	8626.38	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	4	244.429	0.00533	0	244.562	g/hp-hr	2.35
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					426.943	0.00799	0	427.142	g/hp-hr	3.02
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.626	0.00738	0	420.811	g/hp-hr	1.13
				Concrete Mixer Truck	n/a - onroad	3	MHDT					24535.8	0	0	24535.8	g/hr	2.36
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					312.57	0.00972	0	312.814	g/hp-hr	0.97
				24 TN Truck End Dump	Off-Highway Trucks	2	314					323.983	0.00926	0	324.215	g/hp-hr	6.52
				Pickup Truck Conventional	n/a - onroad	8	LDT2					8626.38	0	0	8626.38	g/hr	2.21
																<b>Pedestrian Bridge Concrete Piles Subtotal</b>	
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	420.626	0.00738	0	420.811	g/hp-hr	0.28
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.02
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	0.39
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	0.48
												<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>					<b>1.17</b>
26	Pedestrian Bridge Span Installation	2,720	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	7	244.429	0.00533	0	244.562	g/hp-hr	6.16
				Flatbed Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	2.75
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8626.38	0	0	8626.38	g/hr	2.42
												<b>Pedestrian Bridge Span Installation Subtotal</b>					<b>11.33</b>
												<b>08 - Roads, Railroads, and Bridges Total</b>					<b>32.13</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT		1	1	2	24535.8	0	0	24535.8	g/hr	0.39
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8626.38	0	0	8626.38	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
28	CMU Building and Earthwork Pad Construct	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165		1	1	30	342.96	0.00931	0	343.193	g/hp-hr	13.59
				Scraper	Scrapers	1	367					409.124	0.00916	0	409.353	g/hp-hr	36.06
				Motor Grader	Graders	1	187					346.665	0.00749	0	346.853	g/hp-hr	15.57
				Compactor	Rollers	1	80					318.262	0.00765	0	318.453	g/hp-hr	6.11
				4000 gallon Water Truck	n/a - onroad	1	MHDT					24535.8	0	0	24535.8	g/hr	5.89
				10 TN Smooth Roller	Rollers	1	157					318.273	0.00532	0	318.406	g/hp-hr	12.00
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	14.49
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.626	0.00738	0	420.811	g/hp-hr	8.48
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.47
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	8.19
				Concrete Mixer Truck	n/a - onroad	1	MHDT					24535.8	0	0	24535.8	g/hr	5.89
																<b>CMU Building and Earthwork Pad Construction Subtotal</b>	
29	Concrete Duct Banc	1,350	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	23	420.626	0.00738	0	420.811	g/hp-hr	6.50
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.36
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	9.03
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	11.11
												<b>Concrete Duct Banc Subtotal</b>					<b>27.00</b>
												<b>19 - Buildings, Grounds, and Utilities Total</b>					<b>154.82</b>

**Table L1-180. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 2) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr	
												CO2	CH4	N2O	CO2e	Units		
<b>20 -Permanent Operating Equipment</b>																		
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24535.8	0	0	24535.8	g/hr	0.39	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	-	340.989	0.01013	0	341.242	g/hp-hr	0.55			
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-	-	8626.38	0	0	8626.38	g/hr	0.14			
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-	-	0	0	0	0	g/hr	0.00			
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>	
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.989	0.01013	0	341.242	g/hp-hr	8.19	
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-	-	8626.38	0	0	8626.38	g/hr	6.21			
												<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>					<b>14.40</b>	
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.989	0.01013	0	341.242	g/hp-hr	8.19	
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-	-	8626.38	0	0	8626.38	g/hr	6.21			
												<b>CMU Building Mechanical Equipment Subtotal</b>					<b>14.40</b>	
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8626.38	0	0	8626.38	g/hr	6.21	
												<b>Electrical Control Equipment CMU Building Subtotal</b>					<b>6.21</b>	
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8626.38	0	0	8626.38	g/hr	6.21	
												<b>Electrical Power Equipment CMU Building Subtotal</b>					<b>6.21</b>	
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	8626.38	0	0	8626.38	g/hr	2.48	
												<b>Communication Equipment Subtotal</b>					<b>2.48</b>	
												<b>20 -Permanent Operating Equipment Total</b>					<b>44.78</b>	
<b>GRAND TOTAL</b>																	<b>3,253.59</b>	

**Table L1-181. PM10 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
02 - Relocations																						
1	Mobilization and Demobilization																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																					
	Material Handling		0.13	0.13																		
	Grading	n/a	n/a																			
	Bulldozing	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a																			
	Paved Road Dust	n/a	n/a																			
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																					
	Material Handling																					
	Grading																					
	Bulldozing																					
	Unpaved Road Dust																					
	Paved Road Dust																					
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09 - Channels and Canals																						
5	Mobilization and Demobilization																					
	Material Handling	n/a																				n/a
	Grading	n/a																				n/a
	Bulldozing	n/a																				n/a
	Unpaved Road Dust	n/a																				n/a
	Paved Road Dust	n/a																				n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																					
	Material Handling	n/a	n/a	n/a																		
	Grading		1.06	1.06	1.06																	
	Bulldozing	n/a	n/a	n/a																		
	Unpaved Road Dust	n/a	n/a	n/a																		
	Paved Road Dust	n/a	n/a	n/a																		
	<b>Clearing and Grubbing Subtotal</b>	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																					
	Material Handling							n/a	n/a	n/a	n/a	n/a										
	Grading							n/a	n/a	n/a	n/a	n/a										
	Bulldozing							n/a	n/a	n/a	n/a	n/a										
	Unpaved Road Dust							90.53	90.53	90.53	90.53	90.53										
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a										
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	--	--	--	--	--	--	--	--	--	--

**Table L1-181. PM10 Emissions Summary from Fugitive I**

#	Activity	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a		n/a
	Grading					0.53		0.00
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling							n/a
	Grading							0.01
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
7	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							1.18
	Paved Road Dust							n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>1.18</b>

**Table L1-181. PM10 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					1.89	1.89	1.89	1.89	1.89	1.89												
	Grading					15.91	15.91	15.91	15.91	15.91	15.91												
	Bulldozing					7.05	7.05	7.05	7.05	7.05	7.05												
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a												
	Paved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a												
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	24.84	24.84	24.84	24.84	24.84	24.84	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill																						
	Material Handling									0.18													
	Grading									0.53													
	Bulldozing									2.35													
	Unpaved Road Dust									n/a													
	Paved Road Dust									n/a													
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	3.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2																						
	Material Handling													3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
	Grading													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30		
11	Riprap - Class 3																						
	Material Handling																				1.65		
	Grading																			n/a			
	Bulldozing																			n/a			
	Unpaved Road Dust																			n/a			
	Paved Road Dust																			n/a			
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	--	--	
12	RSP Bedding Material																						
	Material Handling													3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
	Grading													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--		
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>09 - Channels and Canals Total</b>	--	1.06	1.06	1.06	24.84	24.84	118.43	115.37	115.37	115.37	90.53	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95	3.30	--	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-181. PM10 Emissions Summary from Fugitive I**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.03
	Grading							0.29
	Bulldozing							0.13
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.45</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.00
	Bulldozing							0.00
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
10	Riprap - Class 2							
	Material Handling							0.07
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.07</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.07
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.07</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>1.78</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	<b>--</b>



**Table L1-181. PM10 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							46.27															
	Paved Road Dust							n/a															
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>46.27</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust								n/a	n/a													
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling													n/a	n/a						n/a		
	Grading													n/a	n/a						n/a		
	Bulldozing													n/a	n/a						n/a		
	Unpaved Road Dust													n/a	n/a						n/a		
	Paved Road Dust													n/a	n/a						n/a		
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling															n/a	n/a						
	Grading															n/a	n/a						
	Bulldozing															n/a	n/a						
	Unpaved Road Dust															n/a	n/a						
	Paved Road Dust															n/a	n/a						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	<b>46.27</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization																						
	Material Handling															n/a					n/a		
	Grading															n/a					n/a		
	Bulldozing															n/a					n/a		
	Unpaved Road Dust															n/a					n/a		
	Paved Road Dust															n/a					n/a		
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-181. PM10 Emissions Summary from Fugitive I**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.08
	Paved Road Dust							n/a
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	--	<b>0.08</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	<b>0.08</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-181. PM10 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a															
	Grading		2.12	2.12	2.12	2.12	2.12	2.12															
	Bulldozing		2.35	2.35	2.35	2.35	2.35	2.35															
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a															
	Paved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a															
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-181. PM10 Emissions Summary from Fugitive I**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.03
	Bulldozing							0.04
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	<b>0.07</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	<b>0.07</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-181. PM10 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	5.66	5.66	5.53	29.31	29.31	164.70	115.37	115.37	115.37	90.53	3.30	6.60	6.60	6.60	6.60	6.60	6.60	4.95	3.30	--	--
	<i>Percent Reduction (Compared to Unmitigated)</i>	n/a	0%	0%	0%	0%	0%	-54%	-53%	-53%	-53%	-59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	n/a	n/a

**Table L1-181. PM10 Emissions Summary from Fugitive I**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust			n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--
<b>GRAND TOTAL</b>						<b>0.53</b>		<b>1.93</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0%</i>	<i>n/a</i>	<i>-48%</i>

**Table L1-182. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization																						
	Material Handling	n/a																					
	Grading	n/a																					
	Bulldozing	n/a																					
	Unpaved Road Dust	n/a																					
	Paved Road Dust	n/a																					
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																						
	Material Handling		0.02	0.02																			
	Grading	n/a	n/a																				
	Bulldozing	n/a	n/a																				
	Unpaved Road Dust	n/a	n/a																				
	Paved Road Dust	n/a	n/a																				
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																						
	Material Handling	n/a																					
	Grading	n/a																					
	Bulldozing	n/a																					
	Unpaved Road Dust	n/a																					
	Paved Road Dust	n/a																					
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization																						
	Material Handling	n/a																				n/a	
	Grading	n/a																				n/a	
	Bulldozing	n/a																				n/a	
	Unpaved Road Dust	n/a																				n/a	
	Paved Road Dust	n/a																				n/a	
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																						
	Material Handling	n/a	n/a	n/a																			
	Grading		0.11	0.11	0.11																		
	Bulldozing	n/a	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a	n/a																			
	Paved Road Dust	n/a	n/a	n/a																			
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a											
	Grading							n/a	n/a	n/a	n/a	n/a											
	Bulldozing							n/a	n/a	n/a	n/a	n/a											
	Unpaved Road Dust							9.05	9.05	9.05	9.05	9.05											
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a											
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	--	--	--	--	--	--	--	--	--	--	--

**Table L1-182. PM2.5 Emissions Summary from Fugitive**

#	Activity	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a		n/a
	Grading					0.06		0.00
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
7	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.12
	Paved Road Dust							n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.12</b>



Table L1-182. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					0.29	0.29	0.29	0.29	0.29	0.29												
	Grading					1.72	1.72	1.72	1.72	1.72	1.72												
	Bulldozing					3.87	3.87	3.87	3.87	3.87	3.87												
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a												
	Paved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a												
<b>Excavation/Grading (Dry Conditions) Subtotal</b>		--	--	--	--	5.88	5.88	5.88	5.88	5.88	5.88	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill																						
	Material Handling									0.03													
	Grading									0.06													
	Bulldozing									1.29													
	Unpaved Road Dust									n/a													
	Paved Road Dust									n/a													
<b>Earthen Backfill Subtotal</b>		--	--	--	--	--	--	1.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2																						
	Material Handling													0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Grading												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Riprap - Class 2 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	--	--
11	Riprap - Class 3																						
	Material Handling																				0.25		
	Grading																				n/a		
	Bulldozing																				n/a		
	Unpaved Road Dust																				n/a		
	Paved Road Dust																				n/a		
<b>Riprap - Class 3 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--
12	RSP Bedding Material																						
	Material Handling												0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Grading												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>RSP Bedding Material Subtotal</b>		--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	--	--	--
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
<b>Erosion Control Seeding Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals Total</b>		--	0.11	0.11	0.11	5.88	5.88	16.31	14.93	14.93	14.93	9.05	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.50	--	--
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling				n/a																		
	Grading				n/a																		
	Bulldozing				n/a																		
	Unpaved Road Dust				n/a																		
	Paved Road Dust				n/a																		
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling				n/a	n/a	n/a																
	Grading				n/a	n/a	n/a																
	Bulldozing				n/a	n/a	n/a																
	Unpaved Road Dust				n/a	n/a	n/a																
	Paved Road Dust				n/a	n/a	n/a																
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-182. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.01
	Grading							0.03
	Bulldozing							0.07
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.11</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.00
	Bulldozing							0.00
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
10	Riprap - Class 2							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>0.25</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	<b>--</b>

**Table L1-182. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust								4.63														
	Paved Road Dust								n/a														
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust								n/a	n/a													
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling													n/a	n/a						n/a		
	Grading													n/a	n/a						n/a		
	Bulldozing													n/a	n/a						n/a		
	Unpaved Road Dust													n/a	n/a						n/a		
	Paved Road Dust													n/a	n/a						n/a		
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling															n/a	n/a						
	Grading															n/a	n/a						
	Bulldozing															n/a	n/a						
	Unpaved Road Dust															n/a	n/a						
	Paved Road Dust															n/a	n/a						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization																						
	Material Handling															n/a					n/a		
	Grading															n/a					n/a		
	Bulldozing															n/a					n/a		
	Unpaved Road Dust															n/a					n/a		
	Paved Road Dust															n/a					n/a		
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-182. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.01
	Paved Road Dust							n/a
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	--	<b>0.01</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	<b>0.01</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

Table L1-182. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																					n/a	n/a
	Grading																					n/a	n/a
	Bulldozing																					n/a	n/a
	Unpaved Road Dust																					n/a	n/a
	Paved Road Dust																					n/a	n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling		n/a	n/a	n/a	n/a	n/a																
	Grading		0.23	0.23	0.23	0.23	0.23																
	Bulldozing		1.29	1.29	1.29	1.29	1.29																
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a																
	Paved Road Dust		n/a	n/a	n/a	n/a	n/a																
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-182. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	<b>0.02</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	<b>0.02</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-182. PM2.5 Emissions Summary from Fugitive Dust (Alternative 2) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	1.65	1.65	1.63	7.40	7.40	20.93	14.93	14.93	14.93	9.05	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.50	--	--
	<i>Percent Reduction (Compared to Unmitigated)</i>	n/a	0%	0%	0%	0%	0%	-48%	-47%	-47%	-47%	-59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	n/a	n/a

**Table L1-182. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust			n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--
<b>GRAND TOTAL</b>						<b>0.06</b>		<b>0.28</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0%</i>	<i>n/a</i>	<i>-39%</i>



## Alternative 2: Central Small Gated Notch Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

### Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	1.6 crushed limestone (AP-42, Table 13.2.4-1)
W, tons	180 loaded 74 unloaded

**Table L1-183. Mitigated Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	1.54	0.15
Unloaded	1.04	0.10
Average	1.29	0.13

**Table L1-184. Mitigated Unpaved Road Dust Emissions (Alternative 2)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	3,600	93,610	CY	27	180	4,684	90.5	9.1	1.2	0.1
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,460	CY	4	92	324	46.3	4.6	0.1	0.01

Notes:

Assumes payload of each truck is 100 tons.

Half of truck trips will be loaded and other half will be unloaded.

Only includes materials that will be transported to spoil site by dump trucks.

Distance to borrow area

2 miles (spoils site located within a 1-mile radius of the project access point(s) and it is an average of 1 mile travel distance from point of excavati

Density

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

## Offroad Exhaust Emissions Summary

**Table L1-185. Maximum Daily Offroad Construction Equipment Emissions (Alternative 3)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	1.07	20.99	14.88	0.05	0.57	0.45
09 - Channels and Canals	38.17	612.27	290.94	1.28	16.94	13.66
15 - Floodway Control and Diversion Structures	4.93	59.98	44.88	0.17	2.56	1.99
08 - Roads, Railroads, and Bridges	2.29	25.87	22.55	0.10	1.16	0.96
19 - Buildings, Grounds, and Utilities	3.67	42.91	39.08	0.11	2.11	1.78
20 -Permanent Operating Equipment	0.60	3.68	11.36	0.03	0.35	0.23
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>40.81</b>	<b>634.73</b>	<b>313.28</b>	<b>1.35</b>	<b>18.34</b>	<b>14.70</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-186. Annual Offroad Construction Equipment Emissions (Alternative 3)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.01	0.11	0.10	0.00	0.00	0.00	37.99
09 - Channels and Canals	1.28	16.61	8.54	0.04	0.47	0.38	3,937.93
15 - Floodway Control and Diversion Structures	0.11	1.12	1.00	0.00	0.06	0.04	385.05
08 - Roads, Railroads, and Bridges	0.01	0.10	0.07	0.00	0.00	0.00	33.86
19 - Buildings, Grounds, and Utilities	0.05	0.56	0.51	0.00	0.03	0.02	130.24
20 -Permanent Operating Equipment	0.01	0.06	0.17	0.00	0.01	0.00	45.09
<b>Annual Construction Exhaust Emissions Total</b>	<b>1.46</b>	<b>18.56</b>	<b>10.39</b>	<b>0.04</b>	<b>0.57</b>	<b>0.46</b>	<b>4,570.16</b>

Notes:

Total may not add exactly because of rounding.

**Table L1-187. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.045120 0.103491 0.090102 3.122501 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.113149 3.122501 1.479690 6.999774	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	3.122501 1.479690	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.238441 0.075360 72.563070 3.122501 1.479690 6.999774	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.045120 0.160818 0.103491 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.160818 0.119269 0.113149 3.122501 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.160818 3.122501 0.059817 1.479690	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.29</b>	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.93	0.93	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	20.48	20.48	20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.31	0.31	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	--	--	--	--	--
		--	--	--	--	--	--	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	--	--	--	--	--
		--	--	--	--	--	--	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	--	--	--	--	--
		--	--	--	--	--	--	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	--	--	--	--	--
		--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--
		--	--	--	--	--	--	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	--	--	--	--	--
		--	--	--	--	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	--	--	--	--	--
		--	--	--	--	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	--	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--
		--	--	--	--	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	--	--	--	--	--
		--	--	--	--	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.85	0.85	0.85	0.85	0.85	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	--	--	--	--	--	--	--	--

Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	0.10	0.0001
		--	--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--	--
									<b>0.18</b>	<b>0.0002</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0007
										0.0009	
										<b>0.0064</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.37	--	0.0006
		--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	0.62	--	0.0009
								<b>1.07</b>	--	<b>0.0016</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
										<b>0.0001</b>	
									<b>1.07</b>	<b>0.18</b>	<b>0.0083</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	0.0001
		0.10	--	--	--	--	--	--	--	--	0.0001
		0.03	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0002</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	0.0043
		--	--	--	--	--	--	--	--	--	0.2355
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0036
										0.0028	
										<b>0.2581</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0154
		--	--	--	--	--	--	--	--	--	0.0766
		--	--	--	--	--	--	--	--	--	0.0269
		--	--	--	--	--	--	--	--	--	0.0500
		--	--	--	--	--	--	--	--	--	0.0082
										<b>0.1771</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0715
		--	--	--	--	--	--	--	--	--	0.2877
		--	--	--	--	--	--	--	--	--	0.0313
		--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	0.0153
										<b>0.4105</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0119
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	0.0011
										<b>0.0161</b>	

**Table L1-187. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.045120 0.100372 6.999774 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.045120 0.100372 6.999774 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.045120 0.100372 1.479690 6.999774	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.090102 1.479690	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	3.122501 0.055013 1.479690	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.264018 1.479690	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.045120 0.160818 0.103491 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	3.122501 0.055013 1.479690	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.070325 0.055013 0.264018 3.122501 0.090102 0.070980 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-187. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06
		--	--	--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26
		--	--	--	--	--	--	--	--	--	--	--	--	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.53
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.84
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.91</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
		--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
		--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
		--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68
		--	--	--	--	--	--	--	--	--	--	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	<b>14.66</b>	<b>14.66</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>30.35</b>	<b>30.35</b>	<b>38.17</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>19.55</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.43</b>	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		--	--	--	--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.70	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.60	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>3.94</b>	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.06	0.06	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	
		--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	
		--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	
		--	--	--	--	--	--	--	0.79	0.79	0.79	0.79	0.79	0.79	0.79	--	--	--	--	--
		--	--	--	--	--	--	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	--	--	--	--	--		



Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
10	Riprap - Class 2	0.82	0.82	0.82	--	--	--	--	--	--	0.0205	
		1.06	1.06	1.06	--	--	--	--	--	--	0.0266	
		5.68	5.68	5.68	--	--	--	--	--	--	0.1420	
		0.26	0.26	0.26	--	--	--	--	--	--	0.0065	
		<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	--	--	--	--	--	--	--	<b>0.1955</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	0.0011	
		--	--	--	--	--	--	--	--	--	0.0057	
		--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	--	<b>0.0078</b>
12	RSP Bedding Material	0.82	--	--	--	--	--	--	--	--	0.0225	
		1.06	--	--	--	--	--	--	--	--	0.0292	
		0.26	--	--	--	--	--	--	--	--	0.0072	
		5.68	--	--	--	--	--	--	--	--	0.1562	
		<b>7.82</b>	--	--	--	--	--	--	--	--	--	<b>0.2150</b>
13	Erosion Control Seeding	--	--	--	0.15	0.15	--	--	--	--	0.0008	
		--	--	--	0.10	0.10	--	--	--	--	0.0005	
		--	--	--	<b>0.26</b>	<b>0.26</b>	--	--	--	--	<b>0.0013</b>	
		<b>15.82</b>	<b>7.82</b>	<b>7.82</b>	<b>0.26</b>	<b>0.26</b>	--	--	--	--	<b>1.2816</b>	
<b>15 - Floodway Control and Diversion Structures</b>												
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	0.0001	
		--	--	--	--	--	--	--	0.10	--	0.0001	
		--	--	--	--	--	--	--	0.03	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	--	--	--	0.0014	
		--	--	--	--	--	--	--	--	--	<b>0.0038</b>	
16	Construction Site Dewatering (Pumping)	0.39	0.39	0.39	0.39	0.39	0.39	0.39	--	--	0.0235	
		0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	0.0047	
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	<b>0.0282</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	0.0034	
		--	--	--	--	--	--	--	--	--	0.0012	
		--	--	--	--	--	--	--	--	--	0.0022	
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	<b>0.0079</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	--	--	--	<b>0.0015</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0060	
		--	--	--	--	--	--	--	--	--	0.0034	
		--	--	--	--	--	--	--	--	--	0.0063	
		--	--	--	--	--	--	--	--	--	0.0026	
		--	--	--	--	--	--	--	--	--	0.0025	
		--	--	--	--	--	--	--	--	--	0.0126	
		--	--	--	--	--	--	--	--	0.0033		
		--	--	--	--	--	--	--	--	--	<b>0.0367</b>	

**Table L1-187. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.264018 0.284463 3.122501 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.284463 3.122501 1.479690	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.070325 6.999774 1.479690	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.070325 0.055013 0.264018 3.122501 0.090102 0.070980 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.264018 0.284463 3.122501 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.070325 3.122501 1.479690	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-187. ROG Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17
		--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	0.12
		--	--	--	--	--	--	--	--	--	--	--	--	0.33	0.33	--	--	--	--	0.33
		--	--	--	--	--	--	--	--	--	--	--	--	0.55	0.55	--	--	--	--	0.55
		--	--	--	--	--	--	--	--	--	--	--	2.17	2.17	--	--	--	--	2.17	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.18	0.43	0.43	0.43	4.41	3.19	3.19	2.76	2.76	2.76	4.93	2.64	1.08	1.08	0.47	0.47	2.64
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.79	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.29	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.72	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	--	0.56	0.56
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	0.11	0.11
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	0.13	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.80	--	0.80	0.80	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	2.29	0.72	0.80	0.80	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.18	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	--	--	<b>0.0196</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	<b>0.0031</b>	
22	Hinged Bottom Gates	--	--	--	0.56	0.56	0.56	0.56	--	--	--	0.0067
		--	--	--	0.12	0.12	0.12	0.12	--	--	--	0.0015
		--	--	--	0.10	0.10	0.10	0.10	--	--	--	0.0013
		--	--	--	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	<b>0.79</b>	--	--	<b>0.0094</b>	
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>1.26</b>	<b>0.18</b>	--	<b>0.1103</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.10	--	--	--	--	--	--	--	--	--	0.0001
		0.03	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0002</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	<b>0.0046</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0004</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0032</b>	
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0083</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>	

**Table L1-187. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.225807	g/hp-hr
				Scraper	Scrapers	1	367	0.119269				g/hp-hr	
				Motor Grader	Graders	1	187	0.113149				g/hp-hr	
				Compactor	Rollers	1	80	0.109594				g/hp-hr	
				4000 gallon Water Truck	n/a - onroad	1	MHDT	3.122501				g/hr	
				10 TN Smooth Roller	Rollers	1	157	0.059817				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	1.479690				g/hr	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	0.264018				g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.284463				g/hp-hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.058022				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	1	MHDT	3.122501				g/hr	
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.264018	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.284463				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	3.122501				g/hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	1.479690				g/hr	
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	3.122501	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.058022				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	1.479690				g/hr	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0.000000				g/hr	
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.058022	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	1.479690				g/hr	
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.058022	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	1.479690				g/hr	
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.479690	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.479690	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.479690	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.72</b>	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.18</b>	<b>2.95</b>	<b>2.95</b>	<b>2.95</b>	<b>3.67</b>	<b>2.95</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		<b>0.66</b>	<b>26.47</b>	<b>26.65</b>	<b>25.82</b>	<b>18.76</b>	<b>18.03</b>	<b>28.27</b>	<b>26.87</b>	<b>26.87</b>	<b>26.44</b>	<b>26.44</b>	<b>33.11</b>	<b>35.28</b>	<b>40.81</b>	<b>16.91</b>	<b>19.02</b>	<b>16.83</b>	<b>16.91</b>	<b>22.99</b>

Table L1-187. ROG Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0099	
		--	--	--	--	--	--	--	--	--	--	0.0116
		--	--	--	--	--	--	--	--	--	--	0.0056
		--	--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	<b>0.0442</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>	
		--	--	--	--	--	--	--	--	--	<b>0.0451</b>	
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.06	--	--	--	--	--	0.06	--	0.0001	
		--	0.10	--	--	--	--	--	0.10	--	0.0001	
		--	0.03	--	--	--	--	--	0.03	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.18</b>	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>	
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015	
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012	
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>	
32	CMU Building Mechanical Equipment	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015	
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012	
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>	
33	Electrical Control Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012	
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>	
34	Electrical Power Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012	
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>	
35	Communication Equipment	--	--	--	--	--	0.08	0.08	--	--	0.0005	
		--	--	--	--	--	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0005</b>	
		--	<b>0.18</b>	<b>0.52</b>	<b>0.52</b>	<b>0.52</b>	<b>0.60</b>	<b>0.60</b>	<b>0.18</b>	--	<b>0.0084</b>	
<b>GRAND TOTAL</b>		<b>16.48</b>	<b>8.47</b>	<b>8.81</b>	<b>2.03</b>	<b>2.03</b>	<b>1.85</b>	<b>1.85</b>	<b>1.44</b>	<b>0.18</b>	<b>1.4620</b>	

**Table L1-188. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000
<b>Mobilization and Demobilization</b>												
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.508602 1.128421 1.103675 73.715363 155.969927 1.651465
<b>Fremont Weir Demc</b>												
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	1.790685 73.715363 1.651465 155.969927
<b>Levee O&amp;M Road Regrading (6" AB)</b>												
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	73.715363 1.651465
<b>Temporary Electrical Power</b>												
<b>02 - Relocati</b>												
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000
<b>Mobilization and Demobilization</b>												
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	2.425960 0.772717 1.287316 73.715363 1.651465 155.969927
<b>Clearing and Grubbing</b>												
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.508602 2.008554 1.128421 155.969927 1.651465
<b>Excavation (Wet Conditions)</b>												
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	2.008554 1.661803 1.790685 73.715363 1.651465
<b>Excavation/Grading (Dry Conditions)</b>												
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	2.008554 73.715363 0.794277 1.651465
<b>Earthen Backfill</b>												



Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	Units	Maximum Daily Emissions, lbs/day																	
			15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	g/hr	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	g/hp-hr	--	3.22	3.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	3.26	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	1.89	1.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	2.75	2.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	g/hr	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	<b>1.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>ons Total</b>	<b>4.31</b>	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	g/hr	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	g/hp-hr	--	9.41	9.41	9.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	2.60	2.60	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	5.50	5.50	5.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	g/hp-hr	--	--	--	--	--	--	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	--	--	--	--
		g/hp-hr	--	--	--	--	--	--	42.51	42.51	42.51	42.51	42.51	42.51	42.51	42.51	--	--	--	--
		g/hp-hr	--	--	--	--	--	--	13.06	13.06	13.06	13.06	13.06	13.06	13.06	13.06	--	--	--	--
		g/hr	--	--	--	--	--	--	49.51	49.51	49.51	49.51	49.51	49.51	49.51	49.51	--	--	--	--
		g/hr	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	g/hp-hr	--	--	--	--	--	31.88	31.88	31.88	31.88	31.88	31.88	31.88	31.88	31.88	--	--	--	--
		g/hp-hr	--	--	--	--	--	143.14	143.14	143.14	143.14	143.14	143.14	143.14	143.14	143.14	--	--	--	--
		g/hp-hr	--	--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--
		g/hr	--	--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--
		g/hr	--	--	--	--	--	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	--	--	--	--
9	Earthen Backfill	g/hp-hr	--	--	--	--	--	--	10.63	10.63	10.63	10.63	10.63	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--
		g/hp-hr	--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	--	--	--	--	--	--	--

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity											Annual Emissions , tpy	
		19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	1.30	0.0013
		--	--	--	--	--	--	--	--	--	--	1.62	0.0016
		--	--	--	--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>2.95</b>	<b>0.0029</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	0.0193	
		--	--	--	--	--	--	--	--	--	--	0.0196	
		--	--	--	--	--	--	--	--	--	--	0.0113	
		--	--	--	--	--	--	--	--	--	--	0.0078	
		--	--	--	--	--	--	--	--	--	--	0.0165	
		--	--	--	--	--	--	--	--	--	0.0010		
		--	--	--	--	--	--	--	--	--	<b>0.0756</b>		
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	5.91	--	0.0089	
		--	--	--	--	--	--	--	--	1.30	--	0.0020	
		--	--	--	--	--	--	--	--	0.03	--	0.0000	
		--	--	--	--	--	--	--	--	13.75	--	0.0206	
		--	--	--	--	--	--	--	<b>20.99</b>	--	<b>0.0315</b>		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>		
		--	--	--	--	--	--	--	--	<b>20.99</b>	<b>2.95</b>	<b>0.1107</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	--	1.30	--	--	--	--	--	--	--	--	0.0013	
		--	1.62	--	--	--	--	--	--	--	--	0.0016	
		--	0.03	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--	
		--	<b>2.95</b>	--	--	--	--	--	--	--	<b>0.0029</b>		
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.1082	
		--	--	--	--	--	--	--	--	--	--	0.0439	
		--	--	--	--	--	--	--	--	--	--	0.0042	
		--	--	--	--	--	--	--	--	--	--	0.0299	
		--	--	--	--	--	--	--	--	--	--	0.0040	
		--	--	--	--	--	--	--	--	--	0.0633		
		--	--	--	--	--	--	--	--	--	<b>0.2535</b>		
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.1732	
		--	--	--	--	--	--	--	--	--	--	0.9565	
		--	--	--	--	--	--	--	--	--	--	0.2937	
		--	--	--	--	--	--	--	--	--	--	1.1141	
		--	--	--	--	--	--	--	--	--	--	0.0092	
		--	--	--	--	--	--	--	--	--	<b>2.5466</b>		
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.8927	
		--	--	--	--	--	--	--	--	--	--	4.0080	
		--	--	--	--	--	--	--	--	--	--	0.4961	
		--	--	--	--	--	--	--	--	--	--	0.1092	
		--	--	--	--	--	--	--	--	--	--	0.0171	
		--	--	--	--	--	--	--	--	--	<b>5.5231</b>		
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.1488	
		--	--	--	--	--	--	--	--	--	--	0.0182	
		--	--	--	--	--	--	--	--	--	--	0.0308	
		--	--	--	--	--	--	--	--	--	--	0.0012	
		--	--	--	--	--	--	--	--	--	<b>0.1990</b>		

**Table L1-188. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.508602 1.404915 155.969927 1.651465
<b>Riprap - Class 2</b>												
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.508602 1.404915 155.969927 1.651465
<b>Riprap - Class 3</b>												
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.508602 1.404915 1.651465 155.969927
<b>RSP Bedding Material</b>												
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	1.103675 1.651465
<b>Erosion Control Seeding</b>												
<b>09 - Channels and Canals</b>												
<b>15 - Floodway Control and Diversion Structures</b>												
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000
<b>Mobilization and Demobilization</b>												
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	73.715363 0.779403 1.651465
<b>Construction Site Dewatering (Temporary Cofferdam)</b>												
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.228825 1.651465
<b>Construction Site Dewatering (Pumping)</b>												
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.508602 2.008554 1.128421 155.969927 1.651465
<b>Excavation (Wet Conditions)</b>												
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	73.715363 0.779403 1.651465
<b>Sheet Pile Wall</b>												
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.991811 0.779403 2.228825 73.715363 1.103675 0.746082 1.651465
<b>Headworks Structure Concrete Piles</b>												

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	Units	Maximum Daily Emissions, lbs/day																				
			15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug			
10	Riprap - Class 2	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22		
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	
11	Riprap - Class 3	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22	9.22	9.22		
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	14.87	14.87		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29	0.29		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	126.54	126.54		
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	
13	Erosion Control Seeding	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	<b>als Total</b>		<b>2.95</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>197.25</b>	<b>197.25</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>461.35</b>	<b>461.35</b>	<b>612.27</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>		
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	g/hr	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>Subtotal</b>	--	--	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	g/hr	--	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	3.04	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>Subtotal</b>	--	--	--	<b>4.51</b>	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	g/hp-hr	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30		
		g/hr	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	
		<b>Subtotal</b>	--	--	--	--	--	--	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	
17	Excavation (Wet Conditions)	g/hp-hr	--	--	--	--	--	--	3.85	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	--	--	21.25	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hp-hr	--	--	--	--	--	--	6.53	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	--	--	--	--	24.76	--	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>Subtotal</b>	--	--	--	--	--	--	<b>56.59</b>	--	--	--	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	g/hr	--	--	--	--	--	--	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	--	--	--	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	
		<b>Subtotal</b>	--	--	--	--	--	--	--	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	g/hp-hr	--	--	--	--	--	--	--	5.25	5.25	5.25	5.25	5.25	5.25	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	--	--	--	3.04	3.04	3.04	3.04	3.04	3.04	--	--	--	--	--	--	--	
		g/hp-hr	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	
		g/hr	--	--	--	--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--	--	--	
		g/hp-hr	--	--	--	--	--	--	--	1.89	1.89	1.89	1.89	1.89	1.89	--	--	--	--	--	--	--	
		g/hp-hr	--	--	--	--	--	--	--	8.26	8.26	8.26	8.26	8.26	8.26	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	0.23	0.23	0.23	0.23	0.23	0.23	--	--	--	--	--	--	--	
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	--	--	--	--	--	--	--

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
10	Riprap - Class 2	9.22	9.22	9.22	9.22	--	--	--	--	--	--	0.2305
		14.87	14.87	14.87	14.87	--	--	--	--	--	--	0.3717
		126.54	126.54	126.54	126.54	--	--	--	--	--	--	3.1634
		0.29	0.29	0.29	0.29	--	--	--	--	--	--	0.0073
		<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	--	--	--	--	--	--	<b>3.7729</b>
11	Riprap - Class 3	4.61	--	--	--	--	--	--	--	--	--	0.0092
		7.43	--	--	--	--	--	--	--	--	--	0.0149
		63.27	--	--	--	--	--	--	--	--	--	0.1265
		0.15	--	--	--	--	--	--	--	--	--	0.0003
		<b>75.46</b>	--	--	--	--	--	--	--	--	--	<b>0.1509</b>
12	RSP Bedding Material	9.22	9.22	--	--	--	--	--	--	--	--	0.2536
		14.87	14.87	--	--	--	--	--	--	--	--	0.4088
		0.29	0.29	--	--	--	--	--	--	--	--	0.0080
		126.54	126.54	--	--	--	--	--	--	--	--	3.4798
		<b>150.92</b>	<b>150.92</b>	--	--	--	--	--	--	--	--	<b>4.1502</b>
13	Erosion Control Seeding	--	--	--	--	1.89	1.89	--	--	--	--	0.0094
		--	--	--	--	0.12	0.12	--	--	--	--	0.0006
		--	--	--	--	<b>2.00</b>	<b>2.00</b>	--	--	--	--	<b>0.0100</b>
		<b>377.29</b>	<b>304.78</b>	<b>150.92</b>	<b>150.92</b>	<b>2.00</b>	<b>2.00</b>	--	--	--	--	<b>16.6092</b>
<b>15 - Floodway Control and Diversion Structures</b>												
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	1.30	--	0.0013
		--	--	--	--	--	--	--	--	1.62	--	0.0016
		--	--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>2.95</b>	--	--	<b>0.0029</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	--	0.0117
		--	--	--	--	--	--	--	--	--	--	0.0273
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	<b>0.0406</b>
16	Construction Site Dewatering (Pumping)	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	--	0.1981
		0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	--	--	0.0052
		<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	--	--	<b>0.2034</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0077
		--	--	--	--	--	--	--	--	--	--	0.0425
		--	--	--	--	--	--	--	--	--	--	0.0131
		--	--	--	--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	--	<b>0.1132</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	<b>0.0158</b>
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0840
		--	--	--	--	--	--	--	--	--	--	0.0486
		--	--	--	--	--	--	--	--	--	--	0.0528
		--	--	--	--	--	--	--	--	--	--	0.0624
		--	--	--	--	--	--	--	--	--	--	0.0302
		--	--	--	--	--	--	--	--	--	--	0.1322
		--	--	--	--	--	--	--	--	--	0.0037	
		--	--	--	--	--	--	--	--	--	--	<b>0.4140</b>

**Table L1-188. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.228825 1.781417 73.715363 1.651465
<b>Headworks Structure</b>												
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.781417 73.715363 1.651465
<b>Headworks Channel Transition</b>												
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.991811 155.969927 1.651465
<b>Hinged Bottom Gates</b>												
<b>15 - Floodway Control and Diversion Struct</b>												
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000
<b>Mobilization and Demobilization</b>												
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.991811 0.779403 2.228825 73.715363 1.103675 0.746082 1.651465
<b>Pedestrian Bridge Concrete Piles</b>												
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.228825 1.781417 73.715363 1.651465
<b>Pedestrian Bridge Concrete Abutments and Wingwalls</b>												
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.991811 73.715363 1.651465
<b>Pedestrian Bridge Span Installation</b>												
<b>08 - Roads, Railroads, and Brid</b>												
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000
<b>Mobilization and Demobilization</b>												

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	Units	Maximum Daily Emissions, lbs/day																		
			15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	
20	Headworks Structure	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	9.91	9.91	--	--	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	7.80	7.80	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	<b>19.07</b>	<b>19.07</b>	--	--	--	--	
21	Headworks Channel Transition	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.20	5.20	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.35	0.35	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>6.05</b>	<b>6.05</b>	--	--	
22	Hinged Bottom Gates	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>ires Total</b>	--	--	<b>2.95</b>	<b>4.51</b>	<b>4.51</b>	<b>4.51</b>	<b>59.98</b>	<b>33.77</b>	<b>33.77</b>	<b>29.26</b>	<b>29.26</b>	<b>29.26</b>	<b>48.33</b>	<b>22.46</b>	<b>9.44</b>	<b>9.44</b>	<b>3.39</b>	<b>3.39</b>	
<b>08 - Roads, Railroads, and Bridges</b>																					
23	Mobilization and Demobilization	g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30	--	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>	--	--	--	
24	Pedestrian Bridge Concrete Piles	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.25	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.04	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.89	--	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.26	--	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>25.87</b>	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>6.36</b>	--	
26	Pedestrian Bridge Span Installation	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.87	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>10.62</b>	
		<b>ges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.95</b>	<b>25.87</b>	<b>6.36</b>	<b>10.62</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																					
27	Mobilization and Demobilization	g/hr	1.30	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	1.62	--	--	--	--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	<b>2.95</b>	--	--	--	--	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
20	Headworks Structure	9.91	--	--	--	--	--	--	--	--	--	0.0892
		0.75	--	--	--	--	--	--	--	--	--	0.0068
		7.80	--	--	--	--	--	--	--	--	--	0.0702
		0.61	--	--	--	--	--	--	--	--	--	0.0055
		<b>19.07</b>	--	--	--	--	--	--	--	--	--	<b>0.1716</b>
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	--	0.0260
		--	--	--	--	--	--	--	--	--	--	0.0017
												<b>0.0303</b>
22	Hinged Bottom Gates	--	--	--	--	7.87	7.87	7.87	7.87	--	--	0.0945
		--	--	--	--	2.75	2.75	2.75	2.75	--	--	0.0330
		--	--	--	--	0.12	0.12	0.12	0.12	--	--	0.0014
						<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	<b>10.74</b>	--	--	<b>0.1289</b>
		<b>22.46</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>14.13</b>	<b>2.95</b>	--	<b>1.1206</b>
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	--	1.30	--	--	--	--	--	--	--	--	0.0013
		--	1.62	--	--	--	--	--	--	--	--	0.0016
		--	0.03	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
			<b>2.95</b>	--	--	--	--	--	--	--	--	<b>0.0029</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	--	--	0.0165
												0.0005
												<b>0.0517</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0001
												<b>0.0032</b>
26	Pedestrian Bridge Span Installation	7.87	--	--	--	--	--	--	--	--	--	0.0315
		2.60	--	--	--	--	--	--	--	--	--	0.0104
		0.15	--	--	--	--	--	--	--	--	--	0.0006
		<b>10.62</b>	--	--	--	--	--	--	--	--	<b>0.0425</b>	
		<b>10.62</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	<b>0.1003</b>
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
												<b>0.0029</b>



**Table L1-188. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.684280
				Scraper	Scrapers	1	367	1.661803				
				Motor Grader	Graders	1	187	1.790685				
				Compactor	Rollers	1	80	1.346578				
				4000 gallon Water Truck	n/a - onroad	1	MHDT	73.715363				
				10 TN Smooth Roller	Rollers	1	157	0.794277				
				Pickup Truck Conventional	n/a - onroad	7	LDT2	1.651465				
				Concrete Pump Boom Truck Mounted	Pumps	1	84	2.228825				
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	1.781417				
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.918721				
Concrete Mixer Truck	n/a - onroad	1	MHDT	73.715363								
<b>CMU Building and Earthwork Pad Construction</b>												
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	2.228825
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.781417
				Concrete Mixer Truck	n/a - onroad	2	MHDT					73.715363
				Pickup Truck Conventional	n/a - onroad	7	LDT2					1.651465
<b>Concrete Duct Banc</b>												
<b>19 - Buildings, Grounds, and Utili</b>												
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT		1	1	2	73.715363
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.918721
				Pickup Truck Conventional	n/a - onroad	1	LDT2					1.651465
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000
<b>Mobilization and Demobilization</b>												
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100		1	1	30	0.918721
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.651465
<b>Mechanical Hydraulic Cylinders &amp; Housing</b>												
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100		1	1	30	0.918721
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.651465
<b>CMU Building Mechanical Equipment</b>												
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2		1	1	30	1.651465
<b>Electrical Control Equipment CMU Building</b>												
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2		1	1	30	1.651465
<b>Electrical Power Equipment CMU Building</b>												
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2		1	1	12	1.651465
<b>Communication Equipment</b>												
<b>20 -Permanent Operating Equipr</b>												
<b>GRAND TOTAL</b>												

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	Units	Maximum Daily Emissions, lbs/day																		
			15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	
28	CMU Building and Earthwork Pad Construction	g/hp-hr	--	7.81	7.81	7.81	7.81	7.81	7.81	--	--	--	--	--	--	--	--	--	--	--	
		g/hp-hr	--	10.76	10.76	10.76	10.76	10.76	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hp-hr	--	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hp-hr	--	1.90	1.90	1.90	1.90	1.90	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hr	--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	
		g/hp-hr	--	2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hp-hr	--	1.62	1.62	1.62	1.62	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--
		g/hr	--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>Subtotal</b>	--	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	g/hp-hr	--	--	--	--	3.30	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	2.60	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>Subtotal</b>	--	--	--	--	<b>6.36</b>	--	--	--	--	--	--	--	--	--	--	--			
		<b>ties Total</b>	<b>2.95</b>	<b>36.55</b>	<b>36.55</b>	<b>36.55</b>	<b>42.91</b>	<b>36.55</b>	<b>2.95</b>	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																					
30	Mobilization and Demobilization	g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	g/hp-hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	g/hr	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>ment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>GRAND TOTAL</b>			<b>10.21</b>	<b>71.19</b>	<b>74.14</b>	<b>63.11</b>	<b>244.68</b>	<b>238.32</b>	<b>387.58</b>	<b>358.43</b>	<b>358.43</b>	<b>353.91</b>	<b>353.91</b>	<b>490.62</b>	<b>509.69</b>	<b>634.73</b>	<b>314.22</b>	<b>337.15</b>	<b>311.58</b>	<b>315.84</b>	

Table L1-188. NOx Exhaust Emissions from Offroad C

#	Activity	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy		
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	--	0.1172		
		--	--	--	--	--	--	--	--	--	--	--	0.1613	
		--	--	--	--	--	--	--	--	--	--	--	0.0886	
		--	--	--	--	--	--	--	--	--	--	--	0.0285	
		--	--	--	--	--	--	--	--	--	--	--	0.0195	
		--	--	--	--	--	--	--	--	--	--	--	0.0330	
		--	--	--	--	--	--	--	--	--	--	--	0.0031	
		--	--	--	--	--	--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	--	--	--	--	0.0243
		--	--	--	--	--	--	--	--	--	--	0.0195		
		--	--	--	--	--	--	--	--	--	--	<b>0.5483</b>		
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	0.0033		
		--	--	--	--	--	--	--	--	--	--	0.0003		
		--	--	--	--	--	--	--	--	--	--	0.0026		
		--	--	--	--	--	--	--	--	--	--	0.0002		
		--	--	--	--	--	--	--	--	--	<b>0.0064</b>			
		--	--	--	--	--	--	--	--	--	<b>0.5576</b>			
<b>20 -Permanent Operating Equipment</b>														
30	Mobilization and Demobilization	--	--	1.30	--	--	--	--	--	1.30	--	0.0013		
		--	--	1.62	--	--	--	--	--	1.62	--	0.0016		
		--	--	0.03	--	--	--	--	--	0.03	--	0.0000		
		--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>2.95</b>	--	--	--	--	--	<b>2.95</b>	--	<b>0.0029</b>		
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	1.62	1.62	1.62	1.62	1.62	--	--	0.0243		
		--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013		
		--	--	--	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>		
32	CMU Building Mechanical Equipment	--	--	--	1.62	1.62	1.62	1.62	1.62	--	--	0.0243		
		--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013		
		--	--	--	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>		
33	Electrical Control Equipment CMU Building	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013		
		--	--	--	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>		
34	Electrical Power Equipment CMU Building	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013		
		--	--	--	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>		
35	Communication Equipment	--	--	--	--	--	--	0.09	0.09	--	--	0.0005		
		--	--	--	--	--	--	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0005</b>		
		--	--	<b>2.95</b>	<b>3.59</b>	<b>3.59</b>	<b>3.59</b>	<b>3.68</b>	<b>3.68</b>	<b>2.95</b>	--	<b>0.0573</b>		
<b>GRAND TOTAL</b>		<b>410.37</b>	<b>311.12</b>	<b>157.25</b>	<b>157.90</b>	<b>19.72</b>	<b>19.72</b>	<b>17.81</b>	<b>17.81</b>	<b>26.89</b>	<b>2.95</b>	<b>18.5558</b>		

**Table L1-189. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.632109 1.792667 2.050657 12.088781 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.734429 12.088781 12.867992 34.690767	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	12.088781 12.867992	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	2.546292 1.111618 ##### 12.088781 12.867992 34.690767	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.632109 1.116611 1.792667 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	1.116611 1.039280 0.734429 12.088781 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	1.116611 12.088781 1.797415 12.867992	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																	
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug
<b>02 - Relocations</b>																			
1	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	4.00	4.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.19	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.51	3.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.61	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.67</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>5.09</b>	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																			
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	9.88	9.88	9.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.43	0.43	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.72	2.72	2.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.22	1.22	1.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	--	--	--	--
		--	--	--	--	--	--	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	--	--	--	--
		--	--	--	--	--	--	20.74	20.74	20.74	20.74	20.74	20.74	20.74	20.74	--	--	--	--
		--	--	--	--	--	--	11.01	11.01	11.01	11.01	11.01	11.01	11.01	11.01	--	--	--	--
		--	--	--	--	--	--	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	--	--	--	--
		--	--	--	--	--	--	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--
		--	--	--	--	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	--	--	--	--
		--	--	--	--	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	--	--	--	--
		--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--
		--	--	--	--	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	--	--	--	--
		--	--	--	--	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--
		--	--	--	--	--	--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	--	--	--	--	--	--	--

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.21	0.0002
		--	--	--	--	--	--	--	--	3.98	0.0040
		--	--	--	--	--	--	--	--	0.23	0.0002
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	4.42	<b>0.0044</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0240
		--	--	--	--	--	--	--	--	--	0.0311
		--	--	--	--	--	--	--	--	--	0.0210
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	--	0.0082	
		--	--	--	--	--	--	--	--	<b>0.0893</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	2.42	--	0.0036
		--	--	--	--	--	--	--	0.21	--	0.0003
		--	--	--	--	--	--	--	0.23	--	0.0003
		--	--	--	--	--	--	--	3.06	--	0.0046
		--	--	--	--	--	--	5.92	--	<b>0.0089</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	<b>0.0003</b>	
		--	--	--	--	--	--	--	5.92	4.42	<b>0.1029</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	0.0002
		3.98	--	--	--	--	--	--	--	--	0.0040
		0.23	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		4.42	--	--	--	--	--	--	--	--	<b>0.0044</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.1136
		--	--	--	--	--	--	--	--	--	0.0631
		--	--	--	--	--	--	--	--	--	0.4744
		--	--	--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	--	--	0.0313
		--	--	--	--	--	--	--	--	0.0141	
		--	--	--	--	--	--	--	--	<b>0.7014</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.2152
		--	--	--	--	--	--	--	--	--	0.5317
		--	--	--	--	--	--	--	--	--	0.4667
		--	--	--	--	--	--	--	--	--	0.2478
		--	--	--	--	--	--	--	--	0.0715	
		--	--	--	--	--	--	--	--	<b>1.5329</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.4963
		--	--	--	--	--	--	--	--	--	2.5066
		--	--	--	--	--	--	--	--	--	0.2035
		--	--	--	--	--	--	--	--	--	0.0179
		--	--	--	--	--	--	--	--	0.1334	
		--	--	--	--	--	--	--	--	<b>3.3577</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0827
		--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	--	0.0697
		--	--	--	--	--	--	--	--	--	0.0095
		--	--	--	--	--	--	--	--	<b>0.1649</b>	

**Table L1-189. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.632109 0.904885 34.690767 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.632109 0.904885 34.690767 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.632109 0.904885 12.867992 34.690767	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	2.050657 12.867992	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	12.088781 0.776246 12.867992	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.527815 12.867992	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.632109 1.116611 1.792667 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	12.088781 0.776246 12.867992	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.508233 0.776246 2.527815 12.088781 2.050657 0.643118 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46
		--	--	--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58
		--	--	--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27
		--	--	--	--	--	--	--	--	--	--	--	--	51.45	51.45	51.45	51.45	51.45	51.45	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.79
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.07
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.72	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46	11.46	11.46
		--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58
		--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
		--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14
		--	--	--	--	--	--	--	--	--	--	51.45	51.45	51.45	51.45	51.45	51.45	51.45	51.45	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		4.42	60.99	60.99	60.99	119.92	119.92	199.82	199.82	199.82	199.82	199.82	239.49	239.49	290.94	102.90	102.90	102.90	102.90	128.62
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	4.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.36	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	4.60	4.60	4.60	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
		--	--	--	--	--	--	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43
		--	--	--	--	--	--	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	4.78	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	11.82	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	10.37	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	5.51	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	34.06	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	3.03	3.03	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	1.36	1.36	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	4.60	4.60	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	2.69	2.69	2.69	2.69	2.69	2.69	--	--	--	--	--
		--	--	--	--	--	--	--	--	3.03	3.03	3.03	3.03	3.03	3.03	--	--	--	--	--
		--	--	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--
		--	--	--	--	--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--
		--	--	--	--	--	--	--	--	3.51	3.51	3.51	3.51	3.51	3.51	--	--	--	--	--
		--	--	--	--	--	--	--	--	7.12	7.12	7.12	7.12	7.12	7.12	--	--	--	--	--
		--	--	--	--	--	--	--	1.82	1.82	1.82	1.82	1.82	1.82	--	--	--	--	--	
		--	--	--	--	--	--	--	22.55	22.55	22.55	22.55	22.55	22.55	--	--	--	--	--	



Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
10	Riprap - Class 2	11.46	11.46	11.46	--	--	--	--	--	--	0.2865	
		9.58	9.58	9.58	--	--	--	--	--	--	0.2394	
		28.14	28.14	28.14	--	--	--	--	--	--	0.7036	
		2.27	2.27	2.27	--	--	--	--	--	--	0.0567	
		<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	--	--	--	--	--	--	--	<b>1.2862</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0115	
		--	--	--	--	--	--	--	--	--	0.0096	
		--	--	--	--	--	--	--	--	--	0.0281	
		--	--	--	--	--	--	--	--	--	0.0023	
		--	--	--	--	--	--	--	--	--	--	<b>0.0514</b>
12	RSP Bedding Material	11.46	--	--	--	--	--	--	--	--	0.3152	
		9.58	--	--	--	--	--	--	--	--	0.2633	
		2.27	--	--	--	--	--	--	--	--	0.0624	
		28.14	--	--	--	--	--	--	--	--	0.7740	
		<b>51.45</b>	--	--	--	--	--	--	--	--	--	<b>1.4149</b>
13	Erosion Control Seeding	--	--	--	3.51	3.51	--	--	--	--	0.0175	
		--	--	--	0.91	0.91	--	--	--	--	0.0045	
		--	--	--	<b>4.42</b>	<b>4.42</b>	--	--	--	--	<b>0.0221</b>	
		<b>107.32</b>	<b>51.45</b>	<b>51.45</b>	<b>4.42</b>	<b>4.42</b>	--	--	--	--	<b>8.5359</b>	
<b>15 - Floodway Control and Diversion Structures</b>												
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.21	--	0.0002	
		--	--	--	--	--	--	--	3.98	--	0.0040	
		--	--	--	--	--	--	--	0.23	--	0.0002	
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>4.42</b>	--	<b>0.0044</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	--	--	--	0.0272	
		--	--	--	--	--	--	--	--	--	0.0123	
		--	--	--	--	--	--	--	--	<b>0.0414</b>		
16	Construction Site Dewatering (Pumping)	3.74	3.74	3.74	3.74	3.74	3.74	3.74	--	--	0.2247	
		0.68	0.68	0.68	0.68	0.68	0.68	0.68	--	--	0.0409	
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	--	--	<b>0.2655</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0096	
		--	--	--	--	--	--	--	--	--	0.0236	
		--	--	--	--	--	--	--	--	--	0.0207	
		--	--	--	--	--	--	--	--	--	0.0110	
		--	--	--	--	--	--	--	--	--	0.0032	
		--	--	--	--	--	--	--	--	<b>0.0681</b>		
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	0.0106	
		--	--	--	--	--	--	--	--	--	0.0048	
		--	--	--	--	--	--	--	--	<b>0.0161</b>		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0430	
		--	--	--	--	--	--	--	--	--	0.0484	
		--	--	--	--	--	--	--	--	--	0.0599	
		--	--	--	--	--	--	--	--	--	0.0102	
		--	--	--	--	--	--	--	--	--	0.0561	
		--	--	--	--	--	--	--	--	--	0.1140	
		--	--	--	--	--	--	--	--	0.0290		
		--	--	--	--	--	--	--	--	<b>0.3607</b>		

**Table L1-189. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.527815 1.492125 12.088781 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.492125 12.088781 12.867992	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.508233 34.690767 12.867992	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.508233 0.776246 2.527815 12.088781 2.050657 0.643118 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.527815 1.492125 12.088781 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.508233 12.088781 12.867992	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	11.23	11.23	--	--	--	--	11.23
		--	--	--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63
		--	--	--	--	--	--	--	--	--	--	--	--	1.28	1.28	--	--	--	--	1.28
		--	--	--	--	--	--	--	--	--	--	--	--	4.77	4.77	--	--	--	--	4.77
		--	--	--	--	--	--	--	--	--	--	--	17.91	17.91	--	--	--	--	17.91	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.85	0.85	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.72	2.72	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.00	4.00	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	4.42	4.60	4.60	4.60	38.49	31.57	31.57	26.97	26.97	26.97	44.88	22.34	8.42	8.42	4.43	4.43	22.34
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.69	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.03	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.64	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.51	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.12	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.82	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	22.55	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.59	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.97	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.03	--	4.03	4.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	0.43	0.43
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	--	1.13	1.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.59	--	5.59	5.59	
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	22.55	5.97	5.59	5.59	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.42	--	--	--	--	4.42	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.1011
		--	--	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	--	--	--	0.0429
		--	--	--	--	--	--	--	--	--	<b>0.1612</b>
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	0.0043
		--	--	--	--	--	--	--	--	--	0.0136
		--	--	--	--	--	--	--	--	--	<b>0.0200</b>
22	Hinged Bottom Gates	--	--	--	4.03	4.03	4.03	4.03	--	--	0.0484
		--	--	--	0.61	0.61	0.61	0.61	--	--	0.0073
		--	--	--	0.91	0.91	0.91	0.91	--	--	0.0109
		--	--	--	<b>5.55</b>	<b>5.55</b>	<b>5.55</b>	<b>5.55</b>	--	--	<b>0.0666</b>
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>4.42</b>	--	<b>1.0042</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	0.0002
		3.98	--	--	--	--	--	--	--	--	0.0040
		0.23	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	<b>0.0044</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0054
		--	--	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	--	--	0.0075
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0070
		--	--	--	--	--	--	--	--	--	0.0142
		--	--	--	--	--	--	--	--	0.0036	
		--	--	--	--	--	--	--	--	--	<b>0.0451</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	<b>0.0030</b>
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0161
		--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	--	--	--	<b>0.0224</b>
		<b>4.42</b>	--	--	--	--	--	--	--	--	<b>0.0749</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0044</b>

**Table L1-189. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units		
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.096774	g/hp-hr		
				Scraper	Scrapers	1	367							1.039280	g/hp-hr
				Motor Grader	Graders	1	187							0.734429	g/hp-hr
				Compactor	Rollers	1	80							2.079224	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT							12.088781	g/hr
				10 TN Smooth Roller	Rollers	1	157							1.797415	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							12.867992	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84							2.527815	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							1.492125	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							2.255582	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT							12.088781	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>															
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	2.527815	g/hp-hr		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							1.492125	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT							12.088781	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2							12.867992	g/hr
<b>Concrete Duct Banc Subtotal</b>															
<b>19 - Buildings, Grounds, and Utilities Total</b>															
<b>20 -Permanent Operating Equipment</b>															
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.088781	g/hr		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							2.255582	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2							12.867992	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0.000000	g/hr
<b>Mobilization and Demobilization Subtotal</b>															
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.255582	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							12.867992	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>															
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.255582	g/hp-hr		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							12.867992	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>															
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.867992	g/hr		
<b>Electrical Control Equipment CMU Building Subtotal</b>															
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.867992	g/hr		
<b>Electrical Power Equipment CMU Building Subtotal</b>															
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.867992	g/hr		
<b>Communication Equipment Subtotal</b>															
<b>20 -Permanent Operating Equipment Total</b>															
<b>GRAND TOTAL</b>															

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	6.10	6.10	6.10	6.10	6.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	6.73	6.73	6.73	6.73	6.73	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.42	2.42	2.42	2.42	2.42	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.93	2.93	2.93	2.93	2.93	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.98	3.98	3.98	3.98	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	33.11	33.11	33.11	33.11	33.11	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.42	33.11	33.11	33.11	39.08	33.11	4.42	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		13.92	108.98	113.40	98.70	163.60	157.63	242.73	231.40	231.40	226.80	226.80	266.47	284.38	313.28	115.74	133.87	113.30	112.92	156.56

Table L1-189. CO Exhaust Emissions from Offroad Co

#	Activity											Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	--	0.0915
		--	--	--	--	--	--	--	--	--	--	0.1009
		--	--	--	--	--	--	--	--	--	--	0.0363
		--	--	--	--	--	--	--	--	--	--	0.0440
		--	--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	--	0.0747
		--	--	--	--	--	--	--	--	--	--	0.0238
		--	--	--	--	--	--	--	--	--	--	0.0562
		--	--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	--	0.0597
		--	--	--	--	--	--	--	--	--	0.0032	
		--	--	--	--	--	--	--	--	--	<b>0.4967</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0037	
		--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	0.0016	
		--	--	--	--	--	--	--	--	<b>0.0060</b>		
		--	--	--	--	--	--	--	--	<b>0.5070</b>		
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.21	--	--	--	--	--	0.21	--	0.0002	
		--	3.98	--	--	--	--	--	3.98	--	0.0040	
		--	0.23	--	--	--	--	--	0.23	--	0.0002	
		--	--	--	--	--	--	--	--	--	--	
		--	<b>4.42</b>	--	--	--	--	--	<b>4.42</b>	--	<b>0.0044</b>	
31	Mechanical Hydraulic Cylinders & Housing	--	--	3.98	3.98	3.98	3.98	3.98	--	--	0.0597	
		--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102	
		--	--	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>	
32	CMU Building Mechanical Equipment	--	--	3.98	3.98	3.98	3.98	3.98	--	--	0.0597	
		--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102	
		--	--	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>	
33	Electrical Control Equipment CMU Building	--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102	
		--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>	
34	Electrical Power Equipment CMU Building	--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102	
		--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>	
35	Communication Equipment	--	--	--	--	--	0.68	0.68	--	--	0.0041	
		--	--	--	--	--	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0041</b>	
		--	<b>4.42</b>	<b>10.68</b>	<b>10.68</b>	<b>10.68</b>	<b>11.36</b>	<b>11.36</b>	<b>4.42</b>	--	<b>0.1687</b>	
<b>GRAND TOTAL</b>		<b>116.16</b>	<b>60.29</b>	<b>66.55</b>	<b>25.07</b>	<b>25.07</b>	<b>21.34</b>	<b>21.34</b>	<b>14.76</b>	<b>4.42</b>	<b>10.3936</b>	

**Table L1-190. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.003180 0.003453 0.003667 0.172052 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.003901 0.172052 0.047380 0.228106	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.172052 0.047380	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.004267 0.002558 0.016272 0.172052 0.047380 0.228106	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.003180 0.003291 0.003453 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.003291 0.004016 0.003901 0.172052 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.003291 0.172052 0.003581 0.047380	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													



Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--
		--	--	--	--	--	--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--
		--	--	--	--	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--
		--	--	--	--	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.0000</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0003</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.01	--	0.0000	
		--	--	--	--	--	--	--	0.00	--	0.0000	
		--	--	--	--	--	--	--	0.00	--	0.0000	
		--	--	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	<b>0.04</b>	--	<b>0.0001</b>		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
		--	--	--	--	--	--	--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>	
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	0.0000
		0.01	--	--	--	--	--	--	--	--	--	0.0000
		0.00	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0054</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	--	0.0097
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0130</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0005</b>	

**Table L1-190. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.003180 0.003570 0.228106 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.003180 0.003570 0.228106 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.003180 0.003570 0.047380 0.228106	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.003667 0.047380	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.172052 0.004796 0.047380	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.004933 0.047380	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003180 0.003291 0.003453 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.172052 0.004796 0.047380	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002399 0.004796 0.004933 0.172052 0.003667 0.003180 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.01</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.46</b>	<b>0.46</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.99</b>	<b>0.99</b>	<b>1.28</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.72</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		--	--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	0.06	0.06	0.06	--	--	--	--	--	--	0.0014
		0.04	0.04	0.04	--	--	--	--	--	--	0.0009
		0.19	0.19	0.19	--	--	--	--	--	--	0.0046
		0.01	0.01	0.01	--	--	--	--	--	--	0.0002
		<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	<b>0.0072</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0003</b>	
12	RSP Bedding Material	0.06	--	--	--	--	--	--	--	0.0016	
		0.04	--	--	--	--	--	--	--	0.0010	
		0.01	--	--	--	--	--	--	--	0.0002	
		0.19	--	--	--	--	--	--	--	0.0051	
		<b>0.29</b>	--	--	--	--	--	--	--	<b>0.0079</b>	
13	Erosion Control Seeding	--	--	--	0.01	0.01	--	--	--	0.0000	
		--	--	--	0.00	0.00	--	--	--	0.0000	
		--	--	--	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0000</b>	
		<b>0.59</b>	<b>0.29</b>	<b>0.29</b>	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0351</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	0.0004	
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	--	0.0002	
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	<b>0.0006</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	0.0000		
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0001</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0006	
		--	--	--	--	--	--	--	0.0001		
		--	--	--	--	--	--	--	--	<b>0.0015</b>	

**Table L1-190. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.004933 0.003803 0.172052 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.003803 0.172052 0.047380	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.002399 0.228106 0.047380	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002399 0.004796 0.004933 0.172052 0.003667 0.003180 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.004933 0.003803 0.172052 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.002399 0.172052 0.047380	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	--	--	--	--	0.06	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	0.03	0.03	0.03	0.13	0.13	0.13	0.11	0.11	0.11	0.17	0.07	0.03	0.03	0.01	0.01	0.07
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--		
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--		
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.10	0.02	0.03	0.03	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	<b>0.0005</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>	
22	Hinged Bottom Gates	--	--	--	0.02	0.02	0.02	0.02	--	--	--	0.0002
		--	--	--	0.00	0.00	0.00	0.00	--	--	--	0.0000
		--	--	--	0.00	0.00	0.00	0.00	--	--	--	0.0000
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.0003</b>	
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.01</b>	--	<b>0.0037</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	0.0000
		0.01	--	--	--	--	--	--	--	--	--	0.0000
		0.00	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>	
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0003</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	



**Table L1-190. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.003773	g/hp-hr
				Scraper	Scrapers	1	367	0.004016				g/hp-hr	
				Motor Grader	Graders	1	187	0.003901				g/hp-hr	
				Compactor	Rollers	1	80	0.003733				g/hp-hr	
				4000 gallon Water Truck	n/a - onroad	1	MHDT	0.172052				g/hr	
				10 TN Smooth Roller	Rollers	1	157	0.003581				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.047380				g/hr	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	0.004933				g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.003803				g/hp-hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.004000				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	1	MHDT	0.172052				g/hr	
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.004933	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.003803				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	0.172052				g/hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.047380				g/hr	
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.172052	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.004000				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	0.047380				g/hr	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0.000000				g/hr	
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.047380				g/hr	
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.047380				g/hr	
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.047380	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.047380	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.047380	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.09	0.09	0.09	0.11	0.09	0.01	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.10	1.16	1.35	0.62	0.71	0.61	0.62	0.82

Table L1-190. SO2 Exhaust Emissions from Offroad C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0014</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	--	--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.00	--	--	--	--	--	0.00	--	0.0000
		--	0.01	--	--	--	--	--	0.01	--	0.0000
		--	0.00	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
32	CMU Building Mechanical Equipment	--	--	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
33	Electrical Control Equipment CMU Building	--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
34	Electrical Power Equipment CMU Building	--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
35	Communication Equipment	--	--	--	--	--	0.00	0.00	--	--	0.0000
		--	--	--	--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		--	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.61</b>	<b>0.31</b>	<b>0.32</b>	<b>0.07</b>	<b>0.07</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0412</b>

**Table L1-191. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.017022 0.061709 0.065071 2.474210 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.056730 2.474210 0.862254 1.897267	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.474210 0.862254	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.199712 0.030333 0.230004 2.474210 0.862254 1.897267	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.017022 0.091737 0.061709 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.091737 0.064651 0.056730 2.474210 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.091737 2.474210 0.036504 0.862254	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1-191. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.20</b>	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	--	--	--	--
		--	--	--	--	--	--	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	--	--	--	--
		--	--	--	--	--	--	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	--	--	--	--
		--	--	--	--	--	--	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--
		--	--	--	--	--	--	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	--	--	--	--
		--	--	--	--	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	--	--	--	--
		--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--
		--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--
		--	--	--	--	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	--	--	--	--
		--	--	--	--	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.49	0.49	0.49	0.49	0.49	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	--	--	--	--	--	--

**Table L1-191. PM10 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.12</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	--	--	--	<b>0.0034</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.19	--	0.0003	
		--	--	--	--	--	--	--	0.04	--	0.0001	
		--	--	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	0.17	--	0.0003	
		--	--	--	--	--	--	<b>0.41</b>	--	<b>0.0006</b>		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
		--	--	--	--	--	--	--	<b>0.41</b>	<b>0.12</b>	<b>0.0042</b>	
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.02	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	<b>0.0153</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	--	--	--	0.0437
		--	--	--	--	--	--	--	--	--	--	0.0161
		--	--	--	--	--	--	--	--	--	--	0.0136
		--	--	--	--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	--	--	<b>0.0839</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.0408
		--	--	--	--	--	--	--	--	--	--	0.1559
		--	--	--	--	--	--	--	--	--	--	0.0157
		--	--	--	--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	--	--	<b>0.2250</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	<b>0.0095</b>	

**Table L1-191. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.017022 0.055309 1.897267 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.017022 0.055309 1.897267 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.017022 0.055309 0.862254 1.897267	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.065071 0.862254	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.474210 0.023627 0.862254	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.125950 0.862254	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.017022 0.091737 0.061709 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.474210 0.023627 0.862254	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.039905 0.023627 0.125950 2.474210 0.065071 0.027366 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-191. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.77
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.29</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
		--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
		--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
		--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
		--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	<b>8.04</b>	<b>8.04</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>14.35</b>	<b>14.35</b>	<b>16.94</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>6.46</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.97	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.86</b>	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--
		--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	--	--	--	--	--	--	



**Table L1-191. PM10 Exhaust Emissions from Offroad**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
10	Riprap - Class 2	0.31	0.31	0.31	--	--	--	--	--	--	0.0077	
		0.59	0.59	0.59	--	--	--	--	--	--	0.0146	
		1.54	1.54	1.54	--	--	--	--	--	--	0.0385	
		0.15	0.15	0.15	--	--	--	--	--	--	0.0038	
		<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	--	--	--	--	--	--	--	<b>0.0646</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	0.0006	
		--	--	--	--	--	--	--	--	--	0.0015	
		--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	--	<b>0.0026</b>
12	RSP Bedding Material	0.31	--	--	--	--	--	--	--	--	0.0085	
		0.59	--	--	--	--	--	--	--	--	0.0161	
		0.15	--	--	--	--	--	--	--	--	0.0042	
		1.54	--	--	--	--	--	--	--	--	0.0423	
		<b>2.59</b>	--	--	--	--	--	--	--	--	--	<b>0.0711</b>
13	Erosion Control Seeding	--	--	--	0.11	0.11	--	--	--	--	0.0006	
		--	--	--	0.06	0.06	--	--	--	--	0.0003	
		--	--	--	<b>0.17</b>	<b>0.17</b>	--	--	--	--	<b>0.0009</b>	
		<b>5.29</b>	<b>2.59</b>	<b>2.59</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	--	<b>0.4729</b>	
<b>15 - Floodway Control and Diversion Structures</b>												
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	--	0.0000	
		--	--	--	--	--	--	--	0.06	--	0.0001	
		--	--	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	<b>0.0020</b>	
16	Construction Site Dewatering (Pumping)	0.19	0.19	0.19	0.19	0.19	0.19	0.19	--	--	0.0112	
		0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	0.0027	
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	<b>0.0139</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	0.0006	
		--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	<b>0.0037</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	<b>0.0008</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0034	
		--	--	--	--	--	--	--	--	--	0.0015	
		--	--	--	--	--	--	--	--	--	0.0030	
		--	--	--	--	--	--	--	--	--	0.0021	
		--	--	--	--	--	--	--	--	--	0.0018	
		--	--	--	--	--	--	--	--	--	0.0048	
		--	--	--	--	--	--	--	--	0.0019		
		--	--	--	--	--	--	--	--	--	<b>0.0185</b>	

**Table L1-191. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.125950 0.069610 2.474210 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.069610 2.474210 0.862254	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.039905 1.897267 0.862254	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.039905 0.023627 0.125950 2.474210 0.065071 0.027366 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.125950 0.069610 2.474210 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.039905 2.474210 0.862254	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-191. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	--	--	--	--	0.56
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	0.26
		--	--	--	--	--	--	--	--	--	--	--	--	0.32	0.32	--	--	--	--	0.32
		--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.38	0.38	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.12	0.23	0.23	0.23	2.10	1.62	1.62	1.39	1.39	1.39	2.56	1.40	0.61	0.61	0.23	0.23	1.40
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.16	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	--	0.32	0.32
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	0.09	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	0.08	0.08
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.48	--	0.48	0.48	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	1.16	0.39	0.48	0.48	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.12	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-191. PM10 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	--	<b>0.0105</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	<b>0.0019</b>	
22	Hinged Bottom Gates	--	--	--	0.32	0.32	0.32	0.32	--	--	0.0038
		--	--	--	0.03	0.03	0.03	0.03	--	--	0.0004
		--	--	--	0.06	0.06	0.06	0.06	--	--	0.0007
		--	--	--	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	--	<b>0.0049</b>	
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.12</b>	--	<b>0.0565</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	0.0001
		0.02	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	<b>0.0023</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	<b>0.0019</b>	
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0046</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>

**Table L1-191. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.152735	g/hp-hr
				Scraper	Scrapers	1	367	0.064651				g/hp-hr	
				Motor Grader	Graders	1	187	0.056730				g/hp-hr	
				Compactor	Rollers	1	80	0.082320				g/hp-hr	
				4000 gallon Water Truck	n/a - onroad	1	MHDT	2.474210				g/hr	
				10 TN Smooth Roller	Rollers	1	157	0.036504				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.862254				g/hr	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	0.125950				g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.069610				g/hp-hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.035596				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	1	MHDT	2.474210				g/hr	
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.125950	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.069610				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	2.474210				g/hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.862254				g/hr	
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.474210	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.035596				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	0.862254				g/hr	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0.000000				g/hr	
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.035596	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.862254				g/hr	
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.035596	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.862254				g/hr	
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.862254	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.862254	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.862254	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-191. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.44	0.44	0.44	0.44	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.42	0.42	0.42	0.42	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.72	1.72	1.72	1.72	1.72	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--		
		0.12	1.72	1.72	1.72	2.11	1.72	0.12	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		0.44	3.61	3.73	3.27	10.37	9.98	14.66	14.06	14.06	13.83	13.83	15.74	16.91	18.34	5.90	6.94	5.79	5.88	8.35

**Table L1-191. PM10 Exhaust Emissions from Offroad**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0067	
		--	--	--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	<b>0.0258</b>	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	<b>0.0004</b>	
		--	--	--	--	--	--	--	--	--	<b>0.0263</b>	
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.04	--	--	--	--	--	0.04	--	0.0000	
		--	0.06	--	--	--	--	--	0.06	--	0.0001	
		--	0.02	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.12</b>	--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>	
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009	
		--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>	
32	CMU Building Mechanical Equipment	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009	
		--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>	
33	Electrical Control Equipment CMU Building	--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
34	Electrical Power Equipment CMU Building	--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
35	Communication Equipment	--	--	--	--	--	0.05	0.05	--	--	0.0003	
		--	--	--	--	--	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0003</b>	
		--	<b>0.12</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.35</b>	<b>0.35</b>	<b>0.12</b>	--	<b>0.0050</b>	
<b>GRAND TOTAL</b>		<b>5.65</b>	<b>2.94</b>	<b>3.13</b>	<b>1.12</b>	<b>1.12</b>	<b>1.00</b>	<b>1.00</b>	<b>0.66</b>	<b>0.12</b>	<b>0.5694</b>	

**Table L1-192. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.015661 0.056772 0.059866 1.207340 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.052192 1.207340 0.448991 0.959260	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	1.207340 0.448991	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.183735 0.027906 0.211603 1.207340 0.448991 0.959260	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.015661 0.084398 0.056772 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.084398 0.059479 0.052192 1.207340 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.084398 1.207340 0.033583 0.448991	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													



Table L1-192. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.71	0.71	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.14	0.14	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	--	--	--	--
		--	--	--	--	--	--	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	--	--	--	--
		--	--	--	--	--	--	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	--	--	--	--
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--
		--	--	--	--	--	--	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	--	--	--	--
		--	--	--	--	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	--	--	--	--
		--	--	--	--	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	--	--	--	--
		--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--
		--	--	--	--	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.45	0.45	0.45	0.45	0.45	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	--	--	--	--	--	--	--	--

**Table L1-192. PM2.5 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	--	<b>0.0027</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.17	--	0.0003	
		--	--	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	0.01	--	0.0000	
		--	--	--	--	--	--	--	0.08	--	0.0001	
		--	--	--	--	--	--	<b>0.29</b>	--	<b>0.0004</b>		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
		--	--	--	--	--	--	--	<b>0.29</b>	<b>0.09</b>	<b>0.0032</b>	
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.01	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.0082
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	<b>0.0124</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	--	--	--	--	0.0402
		--	--	--	--	--	--	--	--	--	--	0.0148
		--	--	--	--	--	--	--	--	--	--	0.0069
		--	--	--	--	--	--	--	--	--	0.0025	
		--	--	--	--	--	--	--	--	--	<b>0.0696</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.0375
		--	--	--	--	--	--	--	--	--	--	0.1435
		--	--	--	--	--	--	--	--	--	--	0.0145
		--	--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0047	
		--	--	--	--	--	--	--	--	--	<b>0.2019</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0082</b>	

**Table L1-192. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.015661 0.050884 0.959260 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.015661 0.050884 0.959260 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.015661 0.050884 0.448991 0.959260	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.059866 0.448991	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	1.207340 0.021737 0.448991	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.115874 0.448991	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.015661 0.084398 0.056772 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	1.207340 0.021737 0.448991	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.036712 0.021737 0.115874 1.207340 0.059866 0.025177 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1-192. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08
		--	--	--	--	--	--	--	--	--	--	--	--	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
		--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
		--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
		--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
		--	--	--	--	--	--	--	--	--	--	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.09</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>7.21</b>	<b>7.21</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>11.98</b>	<b>11.98</b>	<b>13.66</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>4.20</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
		--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	
		--	--	--	--	--	--	<b>1.55</b>	--	--	--	--	--	--	--	--	--	--		
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	<b>1.55</b>	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.05	0.05	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.15</b>	<b>0.15</b>	--	--	--	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	
		--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	
		--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	
		--	--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	
		--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	--	--	--	--	--	
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--		
		--	--	--	--	--	--	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	--	--	--	--	--		

**Table L1-192. PM2.5 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	0.28	0.28	0.28	--	--	--	--	--	--	0.0071
		0.54	0.54	0.54	--	--	--	--	--	--	0.0135
		0.78	0.78	0.78	--	--	--	--	--	--	0.0195
		0.08	0.08	0.08	--	--	--	--	--	--	0.0020
		<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	--	--	--	--	--	--	<b>0.0420</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0017</b>
12	RSP Bedding Material	0.28	--	--	--	--	--	--	--	--	0.0078
		0.54	--	--	--	--	--	--	--	--	0.0148
		0.08	--	--	--	--	--	--	--	--	0.0022
		0.78	--	--	--	--	--	--	--	--	0.0214
		<b>1.68</b>	--	--	--	--	--	--	--	--	<b>0.0462</b>
13	Erosion Control Seeding	--	--	--	0.10	0.10	--	--	--	--	0.0005
		--	--	--	0.03	0.03	--	--	--	--	0.0002
		--	--	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	<b>0.0007</b>
		<b>3.45</b>	<b>1.68</b>	<b>1.68</b>	<b>0.13</b>	<b>0.13</b>	--	--	--	<b>0.3828</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	<b>0.0014</b>	
16	Construction Site Dewatering (Pumping)	0.17	0.17	0.17	0.17	0.17	0.17	0.17	--	--	0.0103
		0.02	0.02	0.02	0.02	0.02	0.02	0.02	--	--	0.0014
		<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	--	--	<b>0.0117</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	<b>0.0031</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	<b>0.0005</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	--	--	0.0010	
		--	--	--	--	--	--	--	--	<b>0.0153</b>	

**Table L1-192. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.115874 0.064041 1.207340 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.064041 1.207340 0.448991	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	0.036712 0.959260 0.448991	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.036712 0.021737 0.115874 1.207340 0.059866 0.025177 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.115874 0.064041 1.207340 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.036712 1.207340 0.448991	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1-192. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	0.17
		--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	--	--	--	--	<b>0.84</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.09	0.15	0.15	0.15	1.74	1.31	1.31	1.15	1.15	1.15	1.99	1.03	0.39	0.39	0.20	0.20	1.03
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.96</b>	<b>0.28</b>	<b>0.37</b>	<b>0.37</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-192. PM2.5 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	<b>0.0075</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	<b>0.0010</b>	
22	Hinged Bottom Gates	--	--	--	0.29	0.29	0.29	0.29	--	--	0.0035
		--	--	--	0.02	0.02	0.02	0.02	--	--	0.0002
		--	--	--	0.03	0.03	0.03	0.03	--	--	0.0004
		--	--	--	<b>0.34</b>	<b>0.34</b>	<b>0.34</b>	<b>0.34</b>	--	<b>0.0041</b>	
		<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.09</b>	--	<b>0.0448</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.02	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	0.0001
		0.01	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	<b>0.0019</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	<b>0.0001</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	<b>0.0015</b>	
		<b>0.09</b>	--	--	--	--	--	--	--	<b>0.0036</b>	
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.0001</b>	



**Table L1-192. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.140516	g/hp-hr
				Scraper	Scrapers	1	367	0.059479				g/hp-hr	
				Motor Grader	Graders	1	187	0.052192				g/hp-hr	
				Compactor	Rollers	1	80	0.075735				g/hp-hr	
				4000 gallon Water Truck	n/a - onroad	1	MHDT	1.207340				g/hr	
				10 TN Smooth Roller	Rollers	1	157	0.033583				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.448991				g/hr	
				Concrete Pump Boom Truck Mounted	Pumps	1	84	0.115874				g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.064041				g/hp-hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.032748				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	1	MHDT	1.207340				g/hr	
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.115874	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	0.064041				g/hp-hr	
				Concrete Mixer Truck	n/a - onroad	2	MHDT	1.207340				g/hr	
				Pickup Truck Conventional	n/a - onroad	7	LDT2	0.448991				g/hr	
<b>Concrete Duct Banc Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	1.207340	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	0.032748				g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	1	LDT2	0.448991				g/hr	
				Temp. Mobile Office Building	n/a - onroad	1	n/a	0.000000				g/hr	
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.032748	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.448991				g/hr	
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.032748	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2	0.448991				g/hr	
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.448991	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.448991	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.448991	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1-192. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.38	0.38	0.38	0.38	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.50	1.50	1.50	1.50	1.50	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	--		
		0.09	1.50	1.50	1.50	1.78	1.50	0.09	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		0.30	3.04	3.12	2.74	9.14	8.87	12.72	12.20	12.20	12.04	12.04	13.14	13.98	14.70	3.84	4.71	3.83	3.93	5.60

**Table L1-192. PM2.5 Exhaust Emissions from Offroad**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0225</b>
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0003</b>
		--	--	--	--	--	--	--	--	--	<b>0.0229</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.02	--	--	--	--	--	0.02	--	0.0000
		--	0.06	--	--	--	--	--	0.06	--	0.0001
		--	0.01	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.09</b>	--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		--	--	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
32	CMU Building Mechanical Equipment	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		--	--	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
33	Electrical Control Equipment CMU Building	--	--	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		--	--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
34	Electrical Power Equipment CMU Building	--	--	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		--	--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
35	Communication Equipment	--	--	--	--	--	0.02	0.02	--	--	0.0001
		--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0001</b>
		--	<b>0.09</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.23</b>	<b>0.23</b>	<b>0.09</b>	--	<b>0.0034</b>
<b>GRAND TOTAL</b>		<b>3.73</b>	<b>1.96</b>	<b>2.09</b>	<b>0.88</b>	<b>0.88</b>	<b>0.77</b>	<b>0.77</b>	<b>0.46</b>	<b>0.09</b>	<b>0.4607</b>

**Table L1-193. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors			
												CO2	CH4	N2O	
<b>02 - Relocations</b>															
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	
<b>Mobilization and Dem</b>															
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	323.936 306.887 312.57 24743.4 36496.5 8716.75	0.01421 0.01857 0.01854 0 0 0	0 0 0 0 0 0	
<b>Fremont Weir Demo</b>															
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	346.669 24743.4 8716.75 36496.5	0.01722 0 0 0	0 0 0 0	
<b>Levee O&amp;M Road Regrading</b>															
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	24743.4 8716.75	0 0	0 0	
<b>Temporary Electrical Power</b>															
<b>09 - Channels and Canals</b>															
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	
<b>Mobilization and Dem</b>															
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	363.718 227.324 395.091 24743.4 8716.75 36496.5	0.03898 0.0068 0 0 0 0	0 0 0 0 0 0	
<b>Clearing and Grubbing</b>															
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	323.936 335.303 306.887 36496.5 8716.75	0.01421 0.02493 0.01857 0 0	0 0 0 0 0	
<b>Excavation (Wet Conditions)</b>															
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	335.303 409.183 346.669 24743.4 8716.75	0.02493 0.02415 0.01722 0 0	0 0 0 0 0	
<b>Excavation/Grading (Dry Conditions)</b>															
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	335.303 24743.4 318.253 8716.75	0.02493 0 0.01911 0	0 0 0 0	
<b>Earthen Backfill</b>															

**Table L1-193. GHG Exhaust Emissions from Offroad C**

#	Activity	Emissions		Annual Emissions, MTCO <sub>2</sub> e/yr
		CO <sub>2</sub> e	Units	
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
2	Fremont Weir Demo	324.292	g/hp-hr	11.18
		307.351	g/hp-hr	4.84
		313.034	g/hp-hr	2.91
		24743.4	g/hr	2.38
		36496.5	g/hr	3.50
		8716.75	g/hr	5.02
<b>Weir Demo Subtotal</b>				<b>29.83</b>
3	Levee O&M Road Regrading (6" AB)	347.099	g/hp-hr	1.56
		24743.4	g/hr	0.59
		8716.75	g/hr	0.21
		36496.5	g/hr	4.38
<b>Regrading (6" AB) Subtotal</b>				<b>6.74</b>
4	Temporary Electrical Power	24743.4	g/hr	0.20
		8716.75	g/hr	0.14
<b>Electrical Power Subtotal</b>				<b>0.34</b>
<b>- Relocations Total</b>				<b>37.99</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
6	Clearing and Grubbing	364.692	g/hp-hr	14.76
		227.494	g/hp-hr	11.72
		395.091	g/hp-hr	1.16
		24743.4	g/hr	9.11
		8716.75	g/hr	19.25
		36496.5	g/hr	13.43
<b>Grubbing Subtotal</b>				<b>69.43</b>
7	Excavation (Wet Conditions)	324.292	g/hp-hr	100.17
		335.926	g/hp-hr	145.12
		307.351	g/hp-hr	72.58
		36496.5	g/hr	236.50
		8716.75	g/hr	43.93
<b>(Wet Conditions) Subtotal</b>				<b>598.30</b>
8	Excavation/Grading (Dry Conditions)	335.926	g/hp-hr	135.45
		409.787	g/hp-hr	896.63
		347.099	g/hp-hr	87.24
		24743.4	g/hr	33.26
		8716.75	g/hr	82.01
<b>(Dry Conditions) Subtotal</b>				<b>1,234.57</b>
9	Earthen Backfill	335.926	g/hp-hr	22.57
		24743.4	g/hr	5.54
		318.731	g/hp-hr	11.21
		8716.75	g/hr	5.86
<b>Earthen Backfill Subtotal</b>				<b>45.18</b>

**Table L1-193. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors		
												CO2	CH4	N2O
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	2	2,000	50	323.936	0.01421	0
				300 HP Dozer Crawler	Crawler Tractors	1	300					363.718	0.02114	0
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT					36496.5	0	0
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8716.75	0	0
<b>Riprap</b>														
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	1	1,000	4	323.936	0.01421	0
				300 HP Dozer Crawler	Crawler Tractors	1	300					363.718	0.02114	0
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT					36496.5	0	0
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8716.75	0	0
<b>Riprap</b>														
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	2	2,000	55	323.936	0.01421	0
				300 HP Dozer Crawler	Crawler Tractors	1	300					363.718	0.02114	0
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8716.75	0	0
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT					36496.5	0	0
<b>RSP Bedding</b>														
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel	Tractors/Loaders/Backhoes	1	97	2	1	2	10	312.57	0.01854	0
				Pickup Truck Conventional	n/a - onroad	4	LDT2					8716.75	0	0
<b>Erosion Control</b>														
<b>09 - Channel</b>														

**Table L1-193. GHG Exhaust Emissions from Offroad C**

#	Activity	Emissions		Annual Emissions, MTCO <sub>2</sub> e/yr
		CO <sub>2</sub> e	Units	
10	Riprap - Class 2	324.292	g/hp-hr	133.35
		364.246	g/hp-hr	87.42
		36496.5	g/hr	671.54
		8716.75	g/hr	34.87
		<b>Class 2 Subtotal</b>		<b>927.17</b>
11	Riprap - Class 3	324.292	g/hp-hr	5.33
		364.246	g/hp-hr	3.50
		36496.5	g/hr	26.86
		8716.75	g/hr	1.39
		<b>Class 3 Subtotal</b>		<b>37.09</b>
12	RSP Bedding Material	324.292	g/hp-hr	146.68
		364.246	g/hp-hr	96.16
		8716.75	g/hr	38.35
		36496.5	g/hr	738.69
		<b>Bedding Material Subtotal</b>		<b>1,019.89</b>
13	Erosion Control Seeding	313.034	g/hp-hr	2.43
		8716.75	g/hr	2.79
		<b>Seeding Subtotal</b>		<b>5.22</b>
		<b>Canals and Canals Total</b>		<b>3,937.93</b>

**Table L1-193. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors		
												CO2	CH4	N2O
<b>15 - Floodway Control and Diversion Structures</b>														
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0
<b>Mobilization and Dem</b>														
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	24743.4 426.232 8716.75	0 0.00931 0	0 0 0
<b>Construction Site Dewatering (Temporary C</b>														
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	420.549 8716.75	0.02382 0	0 0
<b>Construction Site Dewatering</b>														
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	323.936 335.303 306.887 36496.5 8716.75	0.01421 0.02493 0.01857 0 0	0 0 0 0 0
<b>Excavation (Wet C</b>														
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	24743.4 426.232 8716.75	0 0.00931 0	0 0 0
<b>Shee</b>														
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	244.373 426.232 420.549 24743.4 312.57 323.936 8716.75	0.01266 0.00931 0.02382 0 0.01854 0.01518 0	0 0 0 0 0 0 0
<b>Headworks Structure Con</b>														
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	420.549 244.373 24743.4 8716.75	0.02382 0.02567 0 0	0 0 0 0
<b>Headworks</b>														
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	244.373 24743.4 8716.75	0.02567 0 0	0 0 0
<b>Headworks Channel</b>														
22	Hinged Bottom Gates	3	EA	90 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	450 HHDT LDT2	0.1	1	0.1	24	244.373 36496.5 8716.75	0.01266 0 0	0 0 0
<b>Hinged Bot</b>														
<b>15 - Floodway Control and Diversi</b>														
<b>08 - Roads, Railroads, and Bridges</b>														
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0
<b>Mobilization and Dem</b>														
24	Pedestrian Bridge Concete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	4	244.373	0.01266	0



**Table L1-193. GHG Exhaust Emissions from Offroad C**

#	Activity	Emissions		Annual Emissions, MTCO <sub>2</sub> e/yr
		CO <sub>2</sub> e	Units	
<b>15 - Floodway Control and Diversion Structures</b>				
14	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
15	Construction Site Dewatering (Temporary Cofferdam)	24743.4	g/hr	3.56
		426.465	g/hp-hr	13.57
		8716.75	g/hr	7.53
<b>Cofferdam Subtotal</b>				<b>24.67</b>
16	Construction Site Dewatering (Pumping)	421.145	g/hp-hr	33.96
		8716.75	g/hr	25.10
<b>(Pumping) Subtotal</b>				<b>59.07</b>
17	Excavation (Wet Conditions)	324.292	g/hp-hr	4.45
		335.926	g/hp-hr	6.45
		307.351	g/hp-hr	3.23
		36496.5	g/hr	10.51
		8716.75	g/hr	1.95
<b>Wet Conditions Subtotal</b>				<b>26.59</b>
18	Sheet Pile Wall	24743.4	g/hr	1.39
		426.465	g/hp-hr	5.28
		8716.75	g/hr	2.93
<b>Sheet Pile Wall Subtotal</b>				<b>9.59</b>
19	Headworks Structure Concrete Piles	244.69	g/hp-hr	18.79
		426.465	g/hp-hr	24.13
		421.145	g/hp-hr	9.06
		24743.4	g/hr	19.00
		313.034	g/hp-hr	7.77
		324.316	g/hp-hr	52.14
		8716.75	g/hr	17.85
<b>Concrete Piles Subtotal</b>				<b>148.74</b>
20	Headworks Structure	421.145	g/hp-hr	15.28
		245.015	g/hp-hr	0.85
		24743.4	g/hr	21.38
		8716.75	g/hr	26.36
<b>Headworks Structure Subtotal</b>				<b>63.87</b>
21	Headworks Channel Transition	245.015	g/hp-hr	0.31
		24743.4	g/hr	7.92
		8716.75	g/hr	8.37
<b>Channel Transition Subtotal</b>				<b>16.60</b>
22	Hinged Bottom Gates	244.69	g/hp-hr	21.14
		36496.5	g/hr	7.01
		8716.75	g/hr	6.69
<b>Hinged Bottom Gates Subtotal</b>				<b>34.84</b>
<b>Construction Structures Total</b>				<b>385.05</b>
<b>08 - Roads, Railroads, and Bridges</b>				
23	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
24	Pedestrian Bridge Concrete Piles	244.69	g/hp-hr	2.35

**Table L1-193. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors		
												CO2	CH4	N2O
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221					426.232	0.00931	0
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.549	0.02382	0
				Concrete Mixer Truck	n/a - onroad	3	MHDT					24743.4	0	0
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97					312.57	0.01854	0
				24 TN Truck End Dump	Off-Highway Trucks	2	314					323.936	0.01518	0
				Pickup Truck Conventional	n/a - onroad	8	LDT2					8716.75	0	0
<b>Pedestrian Bridge Cor</b>														
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	420.549	0.02382	0
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.373	0.02567	0
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24743.4	0	0
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8716.75	0	0
<b>Pedestrian Bridge Concrete Abutments and</b>														
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	8	244.373	0.01266	0
				Flatbed Truck	n/a - onroad	2	MHDT					24743.4	0	0
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8716.75	0	0
<b>Pedestrian Bridge Span I</b>														
<b>08 - Roads, Railroads</b>														

**Table L1-193. GHG Exhaust Emissions from Offroad C**

#	Activity	Emissions Factors		Annual Emissions, MTCO <sub>2</sub> e/yr
		CO <sub>2</sub> e	Units	
		426.465	g/hp-hr	3.02
		421.145	g/hp-hr	1.13
		24743.4	g/hr	2.38
		313.034	g/hp-hr	0.97
		324.316	g/hp-hr	6.52
		8716.75	g/hr	2.23
		<b>Concrete Piles Subtotal</b>		<b>18.59</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	421.145	g/hp-hr	0.28
		245.015	g/hp-hr	0.02
		24743.4	g/hr	0.40
		8716.75	g/hr	0.49
		<b>Wingwalls Subtotal</b>		<b>1.18</b>
26	Pedestrian Bridge Span Installation	244.69	g/hp-hr	7.05
		24743.4	g/hr	3.17
		8716.75	g/hr	2.79
		<b>Installation Subtotal</b>		<b>13.00</b>
		<b>Concrete Piles, and Bridges Total</b>		<b>33.86</b>

**Table L1-193. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors			
												CO2	CH4	N2O	
<b>19 - Buildings, Grounds, and Utilities</b>															
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	
<b>Mobilization and Dem</b>															
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	335.303 409.183 346.669 318.253 24743.4 318.253 8716.75 420.549 244.373 340.986 24743.4	0.03353 0.02415 0.01722 0.02578 0 0.01911 0 0.02382 0.02567 0.02272 0	0 0 0 0 0 0 0 0 0 0 0 0	
<b>CMU Building and Earthwork Pad Co</b>															
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	2	420.549 244.373 24743.4 8716.75	0.02382 0.02567 0 0	0 0 0 0	
<b>Concrete</b>															
<b>19 - Buildings, Grounds</b>															
<b>20 -Permanent Operating Equipment</b>															
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	
<b>Mobilization and Dem</b>															
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	340.986 8716.75	0.02272 0	0 0	
<b>Mechanical Hydraulic Cylinders</b>															
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	340.986 8716.75	0.02272 0	0 0	
<b>CMU Building Mechanical f</b>															
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.75	0	0	
<b>Electrical Control Equipment CM</b>															
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.75	0	0	
<b>Electrical Power Equipment CM</b>															
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	8716.75	0	0	
<b>Communication f</b>															
<b>20 -Permanent Operati</b>															
<b>GRAND TOTAL</b>															

Table L1-193. GHG Exhaust Emissions from Offroad C

#	Activity	Emissions		Annual Emissions, MTCO <sub>2</sub> e/yr
		CO <sub>2</sub> e	Units	
<b>19 - Buildings, Grounds, and Utilities</b>				
27	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
28	CMU Building and Earthwork Pad Construction	336.141	g/hp-hr	13.31
		409.787	g/hp-hr	36.09
		347.099	g/hp-hr	15.58
		318.898	g/hp-hr	6.12
		24743.4	g/hr	5.94
		318.731	g/hp-hr	12.01
		8716.75	g/hr	14.64
		421.145	g/hp-hr	8.49
		245.015	g/hp-hr	0.47
		341.554	g/hp-hr	8.20
24743.4	g/hr	5.94		
<b>Construction Subtotal</b>				<b>126.79</b>
29	Concrete Duct Banc	421.145	g/hp-hr	0.57
		245.015	g/hp-hr	0.03
		24743.4	g/hr	0.79
		8716.75	g/hr	0.98
<b>Duct Banc Subtotal</b>				<b>2.37</b>
<b>Buildings, Grounds, and Utilities Total</b>				<b>130.24</b>
<b>20 -Permanent Operating Equipment</b>				
30	Mobilization and Demobilization	24743.4	g/hr	0.40
		341.554	g/hp-hr	0.55
		8716.75	g/hr	0.14
		0	g/hr	0.00
<b>Mobilization Subtotal</b>				<b>1.08</b>
31	Mechanical Hydraulic Cylinders & Housing	341.554	g/hp-hr	8.20
		8716.75	g/hr	6.28
<b>Cylinders &amp; Housing Subtotal</b>				<b>14.47</b>
32	CMU Building Mechanical Equipment	341.554	g/hp-hr	8.20
		8716.75	g/hr	6.28
<b>Equipment Subtotal</b>				<b>14.47</b>
33	Electrical Control Equipment CMU Building	8716.75	g/hr	6.28
<b>CMU Building Subtotal</b>				<b>6.28</b>
34	Electrical Power Equipment CMU Building	8716.75	g/hr	6.28
<b>CMU Building Subtotal</b>				<b>6.28</b>
35	Communication Equipment	8716.75	g/hr	2.51
<b>Equipment Subtotal</b>				<b>2.51</b>
<b>Permanent Operating Equipment Total</b>				<b>45.09</b>
<b>GRAND TOTAL</b>				<b>4,570.16</b>

## Construction Worker Commuting Exhaust Emissions Summary

**Table L1-194. Maximum Daily Construction Worker Commuting Emissions (Alternative 3)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.02	0.10	1.03	0.00	0.46	0.12
09 - Channels and Canals	0.36	1.80	18.06	0.07	8.07	2.17
15 - Floodway Control and Diversion Structures	0.10	0.51	5.13	0.02	2.29	0.62
08 - Roads, Railroads, and Bridges	0.03	0.13	1.33	0.01	0.60	0.16
19 - Buildings, Grounds, and Utilities	0.04	0.19	1.95	0.01	0.87	0.23
20 -Permanent Operating Equipment	0.04	0.20	2.05	0.01	0.92	0.25
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>0.42</b>	<b>2.10</b>	<b>21.13</b>	<b>0.08</b>	<b>9.44</b>	<b>2.54</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-195. Annual Construction Worker Commuting Emissions (Alternative 3)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.00	0.01	0.00	0.00	0.00	2.84
09 - Channels and Canals	0.01	0.05	0.50	0.00	0.22	0.06	177.30
15 - Floodway Control and Diversion Structures	0.00	0.01	0.10	0.00	0.04	0.01	34.73
08 - Roads, Railroads, and Bridges	0.00	0.00	0.01	0.00	0.00	0.00	2.30
19 - Buildings, Grounds, and Utilities	0.00	0.00	0.02	0.00	0.01	0.00	6.07
20 -Permanent Operating Equipment	0.00	0.00	0.03	0.00	0.01	0.00	9.62
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.01</b>	<b>0.07</b>	<b>0.66</b>	<b>0.00</b>	<b>0.30</b>	<b>0.08</b>	<b>232.85</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-196. ROG Emissions from Construction Worker Commuting (Alternative 3)**

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																			
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	2	1.55E-02	0.0102	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	1.55E-02	--	0.0205	0.0205	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	3	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	1.55E-02	0.0061	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.0164</b>	<b>0.0205</b>	<b>0.0205</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	2	1.55E-02	0.1086	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	23	1.55E-02	--	0.0369	0.0369	0.0369	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	45	1.55E-02	--	--	--	--	--	0.0820	0.0820	0.0820	0.0820	0.0820	0.0820	0.0820	0.0820	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	56	1.55E-02	--	--	--	--	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	0.0492	--	--	--	--	--	--	
9	Earthen Backfill	28	1.55E-02	--	--	--	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	50	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	
11	Riprap - Class 3	4	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0574	
12	RSP Bedding Material	55	1.55E-02	--	--	--	--	--	--	--	--	--	--	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	0.1148	
13	Erosion Control Seeding	10	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>0.1086</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0492</b>	<b>0.0492</b>	<b>0.1393</b>	<b>0.1393</b>	<b>0.1393</b>	<b>0.1393</b>	<b>0.1393</b>	<b>0.2459</b>	<b>0.2459</b>	<b>0.3607</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2295</b>	<b>0.2869</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	2	1.55E-02	--	--	0.1025	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	1.55E-02	--	--	--	0.0143	0.0143	0.0143	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	1.55E-02	--	--	--	--	--	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	
17	Excavation (Wet Conditions)	4	1.55E-02	--	--	--	--	--	0.0410	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	1.55E-02	--	--	--	--	--	--	0.0143	0.0143	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	1.55E-02	--	--	--	--	--	0.0266	0.0266	0.0266	0.0266	0.0266	0.0266	0.0266	--	--	--	--	--	--	--	
20	Headworks Structure	18	1.55E-02	--	--	--	--	--	--	--	--	--	--	0.0553	0.0553	--	--	--	--	--	--	0.0553	
21	Headworks Channel Transition	10	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	0.0328	0.0328	--	--	--	--	--	
22	Hinged Bottom Gates	24	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>--</b>	<b>--</b>	<b>0.1025</b>	<b>0.0143</b>	<b>0.0143</b>	<b>0.0143</b>	<b>0.0471</b>	<b>0.0471</b>	<b>0.0471</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0881</b>	<b>0.0615</b>	<b>0.0389</b>	<b>0.0389</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0615</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	2	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	0.0102	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0266	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0184	--	--	--	--	
26	Pedestrian Bridge Span Installation	8	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0143	0.0143	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.0102</b>	<b>0.0266</b>	<b>0.0184</b>	<b>0.0143</b>	<b>0.0143</b>		
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	2	1.55E-02	0.0184	--	--	--	--	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	1.55E-02	--	0.0205	0.0205	0.0205	0.0205	0.0205	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	2	1.55E-02	--	--	--	--	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.0184</b>	<b>0.0205</b>	<b>0.0205</b>	<b>0.0205</b>	<b>0.0389</b>	<b>0.0205</b>	<b>0.0184</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	2	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	1.55E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>				<b>0.1434</b>	<b>0.0779</b>	<b>0.1803</b>	<b>0.0717</b>	<b>0.1025</b>	<b>0.0840</b>	<b>0.2049</b>	<b>0.1865</b>	<b>0.1865</b>	<b>0.1721</b>	<b>0.1721</b>	<b>0.2787</b>	<b>0.3340</b>	<b>0.4221</b>	<b>0.2787</b>	<b>0.2951</b>	<b>0.2541</b>	<b>0.2500</b>	<b>0.3627</b>	

Table L1-196. ROG Emissions from C

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0102	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0001
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0164	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0164</b>	<b>0.0102</b>	<b>0.0002</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.1086	--	--	--	--	--	--	--	--	0.0001
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0004
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0018
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0014
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0001
10	Riprap - Class 2	0.1148	0.1148	0.1148	--	--	--	--	--	--	0.0029
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0001
12	RSP Bedding Material	0.1148	--	--	--	--	--	--	--	--	0.0032
13	Erosion Control Seeding	--	--	--	0.0082	0.0082	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.3381</b>	<b>0.1148</b>	<b>0.1148</b>	<b>0.0082</b>	<b>0.0082</b>	--	--	--	--	<b>0.0100</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.1025	--	0.0001
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0001
16	Construction Site Dewatering (Pumping)	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	--	--	0.0004
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0001
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0005
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0002
22	Hinged Bottom Gates	--	--	--	0.0123	0.0123	0.0123	0.0123	--	--	0.0001
	<b>15 - Floodway Control and Div</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.1025</b>	--	<b>0.0020</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0102	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
	<b>08 - Roads, Railro</b>	<b>0.0102</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0003
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0003</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0041	--	--	--	--	--	0.0041	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
32	CMU Building Mechanical Equipment	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
33	Electrical Control Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
34	Electrical Power Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
35	Communication Equipment	--	--	--	--	--	0.0082	0.0082	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0041</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0410</b>	<b>0.0410</b>	<b>0.0041</b>	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		<b>0.3545</b>	<b>0.1250</b>	<b>0.1537</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.1229</b>	<b>0.0102</b>	<b>0.0132</b>



Table L1-197. NOx Emissions from Construction Worker Commuting (Alternative 3)

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																			
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	2	7.71E-02	0.0510	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	7.71E-02	--	0.1020	0.1020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	3	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	7.71E-02	0.0306	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.0816</b>	<b>0.1020</b>	<b>0.1020</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	2	7.71E-02	0.5407	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	23	7.71E-02	--	0.1836	0.1836	0.1836	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	45	7.71E-02	--	--	--	--	--	0.4080	0.4080	0.4080	0.4080	0.4080	0.4080	0.4080	0.4080	0.4080	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	56	7.71E-02	--	--	--	--	0.2448	0.2448	0.2448	0.2448	0.2448	0.2448	0.2448	0.2448	0.2448	0.2448	--	--	--	--	--	
9	Earthen Backfill	28	7.71E-02	--	--	--	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	50	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	0.5713	0.5713	0.5713	0.5713	0.5713	0.5713	0.5713	
11	Riprap - Class 3	4	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2856	
12	RSP Bedding Material	55	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	0.5713	0.5713	0.5713	0.5713	0.5713	0.5713	0.5713	0.5713	
13	Erosion Control Seeding	10	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>0.5407</b>	<b>0.1836</b>	<b>0.1836</b>	<b>0.1836</b>	<b>0.2448</b>	<b>0.2448</b>	<b>0.6937</b>	<b>0.6937</b>	<b>0.6937</b>	<b>0.6937</b>	<b>0.6937</b>	<b>1.2241</b>	<b>1.2241</b>	<b>1.7954</b>	<b>1.1425</b>	<b>1.1425</b>	<b>1.1425</b>	<b>1.1425</b>	<b>1.1425</b>	<b>1.4282</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	2	7.71E-02	--	--	0.5101	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	7.71E-02	--	--	--	0.0714	0.0714	0.0714	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	7.71E-02	--	--	--	--	--	--	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	
17	Excavation (Wet Conditions)	4	7.71E-02	--	--	--	--	--	--	0.2040	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	7.71E-02	--	--	--	--	--	--	0.0714	0.0714	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	7.71E-02	--	--	--	--	--	--	0.1326	0.1326	0.1326	0.1326	0.1326	0.1326	--	--	--	--	--	--	--	
20	Headworks Structure	18	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	0.2754	0.2754	--	--	--	--	--	0.2754	
21	Headworks Channel Transition	10	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1632	0.1632	--	--	--	--	
22	Hinged Bottom Gates	24	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>--</b>	<b>--</b>	<b>0.5101</b>	<b>0.0714</b>	<b>0.0714</b>	<b>0.0714</b>	<b>0.2346</b>	<b>0.2346</b>	<b>0.2346</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.4387</b>	<b>0.3060</b>	<b>0.1938</b>	<b>0.1938</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0306</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	2	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0510	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1326	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0918	--	--	--	
26	Pedestrian Bridge Span Installation	8	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0714	0.0714	--	
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.0510</b>	<b>0.1326</b>	<b>0.0918</b>	<b>0.0714</b>	<b>0.0714</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	2	7.71E-02	0.0918	--	--	--	--	--	0.0918	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	7.71E-02	--	0.1020	0.1020	0.1020	0.1020	0.1020	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	2	7.71E-02	--	--	--	--	0.0918	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.0918</b>	<b>0.1020</b>	<b>0.1020</b>	<b>0.1020</b>	<b>0.1938</b>	<b>0.1020</b>	<b>0.0918</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	2	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	7.71E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>				<b>0.7141</b>	<b>0.3876</b>	<b>0.8977</b>	<b>0.3570</b>	<b>0.5101</b>	<b>0.4183</b>	<b>1.0201</b>	<b>0.9283</b>	<b>0.9283</b>	<b>0.8569</b>	<b>0.8569</b>	<b>1.3874</b>	<b>1.6628</b>	<b>2.1015</b>	<b>1.3874</b>	<b>1.4690</b>	<b>1.2650</b>	<b>1.2445</b>	<b>1.8056</b>	

Table L1-197. NOx Emissions from Cc

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0510	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0816	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0816</b>	<b>0.0510</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.5407	--	--	--	--	--	--	--	--	0.0005
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0021
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0092
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0069
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0006
10	Riprap - Class 2	0.5713	0.5713	0.5713	--	--	--	--	--	--	0.0143
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0006
12	RSP Bedding Material	0.5713	--	--	--	--	--	--	--	--	0.0157
13	Erosion Control Seeding	--	--	--	0.0408	0.0408	--	--	--	--	0.0002
	<b>09 - Cha</b>	<b>1.6832</b>	<b>0.5713</b>	<b>0.5713</b>	<b>0.0408</b>	<b>0.0408</b>	--	--	--	--	<b>0.0500</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.5101	--	0.0005
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0006
16	Construction Site Dewatering (Pumping)	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	--	--	0.0018
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0021
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0025
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0008
22	Hinged Bottom Gates	--	--	--	0.0612	0.0612	0.0612	0.0612	--	--	0.0007
	<b>15 - Floodway Control and Div</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.5101</b>	--	<b>0.0098</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0510	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0003
	<b>08 - Roads, Railro</b>	<b>0.0510</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0015
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0001
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0017</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0204	--	--	--	--	--	0.0204	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
32	CMU Building Mechanical Equipment	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
33	Electrical Control Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
34	Electrical Power Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
35	Communication Equipment	--	--	--	--	--	0.0408	0.0408	--	--	0.0002
	<b>20 -Permanent Ope</b>	--	<b>0.0204</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.2040</b>	<b>0.2040</b>	<b>0.0204</b>	--	<b>0.0027</b>
<b>GRAND TOTAL</b>		<b>1.7648</b>	<b>0.6223</b>	<b>0.7651</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.6121</b>	<b>0.0510</b>	<b>0.0657</b>

Table L1-198. CO Emissions from Construction Worker Commuting (Alternative 3)

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	2	7.76E-01	0.5129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	7.76E-01	--	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	3	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	7.76E-01	0.3078	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.8207</b>	<b>1.0259</b>	<b>1.0259</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	2	7.76E-01	5.4371	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	23	7.76E-01	--	1.8465	1.8465	1.8465	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	45	7.76E-01	--	--	--	--	--	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	56	7.76E-01	--	--	--	--	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	--	--	--	--	
9	Earthen Backfill	28	7.76E-01	--	--	--	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	50	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	
11	Riprap - Class 3	4	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8724	
12	RSP Bedding Material	55	7.76E-01	--	--	--	--	--	--	--	--	--	--	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	
13	Erosion Control Seeding	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>5.4371</b>	<b>1.8465</b>	<b>1.8465</b>	<b>1.8465</b>	<b>2.4621</b>	<b>2.4621</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>12.3103</b>	<b>12.3103</b>	<b>18.0551</b>	<b>11.4896</b>	<b>11.4896</b>	<b>11.4896</b>	<b>11.4896</b>	<b>14.3620</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	2	7.76E-01	--	--	5.1293	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	7.76E-01	--	--	--	0.7181	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	7.76E-01	--	--	--	--	--	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	
17	Excavation (Wet Conditions)	4	7.76E-01	--	--	--	--	--	2.0517	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	7.76E-01	--	--	--	--	--	--	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	7.76E-01	--	--	--	--	--	--	1.3336	1.3336	1.3336	1.3336	1.3336	1.3336	--	--	--	--	--	--	
20	Headworks Structure	18	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	2.7698	2.7698	--	--	--	--	2.7698	
21	Headworks Channel Transition	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	1.6414	1.6414	--	--	--	--	
22	Hinged Bottom Gates	24	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>--</b>	<b>--</b>	<b>5.1293</b>	<b>0.7181</b>	<b>0.7181</b>	<b>0.7181</b>	<b>2.3595</b>	<b>2.3595</b>	<b>2.3595</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>4.4112</b>	<b>3.0776</b>	<b>1.9491</b>	<b>1.9491</b>	<b>0.3078</b>	<b>0.3078</b>	<b>3.0776</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5129	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3336	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9233	--	--	
26	Pedestrian Bridge Span Installation	8	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7181	0.7181	
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.5129</b>	<b>1.3336</b>	<b>0.9233</b>	<b>0.7181</b>	<b>0.7181</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	2	7.76E-01	0.9233	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	7.76E-01	--	1.0259	1.0259	1.0259	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	2	7.76E-01	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.9233</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.9491</b>	<b>1.0259</b>	<b>0.9233</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>				<b>7.1810</b>	<b>3.8983</b>	<b>9.0276</b>	<b>3.5905</b>	<b>5.1293</b>	<b>4.2060</b>	<b>10.2586</b>	<b>9.3353</b>	<b>9.3353</b>	<b>8.6172</b>	<b>8.6172</b>	<b>13.9517</b>	<b>16.7215</b>	<b>21.1327</b>	<b>13.9517</b>	<b>14.7724</b>	<b>12.7206</b>	<b>12.5155</b>	<b>18.1577</b>

**Table L1-198. CO Emissions from Cor**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.5129	0.0005
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0062
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.8207	--	0.0012
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.8207</b>	<b>0.5129</b>	<b>0.0081</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	5.4371	--	--	--	--	--	--	--	--	0.0054
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0212
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0923
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0689
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0057
10	Riprap - Class 2	5.7448	5.7448	5.7448	--	--	--	--	--	--	0.1436
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0057
12	RSP Bedding Material	5.7448	--	--	--	--	--	--	--	--	0.1580
13	Erosion Control Seeding	--	--	--	0.4103	0.4103	--	--	--	--	0.0021
<b>09 - Channels and Canals</b>		<b>16.9267</b>	<b>5.7448</b>	<b>5.7448</b>	<b>0.4103</b>	<b>0.4103</b>	--	--	--	--	<b>0.5031</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	5.1293	--	0.0051
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0065
16	Construction Site Dewatering (Pumping)	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	--	--	0.0185
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0041
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0025
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0213
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0249
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0082
22	Hinged Bottom Gates	--	--	--	0.6155	0.6155	0.6155	0.6155	--	--	0.0074
<b>15 - Floodway Control and Diversion Structure</b>		<b>0.3078</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>5.1293</b>	--	<b>0.0985</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.5129	--	--	--	--	--	--	--	--	0.0005
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0027
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0005
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0029
<b>08 - Roads, Railroads, and Bridges</b>		<b>0.5129</b>	--	--	--	--	--	--	--	--	<b>0.0065</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0009
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0154
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0009
<b>19 - Buildings, Grounds, and Utilities</b>		--	--	--	--	--	--	--	--	--	<b>0.0172</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.2052	--	--	--	--	--	0.2052	--	0.0002
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
32	CMU Building Mechanical Equipment	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
33	Electrical Control Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
34	Electrical Power Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
35	Communication Equipment	--	--	--	--	--	0.4103	0.4103	--	--	0.0025
<b>20 -Permanent Operating Equipment</b>		--	<b>0.2052</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>2.0517</b>	<b>2.0517</b>	<b>0.2052</b>	--	<b>0.0273</b>
<b>GRAND TOTAL</b>		<b>17.7474</b>	<b>6.2577</b>	<b>7.6939</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>6.1552</b>	<b>0.5129</b>	<b>0.6607</b>

**Table L1-199. SOx Emissions from Construction Worker Commuting (Alternative 3)**

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																		
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	2	3.02E-03	0.0020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Concrete Demo	12	3.02E-03	--	0.0040	0.0040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	3	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	1	3.02E-03	0.0012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>02 - Relocations Total</b>				<b>0.0032</b>	<b>0.0040</b>	<b>0.0040</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	2	3.02E-03	0.0212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	23	3.02E-03	--	0.0072	0.0072	0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	45	3.02E-03	--	--	--	--	--	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	56	3.02E-03	--	--	--	--	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	0.0096	--	--	--	--	--	--
9	Earthen Backfill	28	3.02E-03	--	--	--	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	50	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224
11	Riprap - Class 3	4	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0112
12	RSP Bedding Material	55	3.02E-03	--	--	--	--	--	--	--	--	--	--	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224	0.0224
13	Erosion Control Seeding	10	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals Total</b>				<b>0.0212</b>	<b>0.0072</b>	<b>0.0072</b>	<b>0.0072</b>	<b>0.0096</b>	<b>0.0096</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0272</b>	<b>0.0479</b>	<b>0.0479</b>	<b>0.0703</b>	<b>0.0447</b>	<b>0.0447</b>	<b>0.0447</b>	<b>0.0447</b>	<b>0.0559</b>
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	2	3.02E-03	--	--	0.0200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	18	3.02E-03	--	--	--	0.0028	0.0028	0.0028	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	120	3.02E-03	--	--	--	--	--	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
17	Excavation (Wet Conditions)	4	3.02E-03	--	--	--	--	--	0.0080	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	7	3.02E-03	--	--	--	--	--	--	0.0028	0.0028	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	32	3.02E-03	--	--	--	--	--	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	--	--	--	--	--	--	--
20	Headworks Structure	18	3.02E-03	--	--	--	--	--	--	--	--	--	--	0.0108	0.0108	--	--	--	--	--	--	0.0108
21	Headworks Channel Transition	10	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	0.0064	0.0064	--	--	--	--	--
22	Hinged Bottom Gates	24	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>				--	--	<b>0.0200</b>	<b>0.0028</b>	<b>0.0028</b>	<b>0.0028</b>	<b>0.0092</b>	<b>0.0092</b>	<b>0.0092</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0172</b>	<b>0.0120</b>	<b>0.0076</b>	<b>0.0076</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0120</b>
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	2	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	0.0020	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles	4	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0052	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	1	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0036	--	--	--	--
26	Pedestrian Bridge Span Installation	8	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0028	0.0028	0.0028	0.0028
<b>08 - Roads, Railroads, and Bridges Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0020</b>	<b>0.0052</b>	<b>0.0036</b>	<b>0.0028</b>	<b>0.0028</b>	<b>0.0028</b>	<b>0.0028</b>
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	2	3.02E-03	0.0036	--	--	--	--	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Constructi	30	3.02E-03	--	0.0040	0.0040	0.0040	0.0040	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Bank	2	3.02E-03	--	--	--	--	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.0036</b>	<b>0.0040</b>	<b>0.0040</b>	<b>0.0040</b>	<b>0.0076</b>	<b>0.0040</b>	<b>0.0036</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	2	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	30	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	30	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	30	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	30	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	12	3.02E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>0.0280</b>	<b>0.0152</b>	<b>0.0351</b>	<b>0.0140</b>	<b>0.0200</b>	<b>0.0164</b>	<b>0.0399</b>	<b>0.0363</b>	<b>0.0363</b>	<b>0.0335</b>	<b>0.0335</b>	<b>0.0543</b>	<b>0.0651</b>	<b>0.0823</b>	<b>0.0543</b>	<b>0.0575</b>	<b>0.0495</b>	<b>0.0487</b>	<b>0.0707</b>

Table L1-199. SOx Emissions from Cc

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0020	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0032	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0032</b>	<b>0.0020</b>	<b>0.0000</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.0212	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0001
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0003
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.0224	0.0224	0.0224	--	--	--	--	--	--	0.0006
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0000
12	RSP Bedding Material	0.0224	--	--	--	--	--	--	--	--	0.0006
13	Erosion Control Seeding	--	--	--	0.0016	0.0016	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.0659</b>	<b>0.0224</b>	<b>0.0224</b>	<b>0.0016</b>	<b>0.0016</b>	--	--	--	--	<b>0.0020</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0200	--	0.0000
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0000
16	Construction Site Dewatering (Pumping)	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	--	--	0.0001
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0000
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0000
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0001
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0000
22	Hinged Bottom Gates	--	--	--	0.0024	0.0024	0.0024	0.0024	--	--	0.0000
	<b>15 - Floodway Control and Div</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0200</b>	--	<b>0.0004</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0020	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	0.0000
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0000
	<b>08 - Roads, Railro</b>	<b>0.0020</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0001
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0008	--	--	--	--	--	0.0008	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
32	CMU Building Mechanical Equipment	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
33	Electrical Control Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
34	Electrical Power Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
35	Communication Equipment	--	--	--	--	--	0.0016	0.0016	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0008</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0080</b>	<b>0.0080</b>	<b>0.0008</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>0.0691</b>	<b>0.0244</b>	<b>0.0300</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0240</b>	<b>0.0020</b>	<b>0.0026</b>

Table L1-200. PM10 Emissions from Construction Worker Commuting (Alternative 3)

#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	Maximum Daily Emissions, lbs/day																						
				15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug				
<b>02 - Relocations</b>																										
1	Mobilization and Demobilization	2	3.47E-01	0.2292	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	3.47E-01	--	0.4583	0.4583	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	3	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	3.47E-01	0.1375	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.3667</b>	<b>0.4583</b>	<b>0.4583</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																										
5	Mobilization and Demobilization	2	3.47E-01	2.4292	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	23	3.47E-01	--	0.8250	0.8250	0.8250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	45	3.47E-01	--	--	--	--	--	1.8334	1.8334	1.8334	1.8334	1.8334	1.8334	1.8334	1.8334	1.8334	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	56	3.47E-01	--	--	--	--	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	--	--	--	--	--	--	--	--	
9	Earthen Backfill	28	3.47E-01	--	--	--	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	50	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	
11	Riprap - Class 3	4	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2834	--	
12	RSP Bedding Material	55	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	2.5667	
13	Erosion Control Seeding	10	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>2.4292</b>	<b>0.8250</b>	<b>0.8250</b>	<b>0.8250</b>	<b>1.1000</b>	<b>1.1000</b>	<b>3.1167</b>	<b>3.1167</b>	<b>3.1167</b>	<b>3.1167</b>	<b>3.1167</b>	<b>5.5001</b>	<b>5.5001</b>	<b>8.0668</b>	<b>5.1334</b>	<b>5.1334</b>	<b>5.1334</b>	<b>5.1334</b>	<b>5.1334</b>	<b>5.1334</b>	<b>5.1334</b>	<b>6.4168</b>	
<b>15 - Floodway Control and Diversion Structures</b>																										
14	Mobilization and Demobilization	2	3.47E-01	--	--	2.2917	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	18	3.47E-01	--	--	--	0.3208	0.3208	0.3208	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	3.47E-01	--	--	--	--	--	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	
17	Excavation (Wet Conditions)	4	3.47E-01	--	--	--	--	--	0.9167	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	3.47E-01	--	--	--	--	--	--	0.3208	0.3208	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	3.47E-01	--	--	--	--	--	0.5958	0.5958	0.5958	0.5958	0.5958	0.5958	0.5958	--	--	--	--	--	--	--	--	--	--	
20	Headworks Structure	18	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	1.2375	1.2375	--	--	--	--	--	--	--	1.2375	--	
21	Headworks Channel Transition	10	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7333	0.7333	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	24	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>--</b>	<b>--</b>	<b>2.2917</b>	<b>0.3208</b>	<b>0.3208</b>	<b>0.3208</b>	<b>1.0542</b>	<b>1.0542</b>	<b>1.0542</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.7333</b>	<b>1.9709</b>	<b>1.3750</b>	<b>0.8708</b>	<b>0.8708</b>	<b>0.1375</b>	<b>0.1375</b>	<b>1.3750</b>				
<b>08 - Roads, Railroads, and Bridges</b>																										
23	Mobilization and Demobilization	2	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2292	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5958	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.4125	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	8	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3208	0.3208	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.2292</b>	<b>0.5958</b>	<b>0.4125</b>	<b>0.3208</b>	<b>0.3208</b>				
<b>19 - Buildings, Grounds, and Utilities</b>																										
27	Mobilization and Demobilization	2	3.47E-01	0.4125	--	--	--	--	0.4125	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	3.47E-01	--	0.4583	0.4583	0.4583	0.4583	0.4583	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	2	3.47E-01	--	--	--	--	0.4125	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.4125</b>	<b>0.4583</b>	<b>0.4583</b>	<b>0.4583</b>	<b>0.8708</b>	<b>0.4583</b>	<b>0.4125</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																										
30	Mobilization and Demobilization	2	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	3.47E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>				<b>3.2084</b>	<b>1.7417</b>	<b>4.0334</b>	<b>1.6042</b>	<b>2.2917</b>	<b>1.8792</b>	<b>4.5834</b>	<b>4.1709</b>	<b>4.1709</b>	<b>3.8501</b>	<b>3.8501</b>	<b>6.2334</b>	<b>7.4709</b>	<b>9.4418</b>	<b>6.2334</b>	<b>6.6001</b>	<b>5.6834</b>	<b>5.5917</b>	<b>8.1126</b>				

**Table L1-200. PM10 Emissions from C**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.2292	--	0.0002
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	--	0.0028
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.3667	--	--	0.0006
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.3667</b>	<b>0.2292</b>	--	<b>0.0036</b>
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	2.4292	--	--	--	--	--	--	--	--	--	0.0024
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.0095
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0413
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.0308
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.0026
10	Riprap - Class 2	2.5667	2.5667	2.5667	--	--	--	--	--	--	--	0.0642
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	0.0026
12	RSP Bedding Material	2.5667	--	--	--	--	--	--	--	--	--	0.0706
13	Erosion Control Seeding	--	--	--	0.1833	0.1833	--	--	--	--	--	0.0009
<b>09 - Cha</b>		<b>7.5626</b>	<b>2.5667</b>	<b>2.5667</b>	<b>0.1833</b>	<b>0.1833</b>	--	--	--	--	--	<b>0.2248</b>
<b>15 - Floodway Control and Diversion Structure</b>												
14	Mobilization and Demobilization	--	--	--	--	--	--	--	2.2917	--	--	0.0023
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	--	0.0029
16	Construction Site Dewatering (Pumping)	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	--	--	--	0.0083
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0018
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	0.0011
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0095
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0111
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0037
22	Hinged Bottom Gates	--	--	--	0.2750	0.2750	0.2750	0.2750	--	--	--	0.0033
<b>15 - Floodway Control and Div</b>		<b>0.1375</b>	<b>0.1375</b>	<b>0.1375</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>2.2917</b>	--	--	<b>0.0440</b>
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.2292	--	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0012
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0013
<b>08 - Roads, Railro</b>		<b>0.2292</b>	--	--	--	--	--	--	--	--	--	<b>0.0029</b>
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	--	0.0069
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	--	0.0004
<b>19 - Buildings, Grou</b>		--	--	--	--	--	--	--	--	--	--	<b>0.0077</b>
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.0917	--	--	--	--	--	0.0917	--	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	--	0.0028
32	CMU Building Mechanical Equipment	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	--	0.0028
33	Electrical Control Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	--	0.0028
34	Electrical Power Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	--	0.0028
35	Communication Equipment	--	--	--	--	--	0.1833	0.1833	--	--	--	0.0011
<b>20 -Permanent Ope</b>		--	<b>0.0917</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.9167</b>	<b>0.9167</b>	<b>0.0917</b>	--	--	<b>0.0122</b>
<b>GRAND TOTAL</b>		<b>7.9293</b>	<b>2.7959</b>	<b>3.4375</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>2.7500</b>	<b>0.2292</b>	--	<b>0.2952</b>





Table L1-201. PM2.5 Emissions from (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0616	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0007
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0985	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0985</b>	<b>0.0616</b>	<b>0.0010</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.6527	--	--	--	--	--	--	--	--	0.0007
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0025
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0111
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0083
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0007
10	Riprap - Class 2	0.6897	0.6897	0.6897	--	--	--	--	--	--	0.0172
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0007
12	RSP Bedding Material	0.6897	--	--	--	--	--	--	--	--	0.0190
13	Erosion Control Seeding	--	--	--	0.0493	0.0493	--	--	--	--	0.0002
	<b>09 - Cha</b>	<b>2.0321</b>	<b>0.6897</b>	<b>0.6897</b>	<b>0.0493</b>	<b>0.0493</b>	--	--	--	--	<b>0.0604</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.6158	--	0.0006
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0008
16	Construction Site Dewatering (Pumping)	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	--	--	0.0022
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0005
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0003
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0026
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0030
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0010
22	Hinged Bottom Gates	--	--	--	0.0739	0.0739	0.0739	0.0739	--	--	0.0009
	<b>15 - Floodway Control and Div</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.6158</b>	--	<b>0.0118</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0616	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0001
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0003
	<b>08 - Roads, Railro</b>	<b>0.0616</b>	--	--	--	--	--	--	--	--	<b>0.0008</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0018
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0001
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0021</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0246	--	--	--	--	--	0.0246	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
32	CMU Building Mechanical Equipment	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
33	Electrical Control Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
34	Electrical Power Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
35	Communication Equipment	--	--	--	--	--	0.0493	0.0493	--	--	0.0003
	<b>20 -Permanent Ope</b>	--	<b>0.0246</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.2463</b>	<b>0.2463</b>	<b>0.0246</b>	--	<b>0.0033</b>
<b>GRAND TOTAL</b>		<b>2.1306</b>	<b>0.7512</b>	<b>0.9237</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.7389</b>	<b>0.0616</b>	<b>0.0793</b>

**Table L1-202. GHG Emissions from Construction Worker Commuting (Alternative 3)**

#	Activity	Estimated Duration, Days	CO2 Emission Factor, (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	2	301.29	0.18
2	Fremont Weir Concrete Demo	12	301.29	2.17
3	Levee O&M Road Regrading (6" AB)	3	301.29	0.43
4	Temporary Electrical Power	1	301.29	0.05
<b>02 - Relocations Total</b>				<b>2.84</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	2	301.29	1.92
6	Clearing and Grubbing	23	301.29	7.48
7	Excavation (Wet Conditions)	45	301.29	32.54
8	Excavation/Grading (Dry Conditions)	56	301.29	24.30
9	Earthen Backfill	28	301.29	2.02
10	Riprap - Class 2	50	301.29	50.62
11	Riprap - Class 3	4	301.29	2.02
12	RSP Bedding Material	55	301.29	55.68
13	Erosion Control Seeding	10	301.29	0.72
<b>09 - Channels and Canals Total</b>				<b>177.30</b>
<b>15 - Floodway Control and Diversion Structures</b>				
14	Mobilization and Demobilization	2	301.29	1.81
15	Construction Site Dewatering (Temporary Co	18	301.29	2.28
16	Construction Site Dewatering (Pumping)	120	301.29	6.51
17	Excavation (Wet Conditions)	4	301.29	1.45
18	Sheet Pile Wall	7	301.29	0.89
19	Headworks Structure Concrete Piles	32	301.29	7.52
20	Headworks Structure	18	301.29	8.79
21	Headworks Channel Transition	10	301.29	2.89
22	Hinged Bottom Gates	24	301.29	2.60
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>34.73</b>
<b>08 - Roads, Railroads, and Bridges</b>				
23	Mobilization and Demobilization	2	301.29	0.18
24	Pedestrian Bridge Concrete Piles	4	301.29	0.94
25	Pedestrian Bridge Concrete Abutments and	1	301.29	0.16
26	Pedestrian Bridge Span Installation	8	301.29	1.01
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>2.30</b>
<b>19 - Buildings, Grounds, and Utilities</b>				
27	Mobilization and Demobilization	2	301.29	0.33
28	CMU Building and Earthwork Pad Constructi	30	301.29	5.42
29	Concrete Duct Bank	2	301.29	0.33
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>6.07</b>
<b>20 -Permanent Operating Equipment</b>				
30	Mobilization and Demobilization	2	301.29	0.07
31	Mechanical Hydraulic Cylinders & Housing	30	301.29	2.17
32	CMU Building Mechanical Equipment	30	301.29	2.17
33	Electrical Control Equipment CMU Building	30	301.29	2.17
34	Electrical Power Equipment CMU Building	30	301.29	2.17
35	Communication Equipment	12	301.29	0.87
<b>20 -Permanent Operating Equipment Total</b>				<b>9.62</b>
<b>GRAND TOTAL</b>				<b>232.85</b>

## Haul Truck Exhaust Emissions Summary

**Table L1-203. Maximum Daily Haul Truck Emissions (Alternative 3)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.48	13.99	2.95	0.06	1.65	0.50
09 - Channels and Canals	7.89	230.15	48.52	0.99	27.08	8.25
15 - Floodway Control and Diversion Structures	0.32	9.30	1.96	0.04	1.09	0.33
08 - Roads, Railroads, and Bridges	0.09	2.72	0.57	0.01	0.32	0.10
19 - Buildings, Grounds, and Utilities	0.11	3.26	0.69	0.01	0.38	0.12
20 -Permanent Operating Equipment	0.02	0.49	0.10	0.00	0.06	0.02
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>8.21</b>	<b>239.45</b>	<b>50.48</b>	<b>1.04</b>	<b>28.18</b>	<b>8.58</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-204. Annual Haul Truck Emissions (Alternative 3)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.03	0.01	0.00	0.00	0.00	11.13
09 - Channels and Canals	0.17	5.09	1.07	0.02	0.60	0.18	2,103.72
15 - Floodway Control and Diversion Structures	0.00	0.12	0.03	0.00	0.01	0.00	51.59
08 - Roads, Railroads, and Bridges	0.00	0.00	0.00	0.00	0.00	0.00	1.24
19 - Buildings, Grounds, and Utilities	0.00	0.01	0.00	0.00	0.00	0.00	2.09
20 -Permanent Operating Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.20
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.18</b>	<b>5.25</b>	<b>1.11</b>	<b>0.02</b>	<b>0.62</b>	<b>0.19</b>	<b>2,169.97</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

Table L1-205. ROG Emissions from Haul Trucks (Alternative 3)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum															
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul			
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	-	-	10	21	2	0.1207	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	470	CY	60	22	12	0.1207	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1207	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	-	-	106	21	2	0.1207	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	88	ACR	880	22	23	0.1207	--	0.22	0.22	0.22	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--		
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
11	Riprap - Class 3	3,600	TN	334	66	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	3.23	3.23		
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>0.30</b>	<b>0.22</b>	<b>0.22</b>	--	--	--	--	--	--	--	--	--	--	<b>3.23</b>	<b>3.23</b>	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	-	-	48	21	2	0.1207	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1207	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1207	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1207	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1207	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1207	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,080	CY	616	35	18	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	-	-	20	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	-	-	22	21	2	0.1207	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.1207	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	120	CY	24	35	2	0.1207	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	--	--	--	<b>0.11</b>	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	-	-	6	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>0.39</b>	<b>0.25</b>	<b>0.39</b>	--	<b>0.11</b>	--	<b>0.06</b>	--	--	--	--	--	--	<b>3.23</b>	<b>3.55</b>	

Table L1-205. ROG Emissions from Haul T

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.48	--	0.0007
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.48	0.03	<b>0.0009</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0026
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	--	--	--	--	--	0.0797	
11	Riprap - Class 3	--	--	--	--	--	--	1.47	--	--	--	--	--	--	--	--	0.0029
12	RSP Bedding Material	3.23	3.23	3.23	3.23	3.23	3.23	3.23	--	--	--	--	--	--	--	--	0.0889
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		6.42	6.42	6.42	6.42	6.42	7.89	6.72	3.19	3.19	--	--	--	--	--	--	<b>0.1744</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.32	--	--	--	--	--	0.32	--	--	--	--	--	--	--	--	0.0029
21	Headworks Channel Transition	--	0.26	0.26	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a
		0.32	0.26	0.26	--	--	0.32	--	--	--	--	--	--	--	0.13	--	<b>0.0043</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	0.06	--	0.09	--	--	0.06	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0002</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>6.74</b>	<b>6.73</b>	<b>6.68</b>	<b>6.52</b>	<b>6.42</b>	<b>8.21</b>	<b>6.77</b>	<b>3.21</b>	<b>3.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.63</b>	<b>0.03</b>	<b>0.1799</b>

**Table L1-206. NOx Emissions from Haul Trucks (Alternative 3)**

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Ma											
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul
<b>02 - Relocations</b>																			
1	Mobilization and Demobilization	-	-	10	21	2	3.5212	0.82	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	470	CY	60	22	12	3.5212	--	0.85	0.85	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	100	LF	n/a	n/a	1	3.5212	n/a	--	--	--	--	--	--	--	--	--	--	--
<b>02 - Relocations Total</b>								<b>0.82</b>	<b>0.85</b>	<b>0.85</b>	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																			
5	Mobilization and Demobilization	-	-	106	21	2	3.5212	8.64	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	88	ACR	880	22	23	3.5212	--	6.53	6.53	6.53	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	n/a	--
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	n/a	--
9	Earthen Backfill	27,510	CY	n/a	n/a	28	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	--	--
10	Riprap - Class 2	98,070	TN	9,082	66	50	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
11	Riprap - Class 3	3,600	TN	334	66	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
12	RSP Bedding Material	109,330	TN	10,124	66	55	3.5212	--	--	--	--	--	--	--	--	--	--	--	94.31
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals Total</b>								<b>8.64</b>	<b>6.53</b>	<b>6.53</b>	--	--	--	--	--	--	--	--	<b>94.31</b>
<b>15 - Floodway Control and Diversion Structures</b>																			
14	Mobilization and Demobilization	-	-	48	21	2	3.5212	--	--	3.91	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	3.5212	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	3.5212	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	3.5212	--	--	--	--	--	n/a	--	--	--	--	--	--
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	3.5212	--	--	--	--	--	--	--	n/a	n/a	--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	3.5212	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a
20	Headworks Structure	3,080	CY	616	35	18	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition	1,370	CY	274	35	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>3.91</b>	--	--	--	--	--	--	--	--	<b>--</b>
<b>08 - Roads, Railroads, and Bridges</b>																			
23	Mobilization and Demobilization	-	-	20	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																			
27	Mobilization and Demobilization	-	-	22	21	2	3.5212	1.79	--	--	--	--	--	1.79	--	--	--	--	--
28	CMU Building	1	EA	n/a	n/a	30	3.5212	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--
29	Concrete Duct Banc	120	CY	24	35	2	3.5212	--	--	--	--	3.26	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.26</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>20 -Permanent Operating Equipment</b>																			
30	Mobilization and Demobilization	-	-	6	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	-	-	n/a	n/a	12	3.5212	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>11.25</b>	<b>7.39</b>	<b>11.30</b>	<b>--</b>	<b>3.26</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>94.31</b>

Table L1-206. NOx Emissions from Haul Tr

#	Activity	Maximum Daily Emissions, lbs/day															Annual Emissions, tpy	
		8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct		21-Oct
<b>02 - Relocations</b>																		
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.0008
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0051
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.99	--	0.0210
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.99	0.82	<b>0.0269</b>
<b>09 - Channels and Canals</b>																		
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	8.64	--	--	--	--	--	--	--	0.0086
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0751
7	Excavation (Wet Conditions)	n/a	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	--	93.06	93.06	93.06	93.06	93.06	93.06	93.06	93.06	93.06	--	--	--	--	--	--	2.3265
11	Riprap - Class 3	--	--	--	--	--	--	42.78	--	--	--	--	--	--	--	--	--	0.0856
12	RSP Bedding Material	94.31	94.31	94.31	94.31	94.31	94.31	94.31	94.31	--	--	--	--	--	--	--	--	2.5935
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		94.31	187.37	187.37	187.37	187.37	187.37	230.15	196.01	93.06	93.06	--	--	--	--	--	--	<b>5.0893</b>
<b>15 - Floodway Control and Diversion Structures</b>																		
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.91	--	0.0039
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	9.30	9.30	--	--	--	--	9.30	--	--	--	--	--	--	--	--	--	0.0837
21	Headworks Channel Transition	--	--	7.44	7.44	--	--	--	--	--	--	--	--	--	--	--	--	0.0372
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		9.30	9.30	7.44	7.44	--	--	9.30	--	--	--	--	--	--	--	3.91	--	<b>0.1248</b>
<b>08 - Roads, Railroads, and Bridges</b>																		
23	Mobilization and Demobilization	--	--	1.63	--	--	--	--	1.63	--	--	--	--	--	--	--	--	0.0016
24	Pedestrian Bridge Concrete Piles	--	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	2.72	--	--	--	--	--	--	--	--	--	--	--	0.0014
26	Pedestrian Bridge Span Installation	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	n/a
		--	--	1.63	--	2.72	--	--	1.63	--	--	--	--	--	--	--	--	<b>0.0030</b>
<b>19 - Buildings, Grounds, and Utilities</b>																		
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0018
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0051</b>
<b>20 -Permanent Operating Equipment</b>																		
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.49	--	--	--	--	--	0.49	--	0.0005
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	--	0.49	--	--	--	--	--	0.49	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		<b>103.61</b>	<b>196.67</b>	<b>196.44</b>	<b>194.81</b>	<b>190.09</b>	<b>187.37</b>	<b>239.45</b>	<b>197.64</b>	<b>93.55</b>	<b>93.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>18.40</b>	<b>0.82</b>	<b>5.2496</b>



Table L1-207. CO Emissions from Haul Trucks (Alternative 3)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum															
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul			
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	-	-	10	21	2	0.7423	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	470	CY	60	22	12	0.7423	--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.7423	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	-	-	106	21	2	0.7423	1.82	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	88	ACR	880	22	23	0.7423	--	1.38	1.38	1.38	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.7423	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a		
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.7423	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a		
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.7423	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--		
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
11	Riprap - Class 3	3,600	TN	334	66	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	19.88	19.88		
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>1.82</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	<b>19.88</b>	<b>19.88</b>	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	-	-	48	21	2	0.7423	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co)	21,000	SF	n/a	n/a	18	0.7423	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.7423	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.7423	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.7423	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.7423	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,080	CY	616	35	18	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	1.96		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.82</b>	--	--	--	--	--	--	--	--	--	--	--	<b>1.96</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	-	-	20	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	-	-	22	21	2	0.7423	0.38	--	--	--	--	--	0.38	--	--	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.7423	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	120	CY	24	35	2	0.7423	--	--	--	--	0.69	--	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.38</b>	--	--	--	<b>0.69</b>	--	<b>0.38</b>	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	-	-	6	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>2.37</b>	<b>1.56</b>	<b>2.38</b>	--	<b>0.69</b>	--	<b>0.38</b>	--	--	--	--	--	--	--	<b>19.88</b>	<b>21.84</b>

Table L1-207. CO Emissions from Haul Tru

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.0002
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0011
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	--	0.0044
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	0.17	<b>0.0057</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	1.82	--	--	--	--	--	--	--	--	0.0018
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0158
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	19.62	19.62	19.62	19.62	19.62	19.62	19.62	19.62	19.62	--	--	--	--	--	0.4905	
11	Riprap - Class 3	--	--	--	--	--	9.02	--	--	--	--	--	--	--	--	--	0.0180
12	RSP Bedding Material	19.88	19.88	19.88	19.88	19.88	19.88	19.88	--	--	--	--	--	--	--	--	0.5468
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>48.52</b>	<b>41.32</b>	<b>19.62</b>	<b>19.62</b>	--	--	--	--	--	--	<b>1.0730</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	--	0.0008
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	1.96	--	--	--	--	1.96	--	--	--	--	--	--	--	--	--	0.0176
21	Headworks Channel Transition	--	1.57	1.57	--	--	--	--	--	--	--	--	--	--	--	--	0.0078
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>1.96</b>	<b>1.57</b>	<b>1.57</b>	--	--	<b>1.96</b>	--	--	--	--	--	--	--	<b>0.82</b>	--	<b>0.0263</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.34	--	--	--	--	0.34	--	--	--	--	--	--	--	--	0.0003
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	0.0003
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.34</b>	--	<b>0.57</b>	--	--	<b>0.34</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0011</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.10	--	--	--	--	--	0.10	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	<b>0.10</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>41.46</b>	<b>41.42</b>	<b>41.07</b>	<b>40.07</b>	<b>39.50</b>	<b>50.48</b>	<b>41.67</b>	<b>19.72</b>	<b>19.62</b>	--	--	--	--	<b>3.88</b>	<b>0.17</b>	<b>1.1067</b>

Table L1-208. SOx Emissions from Haul Trucks (Alternative 3)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum																
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul				
<b>02 - Relocations</b>																								
1	Mobilization and Demobilization	-	-	10	21	2	0.0152	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--			
2	Fremont Weir Demo	470	CY	60	22	12	0.0152	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--			
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.0152	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>02 - Relocations Total</b>								<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																								
5	Mobilization and Demobilization	-	-	106	21	2	0.0152	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--			
6	Clearing and Grubbing	88	ACR	880	22	23	0.0152	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--			
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a			
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a			
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--			
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
11	Riprap - Class 3	3,600	TN	334	66	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.0152	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41			
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals Total</b>								<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41		
<b>15 - Floodway Control and Diversion Structures</b>																								
14	Mobilization and Demobilization	-	-	48	21	2	0.0152	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.0152	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.0152	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.0152	--	--	--	--	--	--	n/a	--	--	--	--	--	--	--			
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.0152	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--			
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.0152	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
20	Headworks Structure	3,080	CY	616	35	18	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04			
21	Headworks Channel Transition	1,370	CY	274	35	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	0.04		
<b>08 - Roads, Railroads, and Bridges</b>																								
23	Mobilization and Demobilization	-	-	20	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																								
27	Mobilization and Demobilization	-	-	22	21	2	0.0152	0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--			
28	CMU Building	1	EA	n/a	n/a	30	0.0152	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	120	CY	24	35	2	0.0152	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization and Demobilization	-	-	6	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	-	-	n/a	n/a	12	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
<b>GRAND TOTAL</b>								<b>0.05</b>	<b>0.03</b>	<b>0.05</b>	--	<b>0.01</b>	--	<b>0.01</b>	--	--	--	--	--	--	<b>0.41</b>	<b>0.45</b>		

Table L1-208. SOx Emissions from Haul Tr

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.00	<b>0.0001</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	--	--	--	--	--	0.0101	
11	Riprap - Class 3	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	0.0004	
12	RSP Bedding Material	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	0.0112	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a	
		<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.99</b>	<b>0.85</b>	<b>0.40</b>	<b>0.40</b>	--	--	--	--	--	<b>0.0220</b>	
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	0.0000
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
20	Headworks Structure	0.04	--	--	--	--	0.04	--	--	--	--	--	--	--	--	0.0004	
21	Headworks Channel Transition	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	0.0002	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a	
		<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.04</b>	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.0005</b>	
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.01	--	--	--	--	0.01	--	--	--	--	--	--	--	0.0000	
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	n/a	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	0.0000	
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	n/a	
		--	<b>0.01</b>	--	<b>0.01</b>	--	--	<b>0.01</b>	--	--	--	--	--	--	--	<b>0.0000</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000	
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a	
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	n/a	
		--	--	--	--	--	--	--	<b>0.00</b>	--	--	--	--	--	<b>0.00</b>	<b>0.0000</b>	
<b>GRAND TOTAL</b>		<b>0.85</b>	<b>0.85</b>	<b>0.84</b>	<b>0.82</b>	<b>0.81</b>	<b>1.04</b>	<b>0.85</b>	<b>0.40</b>	<b>0.40</b>	--	--	--	--	<b>0.08</b>	<b>0.00</b>	<b>0.0227</b>

**Table L1-209. PM10 Emissions from Haul Trucks (Alternative 3)**

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.4144	0.10	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	470	CY	60	22	12	0.4144	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.4144	n/a	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.4144	1.02	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	88	ACR	880	22	23	0.4144	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.4144	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.4144	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.4144	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--		
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
11	Riprap - Class 3	3,600	TN	334	66	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.4144	--	--	--	--	--	--	--	--	--	--	--	11.10	11.10		
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>1.02</b>	<b>0.77</b>	<b>0.77</b>	--	--	--	--	--	--	--	--	--	<b>11.10</b>	<b>11.10</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.4144	--	--	0.46	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.4144	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.4144	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.4144	--	--	--	--	--	n/a	--	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.4144	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.4144	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,080	CY	616	35	18	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	1.09		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								--	--	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--	<b>1.09</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.4144	0.21	--	--	--	--	--	--	0.21	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.4144	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	120	CY	24	35	2	0.4144	--	--	--	--	0.38	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.21</b>	--	--	--	<b>0.38</b>	--	<b>0.21</b>	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>GRAND TOTAL</b>								<b>1.32</b>	<b>0.87</b>	<b>1.33</b>	--	<b>0.38</b>	--	<b>0.21</b>	--	--	--	--	--	--	<b>11.10</b>	<b>12.19</b>

Table L1-209. PM10 Emissions from Haul 1

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.0001
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	--	0.0025
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	0.10	<b>0.0032</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	1.02	--	--	--	--	--	--	--	--	0.0010
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0088
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	--	--	--	--	--	0.2738	
11	Riprap - Class 3	--	--	--	--	--	5.03	--	--	--	--	--	--	--	--	--	0.0101
12	RSP Bedding Material	11.10	11.10	11.10	11.10	11.10	11.10	11.10	--	--	--	--	--	--	--	--	0.3052
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		22.05	22.05	22.05	22.05	22.05	27.08	23.07	10.95	10.95	--	--	--	--	--	--	<b>0.5989</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	0.0005
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	1.09	--	--	--	--	1.09	--	--	--	--	--	--	--	--	--	0.0098
21	Headworks Channel Transition	--	0.88	0.88	--	--	--	--	--	--	--	--	--	--	--	--	0.0044
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		1.09	0.88	0.88	--	--	1.09	--	--	--	--	--	--	--	0.46	--	<b>0.0147</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.19	--	--	--	--	0.19	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	0.19	--	0.32	--	--	0.19	--	--	--	--	--	--	--	--	<b>0.0004</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	--	--	--	--	0.06	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.06	--	--	--	--	--	0.06	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>23.14</b>	<b>23.12</b>	<b>22.93</b>	<b>22.37</b>	<b>22.05</b>	<b>28.18</b>	<b>23.26</b>	<b>11.01</b>	<b>10.95</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.16</b>	<b>0.10</b>	<b>0.6178</b>

**Table L1-210. PM2.5 Emissions from Haul Trucks (Alternative 3)**

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.1262	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	470	CY	60	22	12	0.1262	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1262	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.1262	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	88	ACR	880	22	23	0.1262	--	0.23	0.23	0.23	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.1262	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.1262	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.1262	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	3,600	TN	334	66	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	3.38	3.38	
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>0.31</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	<b>3.38</b>	<b>3.38</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.1262	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1262	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1262	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1262	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1262	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1262	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,080	CY	616	35	18	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33	
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	<b>0.33</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.1262	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	0.1262	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	120	CY	24	35	2	0.1262	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.12</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>0.40</b>	<b>0.26</b>	<b>0.40</b>	<b>--</b>	<b>0.12</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.38</b>	<b>3.71</b>	

Table L1-210. PM2.5 Emissions from Haul

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	0.0008
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.03	<b>0.0010</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	0.31	--	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0027
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	--	--	--	--	--	0.0834	
11	Riprap - Class 3	--	--	--	--	--	1.53	--	--	--	--	--	--	--	--	--	0.0031
12	RSP Bedding Material	3.38	3.38	3.38	3.38	3.38	3.38	3.38	--	--	--	--	--	--	--	--	0.0929
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		6.71	6.71	6.71	6.71	6.71	8.25	7.02	3.33	3.33	--	--	--	--	--	--	<b>0.1824</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.33	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	0.0030
21	Headworks Channel Transition	--	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		0.33	0.27	0.27	--	--	0.33	--	--	--	--	--	--	--	0.14	--	<b>0.0045</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	0.06	--	0.10	--	--	0.06	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0002</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>7.05</b>	<b>7.04</b>	<b>6.98</b>	<b>6.81</b>	<b>6.71</b>	<b>8.58</b>	<b>7.08</b>	<b>3.35</b>	<b>3.33</b>	--	--	--	--	<b>0.66</b>	<b>0.03</b>	<b>0.1881</b>



Table L1-211. GHG Emissions from Haul Trucks (Alternative 3)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	CO2 Emission Factor (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	-	-	10	21	2	1,604.39	0.34
2	Fremont Weir Demo	470	CY	60	22	12	1,604.39	2.12
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	1,604.39	8.68
4	Temporary Electrical Power	100	LF	n/a	n/a	1	1,604.39	n/a
<b>02 - Relocations Total</b>								<b>11.13</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	-	-	106	21	2	1,604.39	3.57
6	Clearing and Grubbing	88	ACR	880	22	23	1,604.39	31.06
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	1,604.39	n/a
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	1,604.39	n/a
9	Earthen Backfill	27,510	CY	n/a	n/a	28	1,604.39	n/a
10	Riprap - Class 2	98,070	TN	9,082	66	50	1,604.39	961.69
11	Riprap - Class 3	3,600	TN	334	66	4	1,604.39	35.37
12	RSP Bedding Material	109,330	TN	10,124	66	55	1,604.39	1,072.03
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	1,604.39	n/a
<b>09 - Channels and Canals Total</b>								<b>2,103.72</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization	-	-	48	21	2	1,604.39	1.62
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	1,604.39	n/a
16	Construction Site Dewatering(Pumping)	-	-	n/a	n/a	120	1,604.39	n/a
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	1,604.39	n/a
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	1,604.39	n/a
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	1,604.39	n/a
20	Headworks Structure	3,080	CY	616	35	18	1,604.39	34.59
21	Headworks Channel Transition	1,370	CY	274	35	10	1,604.39	15.39
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	1,604.39	n/a
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>51.59</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization	-	-	20	21	2	1,604.39	0.67
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	1,604.39	n/a
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	1,604.39	0.56
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	1,604.39	n/a
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>1.24</b>
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization	-	-	22	21	2	1,604.39	0.74
28	CMU Building	1	EA	n/a	n/a	30	1,604.39	n/a
29	Concrete Duct Banc	120	CY	24	35	2	1,604.39	1.35
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>2.09</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization	-	-	6	21	2	1,604.39	0.20
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	1,604.39	n/a
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	1,604.39	n/a
33	Electrical Control Equipment CMUBuilding	-	-	n/a	n/a	30	1,604.39	n/a
34	Electrical Power Equipment CMUBuilding	-	-	n/a	n/a	30	1,604.39	n/a
35	Communication Equipment	-	-	n/a	n/a	12	1,604.39	n/a
<b>20 -Permanent Operating Equipment Total</b>								<b>0.20</b>
<b>GRAND TOTAL</b>								<b>2,169.97</b>

Table L1-212. PM10 Emissions Summary from Fugitive Dust (Alternative 3)

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	n/a																					
	Material Handling	n/a																					
	Grading	n/a																					
	Bulldozing	n/a																					
	Unpaved Road Dust	n/a																					
	Paved Road Dust	n/a																					
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																						
	Material Handling		0.13	0.13																			
	Grading	n/a	n/a																				
	Bulldozing	n/a	n/a																				
	Unpaved Road Dust	n/a	n/a																				
	Paved Road Dust	n/a	n/a																				
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																						
	Material Handling	n/a																					
	Grading	n/a																					
	Bulldozing	n/a																					
	Unpaved Road Dust	n/a																					
	Paved Road Dust	n/a																					
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	n/a																					
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																						
	Material Handling	n/a	n/a	n/a																			
	Grading		1.06	1.06	1.06																		
	Bulldozing	n/a	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a	n/a																			
	Paved Road Dust	n/a	n/a	n/a																			
	<b>Clearing and Grubbing Subtotal</b>	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust							220.41	220.41	220.41	220.41	220.41	220.41	220.41	220.41	220.41							
	Paved Road Dust																						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	<b>220.41</b>	--	--	--	--	--	--	--

**Table L1-212. PM10 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89								
	Grading					15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91								
	Bulldozing					7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05								
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust																						
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	<b>24.84</b>	--	--	--	--	--	--	--	--
9	Earthen Backfill																						
	Material Handling								0.18	0.18	0.18	0.18	0.18										
	Grading								0.53	0.53	0.53	0.53	0.53										
	Bulldozing								2.35	2.35	2.35	2.35	2.35										
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a										
	Paved Road Dust																						
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	--	<b>3.06</b>	<b>3.06</b>	<b>3.06</b>	<b>3.06</b>	<b>3.06</b>	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2																						
	Material Handling														3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>
11	Riprap - Class 3																						
	Material Handling																				1.65		
	Grading																				n/a		
	Bulldozing																				n/a		
	Unpaved Road Dust																				n/a		
	Paved Road Dust																				n/a		
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.65</b>	--	--
12	RSP Bedding Material																						
	Material Handling														3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>09 - Channels and Canals Total</b>	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>24.84</b>	<b>24.84</b>	<b>248.30</b>	<b>248.30</b>	<b>248.30</b>	<b>248.30</b>	<b>248.30</b>	<b>248.54</b>	<b>248.54</b>	<b>251.84</b>	<b>6.60</b>	<b>6.60</b>	<b>6.60</b>	<b>6.60</b>	<b>8.24</b>	<b>6.60</b>	<b>3.30</b>	<b>3.30</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						

Table L1-212. PM10 Emissions Summary from Fugitive Dust (Alternative 3)

		PM10 Daily Emissions Summary, lbs/day																					
#	Activity	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							112.65															
	Paved Road Dust																						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>112.65</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust								n/a	n/a													
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling													n/a	n/a						n/a		
	Grading													n/a	n/a						n/a		
	Bulldozing													n/a	n/a						n/a		
	Unpaved Road Dust													n/a	n/a						n/a		
	Paved Road Dust													n/a	n/a						n/a		
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling															n/a	n/a						
	Grading															n/a	n/a						
	Bulldozing															n/a	n/a						
	Unpaved Road Dust															n/a	n/a						
	Paved Road Dust															n/a	n/a						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	<b>112.65</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization																						
	Material Handling															n/a					n/a		
	Grading															n/a					n/a		
	Bulldozing															n/a					n/a		
	Unpaved Road Dust															n/a					n/a		

Table L1-212. PM10 Emissions Summary from Fugitive Dust (Alternative 3)

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																					n/a	
	Grading																					n/a	
	Bulldozing																					n/a	
	Unpaved Road Dust																					n/a	
	Paved Road Dust																						
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																					n/a	n/a
	Grading																					n/a	n/a
	Bulldozing																					n/a	n/a
	Unpaved Road Dust																					n/a	n/a
	Paved Road Dust																						
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19 - Buildings, Grounds, and Utilities																							
27	Mobilization and Demobilization																						
	Material Handling	n/a											n/a										
	Grading	n/a											n/a										
	Bulldozing	n/a											n/a										
	Unpaved Road Dust	n/a											n/a										
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a															
	Grading		2.12	2.12	2.12	2.12	2.12	2.12															
	Bulldozing		2.35	2.35	2.35	2.35	2.35	2.35															
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a															
	Paved Road Dust																						
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	4.47	4.47	4.47	4.47	4.47	4.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	4.47	4.47	4.47	4.47	4.47	4.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20 -Permanent Operating Equipment																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-212. PM10 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	5.66	5.66	5.53	29.31	29.31	360.96	248.30	248.30	248.30	248.30	248.54	248.54	251.84	6.60	6.60	6.60	6.60	8.24	6.60	3.30	3.30

**Table L1-212. PM10 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust							
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a	n/a	n/a
	Grading					0.53	n/a	0.00
	Bulldozing					n/a	n/a	n/a
	Unpaved Road Dust					n/a	n/a	n/a
	Paved Road Dust							
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust							
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling						n/a	n/a
	Grading						n/a	0.01
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust							
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
7	Excavation (Wet Conditions)							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust							4.95
	Paved Road Dust							
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>4.95</b>

**Table L1-212. PM10 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.05
	Grading							0.45
	Bulldozing							0.20
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.69</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.01
	Bulldozing							0.03
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.04</b>
10	Riprap - Class 2							
	Material Handling							0.08
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.08</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.09
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.09</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust							n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>5.88</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a



**Table L1-212. PM10 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
	<b>Construction Site Dewatering (Temporary Cofferdam) Sul</b>	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.20
	Paved Road Dust							
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.20</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	<b>0.20</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a

**Table L1-212. PM10 Emissions Summary from Fugitive**

#	Activity	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
	Paved Road Dust							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.03
	Bulldozing							0.04
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	--	--	--	--	--	<b>0.07</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	--	--	--	--	--	<b>0.07</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--

**Table L1-212. PM10 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust							
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	--	--	--	<b>0.53</b>	--	<b>6.14</b>

**Table L1-213. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																							
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep		
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization																								
	Material Handling	n/a																							
	Grading	n/a																							
	Bulldozing	n/a																							
	Unpaved Road Dust	n/a																							
	Paved Road Dust	n/a																							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo																								
	Material Handling		0.02	0.02																					
	Grading	n/a	n/a																						
	Bulldozing	n/a	n/a																						
	Unpaved Road Dust	n/a	n/a																						
	Paved Road Dust	n/a	n/a																						
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)																								
	Material Handling																								
	Grading																								
	Bulldozing																								
	Unpaved Road Dust																								
	Paved Road Dust																								
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power																								
	Material Handling	n/a																							
	Grading	n/a																							
	Bulldozing	n/a																							
	Unpaved Road Dust	n/a																							
	Paved Road Dust	n/a																							
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization																								
	Material Handling	n/a																				n/a			
	Grading	n/a																				n/a			
	Bulldozing	n/a																				n/a			
	Unpaved Road Dust	n/a																				n/a			
	Paved Road Dust	n/a																				n/a			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing																								
	Material Handling	n/a	n/a	n/a																					
	Grading		0.11	0.11	0.11																				
	Bulldozing	n/a	n/a	n/a																					
	Unpaved Road Dust	n/a	n/a	n/a																					
	Paved Road Dust	n/a	n/a	n/a																					
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)																								
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a									
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust							22.04	22.04	22.04	22.04	22.04	22.04	22.04	22.04	22.04									
	Paved Road Dust							22.04	22.04	22.04	22.04	22.04	22.04	22.04	22.04	22.04									
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--			

**Table L1-213. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29								
	Grading					1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72								
	Bulldozing					3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87								
	Unpaved Road Dust				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust																						
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	--	--	--	--	--	--	--	
9	Earthen Backfill																						
	Material Handling								0.03	0.03	0.03	0.03	0.03										
	Grading								0.06	0.06	0.06	0.06	0.06										
	Bulldozing								1.29	1.29	1.29	1.29	1.29										
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a										
	Paved Road Dust																						
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	1.38	1.38	1.38	1.38	1.38	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2																						
	Material Handling														0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
11	Riprap - Class 3																						
	Material Handling																			0.25			
	Grading																			n/a			
	Bulldozing																			n/a			
	Unpaved Road Dust																			n/a			
	Paved Road Dust																			n/a			
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	
12	RSP Bedding Material																						
	Material Handling												0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
	Grading												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust												n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	--	
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>09 - Channels and Canals Total</b>	--	0.11	0.11	0.11	5.88	5.88	29.29	29.29	29.29	29.29	29.29	28.42	28.42	28.92	1.00	1.00	1.00	1.00	1.25	1.00	0.50	0.50
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling																			n/a			
	Grading																			n/a			
	Bulldozing																			n/a			
	Unpaved Road Dust																			n/a			
	Paved Road Dust																			n/a			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling				n/a	n/a	n/a																
	Grading				n/a	n/a	n/a																
	Bulldozing				n/a	n/a	n/a																
	Unpaved Road Dust				n/a	n/a	n/a																
	Paved Road Dust																						

**Table L1-213. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust																						
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust								11.27														
	Paved Road Dust																						
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust																						
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust																						
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling													n/a	n/a						n/a		
	Grading													n/a	n/a						n/a		
	Bulldozing													n/a	n/a						n/a		
	Unpaved Road Dust													n/a	n/a						n/a		
	Paved Road Dust																						
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling																n/a	n/a					
	Grading																n/a	n/a					
	Bulldozing																n/a	n/a					
	Unpaved Road Dust																n/a	n/a					
	Paved Road Dust																						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	--	11.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization																						
	Material Handling																n/a				n/a		
	Grading																n/a				n/a		
	Bulldozing																n/a				n/a		
	Unpaved Road Dust																n/a				n/a		

Table L1-213. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3)

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling		n/a	n/a	n/a	n/a	n/a	n/a															
	Grading		0.23	0.23	0.23	0.23	0.23	0.23															
	Bulldozing		1.29	1.29	1.29	1.29	1.29	1.29															
	Unpaved Road Dust		n/a	n/a	n/a	n/a	n/a	n/a															
	Paved Road Dust																						
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	1.52	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	1.52	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-213. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3)**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	1.65	1.65	1.63	7.40	7.40	40.56	29.29	29.29	29.29	29.29	28.42	28.42	28.92	1.00	1.00	1.00	1.00	1.25	1.00	0.50	0.50



**Table L1-213. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a	n/a	n/a
	Grading					0.06	n/a	0.00
	Bulldozing					n/a	n/a	n/a
	Unpaved Road Dust					n/a	n/a	n/a
	Paved Road Dust					n/a	n/a	n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling						n/a	n/a
	Grading						n/a	0.00
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
7	Excavation (Wet Conditions)							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	0.50
	Paved Road Dust						n/a	n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.50</b>

**Table L1-213. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.01
	Grading							0.05
	Bulldozing							0.11
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.16</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.02</b>
10	Riprap - Class 2							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust							n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>0.71</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a

**Table L1-213. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
	<b>Construction Site Dewatering (Temporary Cofferdam) Sul</b>	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.02
	Paved Road Dust							
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.02</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	<b>0.02</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a

**Table L1-213. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
	Paved Road Dust							
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	--	--	--	--	--	<b>0.02</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	--	--	--	--	--	<b>0.02</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--

**Table L1-213. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust							
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust							
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	--	--	--	<b>0.06</b>	--	<b>0.75</b>

**Alternative 3: West Side Small Gated Notch  
Fugitive Dust Emissions - Material Handling (Truck Loading/Unloading)**

Equation (AP-42, Chapter 13.2.4):

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$

where:

- E = emission factor, pound per ton
- k = particle size multiplier
- U = mean wind speed, miles per hour
- M = material moisture content, %

Average Wind Speed 8.59 mph

Source: MesoWest, Station KSMF (Sacramento International Airport), 2015 data. Site accessed October 27, 2016. mesowest.utah.edu.

k values

PM10	0.35
PM2.5	0.053

Material Moisture Content (%)

Spoils	12	Source: CalEEMod 2016.3.1 User's Guide; default values
Limestone	2.1	Source: AP-42, Table 13.2.4-1; various limestone products
Demolition	2	Source: CalEEMod 2016.3.1 User's Guide; default values

**Table L1-214. Material Handling Emissions (Alternative 3)**

Activity	Total Daily		Total Daily		Type	PM10 EF, PM2.5 EF,		PM10, PM2.5,		PM10, PM2.5,	
	Output, cy/day	Quantity, cy/year	Output, ton/day	Quantity, ton/year		lb/ton	lb/ton	lbs/day	lbs/day	tpy	tpy
<b>02 - Relocations</b>											
Fremont Weir Demo	40	470	50	588	Demolition	2.26E-03	3.43E-04	0.1	0.0	0.00	0.00
<b>09 - Channels and Canals</b>											
Excavation/Grading (Dry Conditions)	10,500	581,540	13,125	726,925	Spoils	1.84E-04	2.79E-05	1.9	0.3	0.05	0.01
Earthen Backfill	1,000	27,510	1,250	34,388	Spoils	1.84E-04	2.79E-05	0.2	0.0	0.00	0.00
Riprap - Class 2	n/a	n/a	2,000	98,070	Limestone	2.11E-03	3.20E-04	3.3	0.5	0.08	0.01
Riprap - Class 3	n/a	n/a	1,000	3,600	Limestone	2.11E-03	3.20E-04	1.6	0.2	0.00	0.00
RSP Bedding Material	n/a	n/a	2,000	109,330	Limestone	2.11E-03	3.20E-04	3.3	0.5	0.09	0.01
<b>09 - Channels and Canals Total</b>	<b>10,500</b>	<b>581,540</b>	<b>13,125</b>	<b>726,925</b>				<b>10.3</b>	<b>1.6</b>	<b>0.23</b>	<b>0.03</b>

Source: HDR, 2016. Draft Technical Memorandum: Constructability and Construction Considerations. Yolo Bypass Salmonid Habitat Restoration & Fish Passage Project - 10% Design. August 31.

**Note:**

Emissions assume that standard construction practice of watering is used.

Fremont weir demolition emissions assume that there is an additional "drop" from the mechanical dismemberment of the structure; method is consistent with CalEEMod 2016.3.1

No emissions assumed to occur with wet excavation activities because spoils would be waterlogged.

Density

1.25 tons per cubic yard

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Number of Drops

2 drops per truck      *(one drop at borrow site and one drop at dam site)*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

Conversion

2,000 pounds per ton

**Alternative 3: West Side Small Gated Notch  
Fugitive Dust Emissions - Grading**

Equations (AP-42, Chapter 11.9):

$$TSP = 0.040(S)^{2.5} \quad \text{and} \quad PM_{15} = 0.051(S)^{2.0}$$

where:

S = mean vehicle speed, miles per hour

Scaling Factors

PM10 0.60 (multiply the 15-micron equation by this fraction to determine emissions)  
PM2.5 0.031 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

PM10 1.54 lb/VMT  
PM2.5 0.17 lb/VMT

Mileage Calculation (CalEEMod 2016.3.1 User's Guide, Appendix A):

$$VMT = A_s/W_b \times 43,560 \left( \frac{sqft}{acre} \right) / 5,280 \left( \frac{ft}{mile} \right)$$

**Table L1-215. Maximum Daily Disturbed Area**

Equipment Type	Acres/8hr-day
Crawler Tractors	0.5
Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

**Table L1-216. Grading Emissions (Alternative 3)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>02 - Relocations</b>												
Levee O&M Road Regrading (6" AB)	12' Blade Grader	Graders	1	1	3	0.5	1.5	1.0	0.5	0.1	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	3	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	1	1	3	--	--	--	--	--	--	--
	16 CY 3 Axle Dump Truck	n/a - onroad	5	1	3	--	--	--	--	--	--	--
						<b>Levee O&amp;M Road Regrading (6" AB) Total</b>	<b>0.5</b>	<b>1.5</b>	<b>1.0</b>	<b>0.5</b>	<b>0.1</b>	<b>0.0</b>
<b>09 - Channels and Canals</b>												
Clearing and Grubbing	1.5 CY Front End Loader Crawler	Crawler Tractors	1	2	23	1.0	23.0	15.8	1.1	0.1	0.0	0.0
	Trailer Mounted Brush Chipper	Shredders	1	2	23	--	--	--	--	--	--	--
	Chainsaw	Chainsaws	1	2	23	--	--	--	--	--	--	--
	4000 gallon Water Truck	n/a - onroad	1	2	23	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	6	2	23	--	--	--	--	--	--	--
	16 CY 3 Axle Dump Truck	n/a - onroad	1	2	23	--	--	--	--	--	--	--
						<b>Clearing and Grubbing Total</b>	<b>1.0</b>	<b>23.0</b>	<b>15.8</b>	<b>1.1</b>	<b>0.1</b>	<b>0.0</b>
Excavation/Grading (Dry Conditions)	300 HP Dozer	Rubber Tired Dozers	1	3	56	1.5	84.0	57.8	1.6	0.2	0.0	0.0
	21 CY Scrapers	Scrapers	4	3	56	12.0	672.0	462.0	12.7	1.4	0.4	0.0
	12' Blade Grader	Graders	1	3	56	1.5	84.0	57.8	1.6	0.2	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	3	56	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	3	56	--	--	--	--	--	--	--
						<b>Excavation/Grading (Dry Conditions) Total</b>	<b>15.0</b>	<b>840.0</b>	<b>577.5</b>	<b>15.9</b>	<b>1.7</b>	<b>0.4</b>



**Table L1-216. Grading Emissions (Alternative 3)**

Activity	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	Graded Acres per Day	Total Graded Area (As)	VMT per year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
Earthen Backfill	300 HP Dozer	Rubber Tired Dozers	1	1	28	0.5	14.0	9.6	0.5	0.1	0.0	0.0
	4000 gallon Water Truck	n/a - onroad	1	1	28	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	28	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	3	1	28	--	--	--	--	--	--	--
<b>Earthen Backfill Total</b>						<b>0.5</b>	<b>14.0</b>	<b>9.6</b>	<b>0.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
<b>19 - Buildings, Grounds, and Utilities</b>												
CMU Building and Earthwork Pad Constructi	165 HP Dozer	Rubber Tired Dozers	1	1	30	0.5	15.0	10.3	0.5	0.1	0.0	0.0
	Scraper	Scrapers	1	1	30	1.0	30.0	20.6	1.1	0.1	0.0	0.0
	Motor Grader	Graders	1	1	30	0.5	15.0	10.3	0.5	0.1	0.0	0.0
	Compactor	Rollers	1	1	30	--	--	--	--	--	--	--
	4000 gallon Water Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
	10 TN Smooth Roller	Rollers	1	1	30	--	--	--	--	--	--	--
	Pickup Truck Conventional	n/a - onroad	7	1	30	--	--	--	--	--	--	--
	Concrete Pump Boom Truck Mounted	Pumps	1	1	30	--	--	--	--	--	--	--
	2.5" Dia. Concrete Vibrator	Plate Compactors	1	1	30	--	--	--	--	--	--	--
	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	1	30	--	--	--	--	--	--	--
	Concrete Mixer Truck	n/a - onroad	1	1	30	--	--	--	--	--	--	--
<b>CMU Building and Earthwork Pad Construction Total</b>						<b>2.0</b>	<b>60.0</b>	<b>41.3</b>	<b>2.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>

Blade Width  
12 feet

Scraper Speed  
7.1 mph (AP-42 default)

Conversions  
43,560 square feet per acre  
5,280 feet per mile  
2,000 pounds per ton

Dust Control  
61% reduction from watering at least 3 times per day  
Source: CalEEMod

**Alternative 3: West Side Small Gated Notch  
Fugitive Dust Emissions - Bulldozing**

Equations (AP-42, Chapter 11.9):

$$TSP = \frac{5.7(s)^{1.2}}{M^{1.3}} \quad \text{and} \quad PM_{15} = \frac{1.0(s)^{1.5}}{M^{1.4}}$$

where:

- s = silt content                      6.9 %              (AP-42, Table 11.9-3, Overburden)
- M = material moisture content      7.9 %              (AP-42, Table 11.9-3, Overburden)

Scaling Factors

- PM10              0.75 (multiply the 15-micron equation by this fraction to determine emissions)
- PM2.5            0.105 (multiply the TSP equation by this fraction to determine emissions)

Emission Factors

- PM10              0.75 lb/hr
- PM2.5            0.41 lb/hr

**Table L1-217. Bulldozing Emissions (Alternative 3)**

Activity	Crew / Equipment	Equipment Quantity per Crew	Crew/ Equipment Quantity	Estimated Duration, Days	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>								
Excavation/Grading (Dry Conditions)	300 HP Dozer	1	3	56	7.05	3.87	0.20	0.11
Earthen Backfill	300 HP Dozer	1	1	28	2.35	1.29	0.03	0.02
<b>19 - Buildings, Grounds, and Utilities</b>								
CMU Building and Earthwork Pad Construc	165 HP Dozer	1	1	30	2.35	1.29	0.04	0.02

Operating Schedule

8 hr/day

Conversion

2,000 pounds per ton

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

**Alternative 3: West Side Small Gated Notch  
Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)**

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	4.3 (CalEEMod default)
W, tons	180 loaded 74 unloaded

**Table L1-218. Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	3.76	0.38
Unloaded	2.52	0.25
Average	3.14	0.31

**Table L1-219. Unpaved Road Dust Emissions (Alternative 3)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	3,600	161,750	CY	45	180	8,088	220.4	22.0	5.0	0.5
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,460	CY	4	92	324	112.7	11.3	0.2	0.02

Notes:

Assumes payload of each truck is 100 tons.

Half of truck trips will be loaded and other half will be unloaded.

Only includes materials that will be transported to spoil site by dump trucks.

Distance to borrow area

2 miles (spoils site located within a 1-mile radius of the project access point(s) and it is an average of 1 mile travel distance from point of exc

Density

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

Prepared by: Gwen Pelletier; February 7, 2017  
 Reviewed by: XX, Date

### Alternative 3: West Side Small Gated Notch Fugitive Dust Emissions - Paved Road Dust (Haul Roads and Worker Commuting)

Equation (SP-42, Chapter 13.2.1):

where:

- E = particulate emission factor, lb/VMT
- k = particle size multiplier, lb/VMT
- sL = road surface silt loading (g/m<sup>2</sup>)
- W = average weight (tons) of the vehicles traveling the road

#### Variables

k (PM10)	0.0022 lb/VMT	
k (PM2.5)	0.00054 lb/VMT	
sL	0.1 g/m <sup>2</sup>	(CalEEMod 2016.3.1 default)
W	2.4 tons	(CalEEMod 2016.3.1 default)

#### Emission Factors

PM10	6.61E-04 lb/VMT
PM2.5	1.62E-04 lb/VMT

Note: Because construction would occur during dry season, no natural mitigation from precipitation was applied to emission

**Mitigated Offroad Exhaust Emissions Summary**

**Table L1-220. Maximum Daily Mitigated Offroad Construction Equipment Emissions (Alternative 3)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.60	13.08	13.94	0.05	0.21	0.10
09 - Channels and Canals	21.53	284.53	233.66	1.27	4.85	2.52
15 - Floodway Control and Diversion Structures	2.46	25.06	42.00	0.16	0.95	0.51
08 - Roads, Railroads, and Bridges	1.06	7.95	21.15	0.10	0.32	0.19
19 - Buildings, Grounds, and Utilities	1.30	11.64	34.58	0.11	0.46	0.26
20 -Permanent Operating Equipment	0.46	2.23	10.60	0.03	0.22	0.11
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>23.08</b>	<b>298.38</b>	<b>254.52</b>	<b>1.34</b>	<b>5.48</b>	<b>2.84</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-43%</i>	<i>-53%</i>	<i>-19%</i>	<i>-1%</i>	<i>-70%</i>	<i>-81%</i>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1-221. Annual Mitigated Offroad Construction Equipment Emissions (Alternative 3)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.05	0.10	0.00	0.00	0.00	37.44
09 - Channels and Canals	0.71	7.62	6.96	0.03	0.14	0.07	3,837.84
15 - Floodway Control and Diversion Structures	0.05	0.46	0.92	0.00	0.02	0.01	375.53
08 - Roads, Railroads, and Bridges	0.00	0.03	0.07	0.00	0.00	0.00	33.74
19 - Buildings, Grounds, and Utilities	0.01	0.12	0.44	0.00	0.00	0.00	130.16
20 -Permanent Operating Equipment	0.01	0.04	0.16	0.00	0.00	0.00	44.78
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.79</b>	<b>8.33</b>	<b>8.64</b>	<b>0.04</b>	<b>0.16</b>	<b>0.09</b>	<b>4,459.50</b>
<i>Percent Reduction (Compared to Unmitigated)</i>	<i>-46%</i>	<i>-55%</i>	<i>-17%</i>	<i>-1%</i>	<i>-71%</i>	<i>-81%</i>	<i>-2%</i>

Notes:

Total may not add exactly because of rounding.

**Table L1-222. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr			
<b>02 - Relocations</b>																			
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr	0.04 0.05 0.02 --	-- -- -- --	-- -- -- --			
														<b>Mobilization and Demobilization Subtotal</b>			<b>0.11</b>	--	--
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.022581 0.028045 0.031110 2.056521 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	0.14 0.08 0.05 0.04 0.09 0.15	0.14 0.08 0.05 0.04 0.09 0.15			
														<b>Fremont Weir Demo Subtotal</b>			--	<b>0.55</b>	<b>0.55</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.024641 2.056521 1.384720 5.196787	g/hp-hr g/hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --			
														<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>			--	--	--
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.056521 1.384720	g/hr g/hr	0.04 0.05	-- --	-- --			
														<b>Temporary Electrical Power Subtotal</b>			<b>0.09</b>	--	--
														<b>02 - Relocations Total</b>			<b>0.19</b>	<b>0.55</b>	<b>0.55</b>
<b>09 - Channels and Canals</b>																			
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr	0.04 0.05 0.02 --	-- -- -- --	-- -- -- --			
														<b>Mobilization and Demobilization Subtotal</b>			<b>0.11</b>	--	--
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.033695 0.075360 72.563285 2.056521 1.384720 5.196787	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	0.13 0.37 20.48 0.07 0.29 0.18	0.13 0.37 20.48 0.07 0.29 0.18			
														<b>Clearing and Grubbing Subtotal</b>			--	<b>21.53</b>	<b>21.53</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.022581 0.030388 0.028045 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --			
														<b>Excavation (Wet Conditions) Subtotal</b>			--	--	--
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.030388 0.028213 0.024641 2.056521 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --			
														<b>Excavation/Grading (Dry Conditions) Subtotal</b>			--	--	--
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.030388 2.056521 0.017849 1.384720	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --			
														<b>Earthen Backfill Subtotal</b>			--	--	--
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.022581 0.024068 5.196787 1.384720	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --			
														<b>Riprap - Class 2 Subtotal</b>			--	--	--

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																					
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	--	--	--	--	--
6	Clearing and Grubbing	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>21.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	<b>3.30</b>	--	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	--	--	--	--	--	--	--	--	--	--	--
		--	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	--	--	--	--	--	--	--	--	--	--	--
		--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--
		--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--
		--	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	<b>3.78</b>	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	0.16	0.16	0.16	0.16	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	--	--	--
		--	--	--	--	--	--	--	--	--	--	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	--	--	--
		--	--	--	--	--	--	--	--	--	--	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	--	--	--



Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>					
1	Mobilization and Demobilization	--	--	0.04	0.0000
		--	--	0.05	0.0000
		--	--	0.02	0.0000
		--	--	--	--
		--	--	<b>0.11</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	0.0009
		--	--	--	0.0005
		--	--	--	0.0003
		--	--	--	0.0002
		--	--	--	0.0005
		--	--	--	0.0009
		--	--	--	<b>0.0033</b>
3	Levee O&M Road Regrading (6" AB)	--	0.08	--	0.0001
		--	0.04	--	0.0001
		--	0.02	--	0.0000
		--	0.46	--	0.0007
		--	<b>0.60</b>	--	<b>0.0009</b>
4	Temporary Electrical Power	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	<b>0.60</b>	<b>0.11</b>	<b>0.0044</b>
<b>09 - Channels and Canals</b>					
5	Mobilization and Demobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	0.0015
		--	--	--	0.0043
		--	--	--	0.2355
		--	--	--	0.0008
		--	--	--	0.0034
		--	--	--	0.0021
		--	--	--	<b>0.2476</b>
7	Excavation (Wet Conditions)	--	--	--	0.0077
		--	--	--	0.0145
		--	--	--	0.0073
		--	--	--	0.0371
		--	--	--	0.0077
		--	--	--	<b>0.0743</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	0.0135
		--	--	--	0.0680
		--	--	--	0.0068
		--	--	--	0.0030
		--	--	--	0.0144
		--	--	--	<b>0.1058</b>
9	Earthen Backfill	--	--	--	0.0023
		--	--	--	0.0005
		--	--	--	0.0007
		--	--	--	0.0010
		--	--	--	<b>0.0045</b>
10	Riprap - Class 2	--	--	--	0.0102
		--	--	--	0.0064
		--	--	--	0.1054
		--	--	--	0.0061
		--	--	--	<b>0.1281</b>

Table L1-222. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.022581 0.024068 5.196787 1.384720	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.022581 0.024068 1.384720 5.196787	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.031110 1.384720	g/hp-hr g/hr	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--
<b>09 - Channels and Canals Total</b>														<b>0.11</b>	<b>21.53</b>	<b>21.53</b>
<b>15 - Floodway Control and Diversion Structures</b>																
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	0.04 0.05 0.02 --
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>0.11</b>
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.056521 0.026622 1.384720	g/hr g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.081819 1.384720	g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.022581 0.030388 0.028045 5.196787 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.056521 0.026622 1.384720	g/hr g/hp-hr g/hr	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.015815 0.026622 0.081819 2.056521 0.031110 0.035193 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																					
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.11	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>2.56</b>	--	--	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	
		--	--	--	--	--	--	--	--	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	--	--	--	--	
		--	--	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	--	--	--	--	
		--	--	--	--	--	--	--	--	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	--	--	--	--	
		--	--	--	--	--	--	--	--	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	<b>5.12</b>	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.15</b>	<b>0.15</b>	
		<b>21.53</b>	<b>3.78</b>	<b>3.78</b>	<b>7.40</b>	<b>7.40</b>	<b>7.40</b>	<b>7.40</b>	<b>7.40</b>	<b>12.20</b>	<b>12.20</b>	<b>17.33</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>10.25</b>	<b>12.81</b>	<b>10.35</b>	<b>5.12</b>	<b>5.12</b>	<b>0.15</b>	<b>0.15</b>	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
		--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
		--	--	--	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	
17	Excavation (Wet Conditions)	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>1.65</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.20	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--	--	--	--	--	--	

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity	7-Oct			Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
11	Riprap - Class 3	--	--	--	0.0004
		--	--	--	0.0003
		--	--	--	0.0042
		--	--	--	0.0002
		--	--	--	<b>0.0051</b>
12	RSP Bedding Material	--	--	--	0.0113
		--	--	--	0.0070
		--	--	--	0.0067
		--	--	--	0.1159
		--	--	--	<b>0.1409</b>
13	Erosion Control Seeding	--	--	--	0.0003
		--	--	--	0.0005
		--	--	--	<b>0.0008</b>
		--	--	--	<b>0.7071</b>
<b>15 - Floodway Control and Diversion Structures</b>					
14	Mobilization and Demobilization	--	0.04	--	0.0000
		--	0.05	--	0.0000
		--	0.02	--	0.0000
		--	--	--	--
		--	<b>0.11</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.0003
		--	--	--	0.0009
		--	--	--	0.0013
		--	--	--	<b>0.0026</b>
16	Construction Site Dewatering (Pumping)	0.12	--	--	0.0073
		0.07	--	--	0.0044
		<b>0.19</b>	--	--	<b>0.0117</b>
17	Excavation (Wet Conditions)	--	--	--	0.0003
		--	--	--	0.0006
		--	--	--	0.0003
		--	--	--	0.0016
		--	--	--	0.0003
		--	--	--	<b>0.0033</b>
18	Sheet Pile Wall	--	--	--	0.0001
		--	--	--	0.0004
		--	--	--	0.0005
		--	--	--	<b>0.0010</b>
19	Headworks Structure Concrete Piles	--	--	--	0.0013
		--	--	--	0.0017
		--	--	--	0.0019
		--	--	--	0.0017
		--	--	--	0.0009
		--	--	--	0.0062
		--	--	--	0.0031
		--	--	--	<b>0.0169</b>

Table L1-222. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.081819 0.284451 2.056521 1.384720	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.284451 2.056521 1.384720	g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.015815 5.196787 1.384720	g/hp-hr g/hr g/hr	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	<b>0.11</b>
<b>08 - Roads, Railroads, and Bridges</b>																
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--
<b>Mobilization Subtotal</b>														--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.015815 0.026622 0.081819 2.056521 0.031110 0.035193 1.384720	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.081819 0.284451 2.056521 1.384720	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.015815 2.056521 1.384720	g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.056521 0.025548 1.384720 0.000000	g/hr g/hp-hr g/hr g/hr	0.04	--	--
<b>Mobilization Subtotal</b>														<b>0.11</b>	--	--

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.36	0.36	--	--	--	--	0.36	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	0.12	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--	--	0.22	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	<b>1.21</b>	<b>1.21</b>	--	--	--	--	<b>1.21</b>	--	--	--	--	--	--			
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.52</b>	<b>0.52</b>	--	--	--	--	--	--	--	--				
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	0.09		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	0.10		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>			
		<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>1.84</b>	<b>1.54</b>	<b>1.54</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>2.46</b>	<b>1.41</b>	<b>0.71</b>	<b>0.71</b>	<b>0.19</b>	<b>0.19</b>	<b>1.41</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>		
<b>08 - Roads, Railroads, and Bridges</b>																									
23	Mobilization	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	0.04	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	0.05	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	--	--	--	<b>0.11</b>	--	--	--	--				
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	--	<b>1.06</b>	--	--	--	--	--	--	--	--				
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	--	<b>0.40</b>	--	--	--	--	--	--	--	--				
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--				
		--	--	--	--	--	--	--	--	--	--	<b>0.11</b>	<b>1.06</b>	<b>0.40</b>	<b>0.32</b>	<b>0.32</b>	<b>0.11</b>	--	--	--	--				
<b>19 - Buildings, Grounds, and Utilities</b>																									
27	Mobilization	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	0.0033
		--	--	--	0.0011
		--	--	--	0.0020
		--	--	--	0.0046
		--	--	--	<b>0.0109</b>
21	Headworks Channel Transition	--	--	--	0.0004
		--	--	--	0.0007
		--	--	--	0.0015
		--	--	--	<b>0.0026</b>
22	Hinged Bottom Gates	0.08	--	--	0.0010
		0.09	--	--	0.0011
		0.10	--	--	0.0012
		<b>0.27</b>	--	--	<b>0.0033</b>
		<b>0.47</b>	<b>0.11</b>	--	<b>0.0524</b>
<b>08 - Roads, Railroads, and Bridges</b>					
23	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	0.0002
		--	--	--	0.0002
		--	--	--	0.0002
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0008
		--	--	--	0.0004
		--	--	--	<b>0.0021</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	<b>0.0002</b>
26	Pedestrian Bridge Span Installation	--	--	--	0.0005
		--	--	--	0.0003
		--	--	--	0.0005
		--	--	--	<b>0.0013</b>
		--	--	--	<b>0.0037</b>
<b>19 - Buildings, Grounds, and Utilities</b>					
27	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>

**Table L1-222. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.032807	g/hp-hr	--	0.10	0.10
				Scraper	Scrapers	1	367					0.028213	g/hp-hr	--	0.18	0.18
				Motor Grader	Graders	1	187					0.024641	g/hp-hr	--	0.08	0.08
				Compactor	Rollers	1	80					0.025876	g/hp-hr	--	0.04	0.04
				4000 gallon Water Truck	n/a - onroad	1	MHDT					2.056521	g/hr	--	0.04	0.04
				10 TN Smooth Roller	Rollers	1	157					0.017849	g/hp-hr	--	0.05	0.05
				Pickup Truck Conventional	n/a - onroad	7	LDT2					1.384720	g/hr	--	0.17	0.17
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.081819	g/hp-hr	--	0.12	0.12
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.284451	g/hp-hr	--	0.04	0.04
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.025548	g/hp-hr	--	0.05	0.05
				Concrete Mixer Truck	n/a - onroad	1	MHDT					2.056521	g/hr	--	0.04	0.04
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>												
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.081819	g/hp-hr	--	--	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.284451	g/hp-hr	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.056521	g/hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2					1.384720	g/hr	--	--	--
<b>Concrete Duct Banc Subtotal</b>													--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>													<b>0.11</b>	<b>0.90</b>	<b>0.90</b>	
<b>20 -Permanent Operating Equipment</b>																
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.056521	g/hr	--	--	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.025548	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2					1.384720	g/hr	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr	--	--	--
<b>Mobilization Subtotal</b>													--	--	--	
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.025548	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.384720	g/hr	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.025548	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.384720	g/hr	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>													--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.384720	g/hr	--	--	--
<b>Electrical Control Equipment CMU Building Subtotal</b>													--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.384720	g/hr	--	--	--
<b>Electrical Power Equipment CMU Building Subtotal</b>													--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.384720	g/hr	--	--	--
<b>Communication Equipment Subtotal</b>													--	--	--	
<b>20 -Permanent Operating Equipment Total</b>													--	--	--	
<b>GRAND TOTAL</b>													<b>0.40</b>	<b>22.98</b>	<b>23.08</b>	



Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																						
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	
28	CMU Building and Earthwork Pad Construction	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	<b>0.40</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>0.90</b>	<b>1.30</b>	<b>0.90</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
																		<b>0.11</b>	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	
																			--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05	0.05	0.05	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	
																			--	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	
																				<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	
																				<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07		
																				--	--	--	<b>0.07</b>	
																				<b>0.11</b>	<b>0.38</b>	<b>0.38</b>	<b>0.38</b>	<b>0.46</b>
<b>GRAND TOTAL</b>		<b>22.71</b>	<b>5.36</b>	<b>4.96</b>	<b>9.35</b>	<b>8.94</b>	<b>8.94</b>	<b>8.65</b>	<b>8.65</b>	<b>13.45</b>	<b>14.67</b>	<b>18.74</b>	<b>11.07</b>	<b>12.02</b>	<b>10.85</b>	<b>10.76</b>	<b>14.54</b>	<b>10.65</b>	<b>5.42</b>	<b>5.70</b>	<b>1.00</b>	<b>1.00</b>	<b>0.92</b>	

Table L1-222. ROG Exhaust Emissions from Offroad (

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	--	0.0014
		--	--	--	0.0027
		--	--	--	0.0012
		--	--	--	0.0005
		--	--	--	0.0005
		--	--	--	0.0007
		--	--	--	0.0026
		--	--	--	0.0018
		--	--	--	0.0006
		--	--	--	0.0007
		--	--	--	<b>0.0134</b>
29	Concrete Duct Banc	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0002
		--	--	--	<b>0.0004</b>
		--	--	--	<b>0.0139</b>
<b>20 -Permanent Operating Equipment</b>					
30	Mobilization	--	0.04	--	0.0000
		--	0.05	--	0.0000
		--	0.02	--	0.0000
		--	--	--	--
		--	<b>0.11</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.05	--	--	0.0007
		0.07	--	--	0.0011
		<b>0.12</b>	--	--	<b>0.0018</b>
32	CMU Building Mechanical Equipment	0.05	--	--	0.0007
		0.07	--	--	0.0011
		<b>0.12</b>	--	--	<b>0.0018</b>
33	Electrical Control Equipment CMU Building	0.07	--	--	0.0011
		<b>0.07</b>	--	--	<b>0.0011</b>
34	Electrical Power Equipment CMU Building	0.07	--	--	0.0011
		<b>0.07</b>	--	--	<b>0.0011</b>
35	Communication Equipment	0.07	--	--	0.0004
		<b>0.07</b>	--	--	<b>0.0004</b>
		<b>0.46</b>	<b>0.11</b>	--	<b>0.0063</b>
<b>GRAND TOTAL</b>		<b>0.92</b>	<b>0.81</b>	<b>0.11</b>	<b>0.7878</b>

Table L1-223. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr	6-May
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr	1.11 0.95 0.02 --	-- -- -- --	-- -- -- --	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.08</b>	<b>--</b>	<b>--</b>	<b>--</b>
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.101596 0.098858 0.508963 62.840307 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	0.64 0.29 0.87 1.11 2.32 0.13	0.64 0.29 0.87 1.11 2.32 0.13	-- -- -- -- -- --
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>	<b>5.36</b>	<b>5.36</b>	<b>--</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.106728 62.840307 1.232384 131.528002	g/hp-hr g/hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	62.840307 1.232384	g/hr g/hr	1.11 0.04	-- --	-- --	-- --
<b>Temporary Electrical Power Subtotal</b>														<b>1.15</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>02 - Relocations Total</b>														<b>3.24</b>	<b>5.36</b>	<b>5.36</b>	<b>--</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr	1.11 0.95 0.02 --	-- -- -- --	-- -- -- --	-- -- -- --
<b>Mobilization and Demobilization Subtotal</b>														<b>2.08</b>	<b>--</b>	<b>--</b>	<b>--</b>
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.586666 0.772717 1.287320 62.840307 1.232384 131.528002	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	2.28 3.82 0.36 2.22 0.26 4.64	2.28 3.82 0.36 2.22 0.26 4.64	2.28 3.82 0.36 2.22 0.26 4.64
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>	<b>13.57</b>	<b>13.57</b>	<b>13.57</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.101596 0.107731 0.098858 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.107731 0.128185 0.106728 62.840307 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.107731 62.840307 0.097718 1.232384	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.101596 0.112912 131.528002 1.232384	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --
<b>Riprap - Class 2 Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.08	--	--
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--	--	
		--	--	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	--	--	--	--	--	--	--	--	--	--	--	
		--	--	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	--	--	--	--	--	--	--	--	--	--	--	
		--	--	41.75	41.75	41.75	41.75	41.75	41.75	41.75	41.75	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	<b>47.02</b>	--	--	--	--	--	--	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	--	--	--	--	--	--	--	--	--	--	--	
		11.04	11.04	11.04	11.04	11.04	11.04	11.04	11.04	11.04	11.04	--	--	--	--	--	--	--	--	--	--	--	
		1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	--	--	--	--	--	--	--	--	--	--	--	
		3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	--	
		0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	--	--	--	--	--	--	--	--	--	--	--	
		<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	<b>17.59</b>	--	--	--	--	--	--	--	--	--	--	--	
9	Earthen Backfill	--	--	0.57	0.57	0.57	0.57	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	1.11	1.11	1.11	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.27	0.27	0.27	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>2.01</b>	<b>2.01</b>	<b>2.01</b>	<b>2.01</b>	<b>2.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	--	--	
		--	--	--	--	--	--	--	--	--	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	--	--	
		--	--	--	--	--	--	--	--	--	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	--	--	
		--	--	--	--	--	--	--	--	--	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	--	--	
		--	--	--	--	--	--	--	--	--	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	--	--	

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity			Annual Emissions, tpy
		14-Oct	21-Oct	
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	--	1.11	0.0011
		--	0.95	0.0010
		--	0.02	0.0000
		--	--	--
		--	<b>2.08</b>	<b>0.0021</b>
2	Fremont Weir Demo	--	--	0.0039
		--	--	0.0017
		--	--	0.0052
		--	--	0.0066
		--	--	0.0139
		--	--	0.0008
		--	--	<b>0.0322</b>
3	Levee O&M Road Regrading (6" AB)	0.35	--	0.0005
		1.11	--	0.0017
		0.02	--	0.0000
		11.60	--	0.0174
		<b>13.08</b>	--	<b>0.0196</b>
4	Temporary Electrical Power	--	--	0.0006
		--	--	0.0000
		--	--	<b>0.0006</b>
		<b>13.08</b>	<b>2.08</b>	<b>0.0544</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	--	--	0.0011
		--	--	0.0010
		--	--	0.0000
		--	--	--
		--	--	<b>0.0021</b>
6	Clearing and Grubbing	--	--	0.0262
		--	--	0.0439
		--	--	0.0042
		--	--	0.0255
		--	--	0.0030
		--	--	0.0534
		--	--	<b>0.1561</b>
7	Excavation (Wet Conditions)	--	--	0.0346
		--	--	0.0513
		--	--	0.0257
		--	--	0.9395
		--	--	0.0068
		--	--	<b>1.0580</b>
8	Excavation/Grading (Dry Conditions)	--	--	0.0479
		--	--	0.3092
		--	--	0.0296
		--	--	0.0931
		--	--	0.0128
		--	--	<b>0.4925</b>
9	Earthen Backfill	--	--	0.0080
		--	--	0.0155
		--	--	0.0038
		--	--	0.0009
		--	--	<b>0.0282</b>
10	Riprap - Class 2	--	--	0.0460
		--	--	0.0299
		--	--	2.6677
		--	--	0.0054
		--	--	<b>2.7490</b>

Table L1-223. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr	6-May
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.101596 0.112912 131.528002 1.232384	g/hp-hr g/hp-hr g/hr g/hr	--	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.101596 0.112912 1.232384 131.528002	g/hp-hr g/hp-hr g/hr g/hr	--	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.508963 1.232384	g/hp-hr g/hr	--	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--	--
<b>09 - Channels and Canals Total</b>														<b>2.08</b>	<b>13.57</b>	<b>13.57</b>	<b>13.57</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	1.11	--
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>2.08</b>	--
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	62.840307 0.131129 1.232384	g/hr g/hp-hr g/hr	--	--	--	1.11 0.51 0.13
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--	<b>1.75</b>
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.998932 1.232384	g/hp-hr g/hr	--	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.101596 0.107731 0.098858 131.528002 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	62.840307 0.131129 1.232384	g/hr g/hp-hr g/hr	--	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.077156 0.131129 0.998932 62.840307 0.508963 0.106961 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--	--

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.92	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.60	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	53.35	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>54.98</b>	--	--	--	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	--	--	--	--	--	
		--	--	--	--	--	--	--	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	--	--	--	--	--	
		--	--	--	--	--	--	--	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	--	--	--	--	--	
		--	--	--	--	--	--	--	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	106.71	--	--	--	--	--	
		--	--	--	--	--	--	--	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	<b>109.96</b>	--	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.87	0.87	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>	<b>0.96</b>	--	--
		<b>17.59</b>	<b>17.59</b>	<b>66.62</b>	<b>66.62</b>	<b>66.62</b>	<b>66.62</b>	<b>66.62</b>	<b>174.57</b>	<b>174.57</b>	<b>284.53</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>219.92</b>	<b>274.90</b>	<b>222.01</b>	<b>109.96</b>	<b>109.96</b>	<b>0.96</b>	<b>0.96</b>	--	--
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	
		--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
		--	--	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	<b>1.55</b>	
17	Excavation (Wet Conditions)	--	--	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	1.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	20.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	<b>23.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>1.75</b>	<b>1.75</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.51	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	1.48	1.48	1.48	1.48	1.48	1.48	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	3.32	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.87	0.87	0.87	0.87	0.87	0.87	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	1.18	1.18	1.18	1.18	1.18	1.18	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	<b>7.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity			Annual Emissions, tpy
		14-Oct	21-Oct	
11	Riprap - Class 3	--	--	0.0018
		--	--	0.0012
		--	--	0.1067
		--	--	0.0002
		--	--	<b>0.1100</b>
12	RSP Bedding Material	--	--	0.0507
		--	--	0.0329
		--	--	0.0060
		--	--	2.9344
		--	--	<b>3.0239</b>
13	Erosion Control Seeding	--	--	0.0044
		--	--	0.0004
		--	--	<b>0.0048</b>
		--	--	<b>7.6245</b>
<b>15 - Floodway Control and Diversion Structures</b>				
14	Mobilization and Demobilization	1.11	--	0.0011
		0.95	--	0.0010
		0.02	--	0.0000
		--	--	--
		<b>2.08</b>	--	<b>0.0021</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	0.0100
		--	--	0.0046
		--	--	0.0012
		--	--	<b>0.0157</b>
16	Construction Site Dewatering (Pumping)	--	--	0.0888
		--	--	0.0039
		--	--	<b>0.0927</b>
17	Excavation (Wet Conditions)	--	--	0.0015
		--	--	0.0023
		--	--	0.0011
		--	--	0.0418
		--	--	0.0003
		--	--	<b>0.0470</b>
18	Sheet Pile Wall	--	--	0.0039
		--	--	0.0018
		--	--	0.0005
		--	--	<b>0.0061</b>
19	Headworks Structure Concrete Piles	--	--	0.0065
		--	--	0.0082
		--	--	0.0237
		--	--	0.0532
		--	--	0.0139
		--	--	0.0190
		--	--	0.0028
		--	--	<b>0.1273</b>



Table L1-223. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr	6-May
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.998932 1.781339 62.840307 1.232384	g/hp-hr g/hp-hr g/hr g/hr	--	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.781339 62.840307 1.232384	g/hp-hr g/hr g/hr	--	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.077156 131.528002 1.232384	g/hp-hr g/hr g/hr	--	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	2.08	1.75
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--	--
<b>Mobilization Subtotal</b>														--	--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.077156 0.131129 0.998932 62.840307 0.508963 0.106961 1.232384	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.998932 1.781339 62.840307 1.232384	g/hp-hr g/hp-hr g/hr g/hr	--	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.077156 62.840307 1.232384	g/hp-hr g/hr g/hr	--	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	62.840307 0.541091 1.232384 0.000000	g/hr g/hp-hr g/hr g/hr	1.11	--	--	--
<b>Mobilization Subtotal</b>														2.08	--	--	--

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct
20	Headworks Structure	--	--	--	--	--	--	--	--	4.44	4.44	--	--	--	--	4.44	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	6.65	6.65	--	--	--	--	6.65	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	0.46	0.46	--	--	--	--	0.46	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	12.30	12.30	--	--	--	--	12.30	--	--	--	--	--		
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	4.43	4.43	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	5.20	5.20	--	--	--	--	--	--	--	--			
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	0.41	0.41
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.32	2.32	2.32	2.32
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	0.09	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.81	2.81	2.81	2.81	
		1.75	1.75	25.06	11.25	11.25	9.50	9.50	9.50	21.80	13.85	6.74	6.74	1.55	1.55	13.85	1.55	1.55	1.55	4.36	4.36	4.36	4.36
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization	--	--	--	--	--	--	--	--	--	--	1.11	--	--	--	--	1.11	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.95	--	--	--	--	0.95	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	2.08	--	--	--	--	2.08	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.41	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.51	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	3.32	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.87	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	1.18	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	7.95	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	1.48	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	2.22	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	4.10	--	--	--	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	2.22	2.22	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.11	0.11	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	2.94	2.94	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	2.08	7.95	4.10	2.94	2.94	2.08	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity			Annual Emissions, tpy
		14-Oct	21-Oct	
20	Headworks Structure	--	--	0.0400
		--	--	0.0068
		--	--	0.0598
		--	--	0.0041
		--	--	<b>0.1107</b>
21	Headworks Channel Transition	--	--	0.0025
		--	--	0.0222
		--	--	0.0013
		--	--	<b>0.0260</b>
22	Hinged Bottom Gates	--	--	0.0049
		--	--	0.0278
		--	--	0.0010
		--	--	<b>0.0338</b>
		<b>2.08</b>	--	<b>0.4614</b>
<b>08 - Roads, Railroads, and Bridges</b>				
23	Mobilization	--	--	0.0011
		--	--	0.0010
		--	--	0.0000
		--	--	--
		--	--	<b>0.0021</b>
24	Pedestrian Bridge Concrete Piles	--	--	0.0008
		--	--	0.0010
		--	--	0.0030
		--	--	0.0066
		--	--	0.0017
		--	--	0.0024
		--	--	0.0003
		--	--	<b>0.0159</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	0.0007
		--	--	0.0001
		--	--	0.0011
		--	--	0.0001
		--	--	<b>0.0020</b>
26	Pedestrian Bridge Span Installation	--	--	0.0024
		--	--	0.0089
		--	--	0.0004
		--	--	<b>0.0118</b>
		--	--	<b>0.0318</b>
<b>19 - Buildings, Grounds, and Utilities</b>				
27	Mobilization	--	--	0.0011
		--	--	0.0010
		--	--	0.0000
		--	--	--
		--	--	<b>0.0021</b>

**Table L1-223. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr	6-May		
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.109795	g/hp-hr	--	0.32	0.32	0.32		
				Scraper	Scrapers	1	367	-	-	-	-	-	-	0.128185	g/hp-hr	--	0.83	0.83	0.83
				Motor Grader	Graders	1	187	-	-	-	-	-	-	0.106728	g/hp-hr	--	0.35	0.35	0.35
				Compactor	Rollers	1	80	-	-	-	-	-	-	0.508783	g/hp-hr	--	0.72	0.72	0.72
				4000 gallon Water Truck	n/a - onroad	1	MHDT	-	-	-	-	-	-	62.840307	g/hr	--	1.11	1.11	1.11
				10 TN Smooth Roller	Rollers	1	157	-	-	-	-	-	-	0.097718	g/hp-hr	--	0.27	0.27	0.27
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-	-	-	-	-	-	1.232384	g/hr	--	0.15	0.15	0.15
				Concrete Pump Boom Truck Mounted	Pumps	1	84	-	-	-	-	-	-	0.998932	g/hp-hr	--	1.48	1.48	1.48
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-	-	-	-	-	-	1.781339	g/hp-hr	--	0.25	0.25	0.25
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	-	-	-	-	-	0.541091	g/hp-hr	--	0.95	0.95	0.95
				Concrete Mixer Truck	n/a - onroad	1	MHDT	-	-	-	-	-	-	62.840307	g/hr	--	1.11	1.11	1.11
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														--	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.998932	g/hp-hr	--	--	--	--		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	-	-	-	-	-	-	1.781339	g/hp-hr	--	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT	-	-	-	-	-	-	62.840307	g/hr	--	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2	-	-	-	-	-	-	1.232384	g/hr	--	--	--	--
<b>Concrete Duct Banc Subtotal</b>														--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>														<b>2.08</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	<b>7.54</b>	
<b>20 -Permanent Operating Equipment</b>																			
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	62.840307	g/hr	--	--	--	--		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	-	-	-	-	-	0.541091	g/hp-hr	--	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2	-	-	-	-	-	-	1.232384	g/hr	--	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a	-	-	-	-	-	-	0.000000	g/hr	--	--	--	--
				<b>Mobilization Subtotal</b>														--	--
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.541091	g/hp-hr	--	--	--	--		
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-	-	-	-	-	-	1.232384	g/hr	--	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														--	--	--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.541091	g/hp-hr	--	--	--	--		
				Pickup Truck Conventional	n/a - onroad	3	LDT2	-	-	-	-	-	-	1.232384	g/hr	--	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>														--	--	--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.232384	g/hr	--	--	--	--		
<b>Electrical Control Equipment CMU Building Subtotal</b>														--	--	--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.232384	g/hr	--	--	--	--		
<b>Electrical Power Equipment CMU Building Subtotal</b>														--	--	--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.232384	g/hr	--	--	--	--		
<b>Communication Equipment Subtotal</b>														--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>														--	--	--	--	--	
<b>GRAND TOTAL</b>														<b>7.40</b>	<b>26.47</b>	<b>28.56</b>	<b>22.87</b>		

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																						
		13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	
28	CMU Building and Earthwork Pad Construction	0.32	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.83	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.72	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.48	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.95	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.11	1.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>7.54</b>	<b>7.54</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		2.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>4.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>11.64</b>	<b>7.54</b>	<b>2.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.11	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
																	<b>2.08</b>	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	0.95	0.95	0.95	0.95		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	
																		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>		
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.95	0.95	0.95	0.95	0.95		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07		
																		<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>	<b>1.02</b>		
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07		
																		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>		
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07		
																		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>		
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.07		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.07</b>	<b>0.07</b>	
																		<b>2.08</b>	<b>2.17</b>	<b>2.17</b>	<b>2.17</b>	<b>2.23</b>	<b>2.23</b>	
<b>GRAND TOTAL</b>		<b>30.98</b>	<b>26.88</b>	<b>93.76</b>	<b>77.87</b>	<b>77.87</b>	<b>76.12</b>	<b>76.12</b>	<b>184.07</b>	<b>196.37</b>	<b>298.38</b>	<b>228.75</b>	<b>234.62</b>	<b>225.57</b>	<b>224.41</b>	<b>291.69</b>	<b>225.64</b>	<b>113.59</b>	<b>113.68</b>	<b>7.49</b>	<b>7.49</b>	<b>6.59</b>	<b>6.59</b>	

Table L1-223. NOx Exhaust Emissions from Offroad C

#	Activity			Annual Emissions, tpy
		14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	0.0048
		--	--	0.0124
		--	--	0.0053
		--	--	0.0108
		--	--	0.0166
		--	--	0.0041
		--	--	0.0023
		--	--	0.0222
		--	--	0.0038
		--	--	0.0143
		--	--	0.0166
		--	--	<b>0.1132</b>
29	Concrete Duct Banc	--	--	0.0015
		--	--	0.0003
		--	--	0.0022
		--	--	0.0002
		--	--	<b>0.0041</b>
		--	--	<b>0.1193</b>
<b>20 -Permanent Operating Equipment</b>				
30	Mobilization	1.11	--	0.0011
		0.95	--	0.0010
		0.02	--	0.0000
		--	--	--
		<b>2.08</b>	--	<b>0.0021</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0143
		--	--	0.0010
		--	--	<b>0.0153</b>
32	CMU Building Mechanical Equipment	--	--	0.0143
		--	--	0.0010
		--	--	<b>0.0153</b>
33	Electrical Control Equipment CMU Building	--	--	0.0010
		--	--	<b>0.0010</b>
34	Electrical Power Equipment CMU Building	--	--	0.0010
		--	--	<b>0.0010</b>
35	Communication Equipment	--	--	0.0004
		--	--	<b>0.0004</b>
		<b>2.08</b>	--	<b>0.0350</b>
<b>GRAND TOTAL</b>		<b>17.25</b>	<b>2.08</b>	<b>8.3265</b>

**Table L1-224. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
<b>02 - Relocations</b>																
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr	0.19 -- --	3.65 -- --	0.22 -- --
<b>Mobilization and Demobilization Subtotal</b>														<b>4.06</b>	<b>--</b>	<b>--</b>
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.597461 1.656533 1.915350 10.564784 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- --	3.78 4.79 3.28	3.78 4.79 3.28
<b>Fremont Weir Demo Subtotal</b>														<b>--</b>	<b>13.94</b>	<b>13.94</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.641123 10.564784 12.471053 33.018220	g/hp-hr g/hr g/hr g/hr	-- -- --	-- -- --	-- -- --
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	10.564784 12.471053	g/hr g/hr	0.19 -- --	0.44 -- --	-- -- --
<b>Temporary Electrical Power Subtotal</b>														<b>0.63</b>	<b>--</b>	<b>--</b>
<b>02 - Relocations Total</b>														<b>4.68</b>	<b>13.94</b>	<b>13.94</b>
<b>09 - Channels and Canals</b>																
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr	0.19 -- --	3.65 -- --	0.22 -- --
<b>Mobilization and Demobilization Subtotal</b>														<b>4.06</b>	<b>--</b>	<b>--</b>
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	2.267364 1.111618 ##### 10.564784 12.471053 33.018220	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- --	8.80 5.49 41.25	8.80 5.49 41.25
<b>Clearing and Grubbing Subtotal</b>														<b>--</b>	<b>59.71</b>	<b>59.71</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.597461 0.627356 1.656533 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- --	-- -- --	-- -- --
<b>Excavation (Wet Conditions) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.627356 0.737650 0.641123 10.564784 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- --	-- -- --	-- -- --
<b>Excavation/Grading (Dry Conditions) Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.627356 10.564784 1.640464 12.471053	g/hp-hr g/hr g/hp-hr g/hr	-- -- --	-- -- --	-- -- --
<b>Earthen Backfill Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.597461 0.659700 33.018220 12.471053	g/hp-hr g/hp-hr g/hr g/hr	-- -- --	-- -- --	-- -- --
<b>Riprap - Class 2 Subtotal</b>														<b>--</b>	<b>--</b>	<b>--</b>

Table L1-224. CO Exhaust Emissions from Offroad Co

#	Activity	Maximum Daily Emissions, lbs/day																				
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.06	--	--	--	--
6	Clearing and Grubbing	8.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		59.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	9.04	9.04	9.04	9.04	9.04	9.04	9.04	9.04	9.04	--	--	--	--	--	--	--	--	--
		--	--	--	13.28	13.28	13.28	13.28	13.28	13.28	13.28	13.28	--	--	--	--	--	--	--	--	--	--
		--	--	--	19.17	19.17	19.17	19.17	19.17	19.17	19.17	19.17	--	--	--	--	--	--	--	--	--	--
		--	--	--	10.48	10.48	10.48	10.48	10.48	10.48	10.48	10.48	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	--	--	--	--	--	--	--	--	--	--
		--	--	--	55.05	55.05	55.05	55.05	55.05	55.05	55.05	55.05	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	9.96	--	--	--	--	--	--	--	--	--	--
		--	63.54	63.54	63.54	63.54	63.54	63.54	63.54	63.54	63.54	63.54	--	--	--	--	--	--	--	--	--	--
		--	6.34	6.34	6.34	6.34	6.34	6.34	6.34	6.34	6.34	6.34	--	--	--	--	--	--	--	--	--	--
		--	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	--
		--	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	--	--	--	--	--	--	--	--	--	--
		--	85.02	85.02	85.02	85.02	85.02	85.02	85.02	85.02	85.02	85.02	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	3.32	3.32	3.32	3.32	3.32	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	4.54	4.54	4.54	4.54	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	8.71	8.71	8.71	8.71	8.71	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	--	--
		--	--	--	--	--	--	--	--	--	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	--	--
		--	--	--	--	--	--	--	--	--	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	--	--
		--	--	--	--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	--	--
		--	--	--	--	--	--	--	--	--	46.80	46.80	46.80	46.80	46.80	46.80	46.80	46.80	46.80	46.80	--	--



Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity				Annual Emissions , tpy
		7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>					
1	Mobilization and Demobilization	--	--	0.19	0.0002
		--	--	3.65	0.0036
		--	--	0.22	0.0002
		--	--	--	--
		--	--	<b>4.06</b>	<b>0.0041</b>
2	Fremont Weir Demo	--	--	--	0.0227
		--	--	--	0.0287
		--	--	--	0.0197
		--	--	--	0.0011
		--	--	--	0.0035
		--	--	--	0.0079
		--	--	--	<b>0.0836</b>
3	Levee O&M Road Regrading (6" AB)	--	2.11	--	0.0032
		--	0.19	--	0.0003
		--	0.22	--	0.0003
		--	2.91	--	0.0044
		--	<b>5.43</b>	--	<b>0.0081</b>
4	Temporary Electrical Power	--	--	--	0.0001
		--	--	--	0.0002
		--	--	--	<b>0.0003</b>
		--	<b>5.43</b>	<b>4.06</b>	<b>0.0962</b>
<b>09 - Channels and Canals</b>					
5	Mobilization and Demobilization	--	--	--	0.0002
		--	--	--	0.0036
		--	--	--	0.0002
		--	--	--	--
		--	--	--	<b>0.0041</b>
6	Clearing and Grubbing	--	--	--	0.1012
		--	--	--	0.0631
		--	--	--	0.4744
		--	--	--	0.0043
		--	--	--	0.0304
		--	--	--	0.0134
		--	--	--	<b>0.6867</b>
7	Excavation (Wet Conditions)	--	--	--	0.2034
		--	--	--	0.2987
		--	--	--	0.4312
		--	--	--	0.2358
		--	--	--	0.0693
		--	--	--	<b>1.2385</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	0.2788
		--	--	--	1.7791
		--	--	--	0.1776
		--	--	--	0.0157
		--	--	--	0.1293
		--	--	--	<b>2.3805</b>
9	Earthen Backfill	--	--	--	0.0465
		--	--	--	0.0026
		--	--	--	0.0636
		--	--	--	0.0092
		--	--	--	<b>0.1219</b>
10	Riprap - Class 2	--	--	--	0.2708
		--	--	--	0.1745
		--	--	--	0.6697
		--	--	--	0.0550
		--	--	--	<b>1.1700</b>

**Table L1-224. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.597461 0.659700 33.018220 12.471053	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.597461 0.659700 12.471053 33.018220	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	1.915350 12.471053	g/hp-hr g/hr	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--
<b>09 - Channels and Canals Total</b>														<b>4.06</b>	<b>59.71</b>	<b>59.71</b>
<b>15 - Floodway Control and Diversion Structures</b>																
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	0.19 3.65 0.22 --
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>4.06</b>
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	10.564784 0.766004 12.471053	g/hr g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.332930 12.471053	g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.597461 0.627356 1.656533 33.018220 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	10.564784 0.766004 12.471053	g/hr g/hp-hr g/hr	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.438595 0.766004 2.332930 10.564784 1.915350 0.612915 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--

Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.42	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.49	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.39	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>23.40</b>	--	--	--	--	--	--		
12	RSP Bedding Material	--	--	--	--	--	--	--	--	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83	--	--	--	--			
		--	--	--	--	--	--	--	--	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	--	--	--	--			
		--	--	--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	--	--	--	--			
		--	--	--	--	--	--	--	--	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	26.79	--	--	--	--			
		--	--	--	--	--	--	--	--	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	<b>46.80</b>	--	--	--	--			
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.28	3.28			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.88	0.88			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.16</b>	<b>4.16</b>			
		<b>59.71</b>	<b>85.02</b>	<b>85.02</b>	<b>148.77</b>	<b>148.77</b>	<b>148.77</b>	<b>148.77</b>	<b>148.77</b>	<b>186.86</b>	<b>186.86</b>	<b>233.66</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>93.60</b>	<b>117.00</b>	<b>97.66</b>	<b>46.80</b>	<b>46.80</b>	<b>4.16</b>	<b>4.16</b>			
<b>15 - Floodway Control and Diversion Structures</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary Cofferdam)	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		1.32	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>4.49</b>	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	--	--	--	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46	3.46			
		--	--	--	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66			
		--	--	--	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>	<b>4.12</b>			
17	Excavation (Wet Conditions)	--	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	6.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	9.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	5.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	<b>27.52</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
18	Sheet Pile Wall	--	--	--	--	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	1.32	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	<b>4.49</b>	<b>4.49</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
19	Headworks Structure Concrete Piles	--	--	--	--	2.32	2.32	2.32	2.32	2.32	2.32	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	2.99	2.99	2.99	2.99	2.99	2.99	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	3.46	3.46	3.46	3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	3.28	3.28	3.28	3.28	3.28	3.28	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	6.79	6.79	6.79	6.79	6.79	6.79	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	1.76	1.76	1.76	1.76	1.76	1.76	--	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	<b>21.15</b>	--	--	--	--	--	--	--	--	--	--	--			

Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
11	Riprap - Class 3	--	--	--	0.0108
		--	--	--	0.0070
		--	--	--	0.0268
		--	--	--	0.0022
		--	--	--	<b>0.0468</b>
12	RSP Bedding Material	--	--	--	0.2979
		--	--	--	0.1920
		--	--	--	0.0605
		--	--	--	0.7366
		--	--	--	<b>1.2870</b>
13	Erosion Control Seeding	--	--	--	0.0164
		--	--	--	0.0044
		--	--	--	<b>0.0208</b>
		--	--	--	<b>6.9563</b>
<b>15 - Floodway Control and Diversion Structures</b>					
14	Mobilization and Demobilization	--	0.19	--	0.0002
		--	3.65	--	0.0036
		--	0.22	--	0.0002
		--	--	--	--
		--	<b>4.06</b>	--	<b>0.0041</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.0017
		--	--	--	0.0269
		--	--	--	0.0119
		--	--	--	<b>0.0404</b>
16	Construction Site Dewatering (Pumping)	3.46	--	--	0.2074
		0.66	--	--	0.0396
		<b>4.12</b>	--	--	<b>0.2470</b>
17	Excavation (Wet Conditions)	--	--	--	0.0090
		--	--	--	0.0133
		--	--	--	0.0192
		--	--	--	0.0105
		--	--	--	0.0031
		--	--	--	<b>0.0550</b>
18	Sheet Pile Wall	--	--	--	0.0007
		--	--	--	0.0104
		--	--	--	0.0046
		--	--	--	<b>0.0157</b>
19	Headworks Structure Concrete Piles	--	--	--	0.0371
		--	--	--	0.0478
		--	--	--	0.0553
		--	--	--	0.0089
		--	--	--	0.0524
		--	--	--	0.1086
		--	--	--	0.0282
		--	--	--	<b>0.3383</b>

**Table L1-224. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.332930 1.492060 10.564784 12.471053	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.492060 10.564784 12.471053	g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.438595 33.018220 12.471053	g/hp-hr g/hr g/hr	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	<b>4.06</b>
<b>08 - Roads, Railroads, and Bridges</b>																
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--
<b>Mobilization Subtotal</b>														--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.438595 0.766004 2.332930 10.564784 1.915350 0.612915 12.471053	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.332930 1.492060 10.564784 12.471053	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.438595 10.564784 12.471053	g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	10.564784 2.069261 12.471053 0.000000	g/hr g/hp-hr g/hr g/hr	0.19	--	--
<b>Mobilization Subtotal</b>														<b>4.06</b>	--	--

Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	10.37	10.37	--	--	--	--	10.37	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	1.12	1.12	--	--	--	--	1.12	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	4.62	4.62	--	--	--	--	4.62	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	16.74	16.74	--	--	--	--	16.74	--	--	--	--	--	--	--	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	2.64	2.64	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	3.81	3.81	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.32	2.32	2.32	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.58	0.58	0.58	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.88	0.88	0.88	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.78	3.78	3.78	--	
		4.49	4.49	4.49	31.64	29.75	29.75	25.26	25.26	25.26	42.00	20.85	7.92	7.92	4.12	4.12	20.85	4.12	4.12	4.12	7.90	7.90	7.90	--	
<b>08 - Roads, Railroads, and Bridges</b>																									
23	Mobilization	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	0.19	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	3.65	--	--	--	--	--	3.65	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--	--	--	0.22	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	4.06	--	--	--	--	--	4.06	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	2.32	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	2.99	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.56	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	3.28	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	6.79	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.76	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	21.15	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	3.46	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	5.58	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.48	3.48	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	0.37	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.10	1.10	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	4.95	4.95	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	4.06	21.15	5.58	4.95	4.95	4.06	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities</b>																									
27	Mobilization	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	4.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-224. CO Exhaust Emissions from Offroad Co

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	0.0933
		--	--	--	0.0057
		--	--	--	0.0101
		--	--	--	0.0416
		--	--	--	<b>0.1506</b>
21	Headworks Channel Transition	--	--	--	0.0021
		--	--	--	0.0037
		--	--	--	0.0132
		--	--	--	<b>0.0190</b>
22	Hinged Bottom Gates	2.32	--	--	0.0278
		0.58	--	--	0.0070
		0.88	--	--	0.0106
		<b>3.78</b>	--	--	<b>0.0454</b>
		<b>7.90</b>	<b>4.06</b>	--	<b>0.9156</b>
<b>08 - Roads, Railroads, and Bridges</b>					
23	Mobilization	--	--	--	0.0002
		--	--	--	0.0036
		--	--	--	0.0002
		--	--	--	--
		--	--	--	<b>0.0041</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	0.0046
		--	--	--	0.0060
		--	--	--	0.0069
		--	--	--	0.0011
		--	--	--	0.0066
		--	--	--	0.0136
		--	--	--	0.0035
		--	--	--	<b>0.0423</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	0.0017
		--	--	--	0.0001
		--	--	--	0.0002
		--	--	--	0.0008
		--	--	--	<b>0.0028</b>
26	Pedestrian Bridge Span Installation	--	--	--	0.0139
		--	--	--	0.0015
		--	--	--	0.0044
		--	--	--	<b>0.0198</b>
		--	--	--	<b>0.0690</b>
<b>19 - Buildings, Grounds, and Utilities</b>					
27	Mobilization	--	--	--	0.0002
		--	--	--	0.0036
		--	--	--	0.0002
		--	--	--	--
		--	--	--	<b>0.0041</b>

**Table L1-224. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	1.969023	g/hp-hr	--	5.73	5.73
				Scraper	Scrapers	1	367					0.737650	g/hp-hr	--	4.77	4.77
				Motor Grader	Graders	1	187					0.641123	g/hp-hr	--	2.11	2.11
				Compactor	Rollers	1	80					1.853667	g/hp-hr	--	2.62	2.62
				4000 gallon Water Truck	n/a - onroad	1	MHDT					10.564784	g/hr	--	0.19	0.19
				10 TN Smooth Roller	Rollers	1	157					1.640464	g/hp-hr	--	4.54	4.54
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.471053	g/hr	--	1.54	1.54
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.332930	g/hp-hr	--	3.46	3.46
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.492060	g/hp-hr	--	0.21	0.21
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.069261	g/hp-hr	--	3.65	3.65
				Concrete Mixer Truck	n/a - onroad	1	MHDT					10.564784	g/hr	--	0.19	0.19
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													--	<b>29.01</b>	<b>29.01</b>	
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	2.332930	g/hp-hr	--	--	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.492060	g/hp-hr	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT					10.564784	g/hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.471053	g/hr	--	--	--
<b>Concrete Duct Banc Subtotal</b>													--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>													<b>4.06</b>	<b>29.01</b>	<b>29.01</b>	
<b>20 -Permanent Operating Equipment</b>																
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	10.564784	g/hr	--	--	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.069261	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2					12.471053	g/hr	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr	--	--	--
<b>Mobilization Subtotal</b>													--	--	--	
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.069261	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.471053	g/hr	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.069261	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.471053	g/hr	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>													--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.471053	g/hr	--	--	--
<b>Electrical Control Equipment CMU Building Subtotal</b>													--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.471053	g/hr	--	--	--
<b>Electrical Power Equipment CMU Building Subtotal</b>													--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.471053	g/hr	--	--	--
<b>Communication Equipment Subtotal</b>													--	--	--	
<b>20 -Permanent Operating Equipment Total</b>													--	--	--	
<b>GRAND TOTAL</b>													<b>12.79</b>	<b>102.66</b>	<b>106.71</b>	



Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																						
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	
28	CMU Building and Earthwork Pad Construction	5.73	5.73	5.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		4.77	4.77	4.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.11	2.11	2.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.62	2.62	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.54	4.54	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.54	1.54	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.46	3.46	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.65	3.65	3.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>29.01</b>	<b>29.01</b>	<b>29.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	--	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>5.58</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>29.01</b>	<b>34.58</b>	<b>29.01</b>	<b>4.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
																			<b>4.06</b>	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	3.65	3.65	3.65	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.66	0.66	0.66	
																				<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.65	3.65	3.65	3.65	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.66	0.66	0.66	
																				<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.66	0.66	0.66	
																				<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.66	0.66	0.66	
																				<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66		
																						<b>0.66</b>		
																				<b>4.06</b>	<b>9.94</b>	<b>9.94</b>	<b>9.94</b>	
<b>GRAND TOTAL</b>		<b>93.21</b>	<b>124.09</b>	<b>118.52</b>	<b>184.47</b>	<b>178.53</b>	<b>178.53</b>	<b>174.03</b>	<b>174.03</b>	<b>212.13</b>	<b>228.86</b>	<b>254.52</b>	<b>105.58</b>	<b>122.67</b>	<b>103.29</b>	<b>102.67</b>	<b>142.81</b>	<b>105.83</b>	<b>54.97</b>	<b>60.85</b>	<b>21.99</b>	<b>21.99</b>	<b>18.50</b>	

Table L1-224. CO Exhaust Emissions from Offroad C

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	--	0.0859
		--	--	--	0.0716
		--	--	--	0.0317
		--	--	--	0.0392
		--	--	--	0.0028
		--	--	--	0.0681
		--	--	--	0.0231
		--	--	--	0.0518
		--	--	--	0.0032
		--	--	--	0.0547
		--	--	--	<b>0.4351</b>
29	Concrete Duct Banc	--	--	--	0.0035
		--	--	--	0.0002
		--	--	--	0.0004
		--	--	--	0.0015
		--	--	--	<b>0.0056</b>
		--	--	--	<b>0.4447</b>
<b>20 -Permanent Operating Equipment</b>					
30	Mobilization	--	0.19	--	0.0002
		--	3.65	--	0.0036
		--	0.22	--	0.0002
		--	--	--	--
		--	<b>4.06</b>	--	<b>0.0041</b>
31	Mechanical Hydraulic Cylinders & Housing	3.65	--	--	0.0547
		0.66	--	--	0.0099
		<b>4.31</b>	--	--	<b>0.0646</b>
32	CMU Building Mechanical Equipment	3.65	--	--	0.0547
		0.66	--	--	0.0099
		<b>4.31</b>	--	--	<b>0.0646</b>
33	Electrical Control Equipment CMU Building	0.66	--	--	0.0099
		<b>0.66</b>	--	--	<b>0.0099</b>
34	Electrical Power Equipment CMU Building	0.66	--	--	0.0099
		<b>0.66</b>	--	--	<b>0.0099</b>
35	Communication Equipment	0.66	--	--	0.0040
		<b>0.66</b>	--	--	<b>0.0040</b>
		<b>10.60</b>	<b>4.06</b>	--	<b>0.1571</b>
<b>GRAND TOTAL</b>		<b>18.50</b>	<b>13.54</b>	<b>4.06</b>	<b>8.6388</b>

**Table L1-225. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
<b>02 - Relocations</b>																
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 g/hr 0.004000 g/hp-hr 0.046775 g/hr 0.000000 g/hr		0.00 -- -- 0.01 -- -- 0.00 -- -- -- -- --		
<b>Mobilization and Demobilization Subtotal</b>													<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.003179 g/hp-hr 0.003453 g/hp-hr 0.003667 g/hp-hr 0.171769 g/hr 0.220605 g/hr 0.046775 g/hr		-- 0.02 0.02 -- 0.01 0.01 -- 0.01 0.01 -- 0.00 0.00 -- 0.00 0.00 -- 0.00 0.00		
<b>Fremont Weir Demo Subtotal</b>													<b>--</b>	<b>0.05</b>	<b>0.05</b>	<b>--</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.003901 g/hp-hr 0.171769 g/hr 0.046775 g/hr 0.220605 g/hr		-- -- -- -- -- -- -- -- -- -- -- --		
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.171769 g/hr 0.046775 g/hr		0.00 -- -- 0.00 -- --		
<b>Temporary Electrical Power Subtotal</b>													<b>0.00</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>02 - Relocations Total</b>													<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	<b>--</b>
<b>09 - Channels and Canals</b>																
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 g/hr 0.004000 g/hp-hr 0.046775 g/hr 0.000000 g/hr		0.00 -- -- 0.01 -- -- 0.00 -- -- -- -- --		
<b>Mobilization and Demobilization Subtotal</b>													<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.004267 g/hp-hr 0.002558 g/hp-hr 0.016272 g/hp-hr 0.171769 g/hr 0.046775 g/hr 0.220605 g/hr		-- 0.02 0.02 -- 0.01 0.01 -- 0.00 0.00 -- 0.01 0.01 -- 0.01 0.01 -- 0.01 0.01		
<b>Clearing and Grubbing Subtotal</b>													<b>--</b>	<b>0.06</b>	<b>0.06</b>	<b>--</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.003179 g/hp-hr 0.003291 g/hp-hr 0.003453 g/hp-hr 0.220605 g/hr 0.046775 g/hr		-- -- -- -- -- -- -- -- -- -- -- -- -- -- --		
<b>Excavation (Wet Conditions) Subtotal</b>													<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.003291 g/hp-hr 0.004016 g/hp-hr 0.003901 g/hp-hr 0.171769 g/hr 0.046775 g/hr		-- -- -- -- -- -- -- -- -- -- -- -- -- -- --		
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.003291 g/hp-hr 0.171769 g/hr 0.003581 g/hp-hr 0.046775 g/hr		-- -- -- -- -- -- -- -- -- -- -- --		
<b>Earthen Backfill Subtotal</b>													<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.003179 g/hp-hr 0.003570 g/hp-hr 0.220605 g/hr 0.046775 g/hr		-- -- -- -- -- -- -- -- -- -- -- --		
<b>Riprap - Class 2 Subtotal</b>													<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Table L1-225. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
6	Clearing and Grubbing	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	--	--	--
		--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	--	--	--

Table L1-225. SO2 Exhaust Emissions from Offroad C

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>					
1	Mobilization and Demobilization	--	--	0.00	0.0000
		--	--	0.01	0.0000
		--	--	0.00	0.0000
		--	--	--	--
		--	--	<b>0.01</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0003</b>
3	Levee O&M Road Regrading (6" AB)	--	0.01	--	0.0000
		--	0.00	--	0.0000
		--	0.00	--	0.0000
		--	0.02	--	0.0000
		--	<b>0.04</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>					
5	Mobilization and Demobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0007</b>
7	Excavation (Wet Conditions)	--	--	--	0.0011
		--	--	--	0.0016
		--	--	--	0.0009
		--	--	--	0.0016
		--	--	--	0.0003
		--	--	--	<b>0.0054</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	0.0015
		--	--	--	0.0097
		--	--	--	0.0011
		--	--	--	0.0003
		--	--	--	0.0005
		--	--	--	<b>0.0130</b>
9	Earthen Backfill	--	--	--	0.0002
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	<b>0.0005</b>
10	Riprap - Class 2	--	--	--	0.0014
		--	--	--	0.0009
		--	--	--	0.0045
		--	--	--	0.0002
		--	--	--	<b>0.0071</b>

**Table L1-225. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.003179 0.003570 0.220605 0.046775	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.003179 0.003570 0.046775 0.220605	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.003667 0.046775	g/hp-hr g/hr	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--
<b>09 - Channels and Canals Total</b>														<b>0.01</b>	<b>0.06</b>	<b>0.06</b>
<b>15 - Floodway Control and Diversion Structures</b>																
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	0.00 0.01 0.00 --
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>0.01</b>
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.171769 0.004804 0.046775	g/hr g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.004934 0.046775	g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003179 0.003291 0.003453 0.220605 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.171769 0.004804 0.046775	g/hr g/hp-hr g/hr	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002399 0.004804 0.004934 0.171769 0.003667 0.003180 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--

Table L1-225. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	--	--	--	--	--	--
12	RSP Bedding Material	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	
		--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	
		--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	
		--	--	--	--	--	--	--	--	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	--	--	--	--	
		--	--	--	--	--	--	--	--	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	--	--	--	--	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	--
		<b>0.06</b>	<b>0.46</b>	<b>0.46</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.99</b>	<b>0.99</b>	<b>1.27</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.71</b>	<b>0.58</b>	<b>0.28</b>	<b>0.28</b>	<b>0.01</b>	<b>0.01</b>	--
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
17	Excavation (Wet Conditions)	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-225. SO2 Exhaust Emissions from Offroad C**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
11	Riprap - Class 3	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0000
		--	--	--	<b>0.0003</b>
12	RSP Bedding Material	--	--	--	0.0016
		--	--	--	0.0010
		--	--	--	0.0002
		--	--	--	0.0049
		--	--	--	<b>0.0078</b>
13	Erosion Control Seeding	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	--	--	<b>0.0347</b>
<b>15 - Floodway Control and Diversion Structures</b>					
14	Mobilization and Demobilization	--	0.00	--	0.0000
		--	0.01	--	0.0000
		--	0.00	--	0.0000
		--	--	--	--
		--	<b>0.01</b>	--	<b>0.0000</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0000
		--	--	--	<b>0.0002</b>
16	Construction Site Dewatering (Pumping)	0.01	--	--	0.0004
		0.00	--	--	0.0001
		<b>0.01</b>	--	--	<b>0.0006</b>
17	Excavation (Wet Conditions)	--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	<b>0.0002</b>
18	Sheet Pile Wall	--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	<b>0.0001</b>
19	Headworks Structure Concrete Piles	--	--	--	0.0002
		--	--	--	0.0003
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0006
		--	--	--	<b>0.0015</b>



**Table L1-225. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.004934 0.003802 0.171769 0.046775	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.003802 0.171769 0.046775	g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002399 0.220605 0.046775	g/hp-hr g/hr g/hr	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	<b>0.01</b>
<b>08 - Roads, Railroads, and Bridges</b>																
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--
<b>Mobilization Subtotal</b>														--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002399 0.004804 0.004934 0.171769 0.003667 0.003180 0.046775	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.004934 0.003802 0.171769 0.046775	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.002399 0.171769 0.046775	g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.171769 0.004000 0.046775 0.000000	g/hr g/hp-hr g/hr g/hr	0.00	--	--
<b>Mobilization Subtotal</b>														<b>0.01</b>	--	--



Table L1-225. SO2 Exhaust Emissions from Offroad C

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	0.0002
		--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0002
		--	--	--	<b>0.0005</b>
21	Headworks Channel Transition	--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	<b>0.0001</b>
22	Hinged Bottom Gates	0.01	--	--	0.0002
		0.00	--	--	0.0000
		0.00	--	--	0.0000
		<b>0.02</b>	--	--	<b>0.0002</b>
		<b>0.03</b>	<b>0.01</b>	--	<b>0.0036</b>
<b>08 - Roads, Railroads, and Bridges</b>					
23	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	<b>0.0002</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Span Installation	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0001</b>
		--	--	--	<b>0.0003</b>
<b>19 - Buildings, Grounds, and Utilities</b>					
27	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>

**Table L1-225. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.003859	g/hp-hr	--	0.01	0.01
				Scraper	Scrapers	1	367					0.004016	g/hp-hr	--	0.03	0.03
				Motor Grader	Graders	1	187					0.003901	g/hp-hr	--	0.01	0.01
				Compactor	Rollers	1	80					0.003733	g/hp-hr	--	0.01	0.01
				4000 gallon Water Truck	n/a - onroad	1	MHDT					0.171769	g/hr	--	0.00	0.00
				10 TN Smooth Roller	Rollers	1	157					0.003581	g/hp-hr	--	0.01	0.01
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.046775	g/hr	--	0.01	0.01
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.004934	g/hp-hr	--	0.01	0.01
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.003802	g/hp-hr	--	0.00	0.00
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.004000	g/hp-hr	--	0.01	0.01
				Concrete Mixer Truck	n/a - onroad	1	MHDT					0.171769	g/hr	--	0.00	0.00
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>												
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.004934	g/hp-hr	--	--	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.003802	g/hp-hr	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT					0.171769	g/hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.046775	g/hr	--	--	--
<b>Concrete Duct Banc Subtotal</b>													--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>													<b>0.01</b>	<b>0.09</b>	<b>0.09</b>	
<b>20 -Permanent Operating Equipment</b>																
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.171769	g/hr	--	--	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.004000	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.046775	g/hr	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr	--	--	--
<b>Mobilization Subtotal</b>													--	--	--	
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.046775	g/hr	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.046775	g/hr	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>													--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.046775	g/hr	--	--	--
<b>Electrical Control Equipment CMU Building Subtotal</b>													--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.046775	g/hr	--	--	--
<b>Electrical Power Equipment CMU Building Subtotal</b>													--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.046775	g/hr	--	--	--
<b>Communication Equipment Subtotal</b>													--	--	--	
<b>20 -Permanent Operating Equipment Total</b>													--	--	--	
<b>GRAND TOTAL</b>													<b>0.04</b>	<b>0.20</b>	<b>0.21</b>	

Table L1-225. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																					
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
28	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.09</b>	<b>0.11</b>	<b>0.09</b>	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
																			<b>0.01</b>	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00
																				<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00
																				<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00
																				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00
																				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.00</b>
																				<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>
<b>GRAND TOTAL</b>		<b>0.18</b>	<b>0.60</b>	<b>0.58</b>	<b>0.88</b>	<b>0.87</b>	<b>0.87</b>	<b>0.84</b>	<b>0.84</b>	<b>1.09</b>	<b>1.15</b>	<b>1.34</b>	<b>0.61</b>	<b>0.69</b>	<b>0.59</b>	<b>0.60</b>	<b>0.80</b>	<b>0.60</b>	<b>0.30</b>	<b>0.32</b>	<b>0.06</b>	<b>0.06</b>	

**Table L1-225. SO2 Exhaust Emissions from Offroad C**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	--	0.0002
		--	--	--	0.0004
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	<b>0.0014</b>
29	Concrete Duct Banc	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>					
30	Mobilization	--	0.00	--	0.0000
		--	0.01	--	0.0000
		--	0.00	--	0.0000
		--	--	--	--
		--	<b>0.01</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	--	--	0.0001
		0.00	--	--	0.0000
		<b>0.01</b>	--	--	<b>0.0001</b>
32	CMU Building Mechanical Equipment	0.01	--	--	0.0001
		0.00	--	--	0.0000
		<b>0.01</b>	--	--	<b>0.0001</b>
33	Electrical Control Equipment CMU Building	0.00	--	--	0.0000
		<b>0.00</b>	--	--	<b>0.0000</b>
34	Electrical Power Equipment CMU Building	0.00	--	--	0.0000
		<b>0.00</b>	--	--	<b>0.0000</b>
35	Communication Equipment	0.00	--	--	0.0000
		<b>0.00</b>	--	--	<b>0.0000</b>
		<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.06</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0407</b>

**Table L1-226. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr		
<b>02 - Relocations</b>																		
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr	0.04 0.01 0.01 --	-- -- -- --	-- -- -- --		
														<b>Mobilization and Demobilization Subtotal</b>		<b>0.06</b>	--	--
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.003593 0.003840 0.004034 2.205086 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	0.02 0.01 0.01 0.04 0.03 0.08	0.02 0.01 0.01 0.04 0.03 0.08		
														<b>Fremont Weir Demo Subtotal</b>		--	<b>0.19</b>	<b>0.19</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.003797 2.205086 0.771382 1.595198	g/hp-hr g/hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --		
														<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>		--	--	--
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.205086 0.771382	g/hr g/hr	0.04 0.03	-- --	-- --		
														<b>Temporary Electrical Power Subtotal</b>		<b>0.07</b>	--	--
														<b>02 - Relocations Total</b>		<b>0.13</b>	<b>0.19</b>	<b>0.19</b>
<b>09 - Channels and Canals</b>																		
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr	0.04 0.01 0.01 --	-- -- -- --	-- -- -- --		
														<b>Mobilization and Demobilization Subtotal</b>		<b>0.06</b>	--	--
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.004510 0.030333 0.230004 2.205086 0.771382 1.595198	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	-- -- -- -- -- --	0.02 0.15 0.06 0.08 0.16 0.06	0.02 0.15 0.06 0.08 0.16 0.06		
														<b>Clearing and Grubbing Subtotal</b>		--	<b>0.53</b>	<b>0.53</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.003593 0.003973 0.003840 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --		
														<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.003973 0.004525 0.003797 2.205086 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	-- -- -- -- --	-- -- -- -- --	-- -- -- -- --		
														<b>Excavation/Grading (Dry Conditions) Subtotal</b>		--	--	--
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.003973 2.205086 0.003412 0.771382	g/hp-hr g/hr g/hp-hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --		
														<b>Earthen Backfill Subtotal</b>		--	--	--
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.003593 0.003966 1.595198 0.771382	g/hp-hr g/hp-hr g/hr g/hr	-- -- -- --	-- -- -- --	-- -- -- --		
														<b>Riprap - Class 2 Subtotal</b>		--	--	--

Table L1-226. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
<b>02 - Relocations</b>																									
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--		
6	Clearing and Grubbing	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.53</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.51	0.51	0.51	0.51	0.51	0.51	0.51	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	<b>0.88</b>	--	--	--	--	--	--	--	--	--	--	--	--		
8	Excavation/Grading (Dry Conditions)	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--		
		--	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>	--	--	--	--	--	--	--	--	--	--	--	--		
9	Earthen Backfill	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--		
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--		
		--	--	--	--	--	--	--	--	--	--	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	--	--	--		



**Table L1-226. PM10 Exhaust Emissions from Offroad**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>					
1	Mobilization and Demobilization	--	--	0.04	0.0000
		--	--	0.01	0.0000
		--	--	0.01	0.0000
		--	--	--	--
		--	--	<b>0.06</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0002
		--	--	--	0.0005
		--	--	--	<b>0.0011</b>
3	Levee O&M Road Regrading (6" AB)	--	0.01	--	0.0000
		--	0.04	--	0.0001
		--	0.01	--	0.0000
		--	0.14	--	0.0002
		--	<b>0.21</b>	--	<b>0.0003</b>
4	Temporary Electrical Power	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	<b>0.21</b>	<b>0.06</b>	<b>0.0015</b>
<b>09 - Channels and Canals</b>					
5	Mobilization and Demobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>
6	Clearing and Grubbing	--	--	--	0.0002
		--	--	--	0.0017
		--	--	--	0.0007
		--	--	--	0.0009
		--	--	--	0.0019
		--	--	--	0.0006
		--	--	--	<b>0.0061</b>
7	Excavation (Wet Conditions)	--	--	--	0.0012
		--	--	--	0.0019
		--	--	--	0.0010
		--	--	--	0.0114
		--	--	--	0.0043
		--	--	--	<b>0.0198</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	0.0018
		--	--	--	0.0109
		--	--	--	0.0011
		--	--	--	0.0033
		--	--	--	0.0080
		--	--	--	<b>0.0250</b>
9	Earthen Backfill	--	--	--	0.0003
		--	--	--	0.0005
		--	--	--	0.0001
		--	--	--	0.0006
		--	--	--	<b>0.0015</b>
10	Riprap - Class 2	--	--	--	0.0016
		--	--	--	0.0010
		--	--	--	0.0324
		--	--	--	0.0034
		--	--	--	<b>0.0384</b>

**Table L1-226. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.003593 0.003966 1.595198 0.771382	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.003593 0.003966 0.771382 1.595198	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.004034 0.771382	g/hp-hr g/hr	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--
<b>09 - Channels and Canals Total</b>														<b>0.06</b>	<b>0.53</b>	<b>0.53</b>
<b>15 - Floodway Control and Diversion Structures</b>																
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	0.04 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>0.06</b>
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.205086 0.004572 0.771382	g/hr g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.007132 0.771382	g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003593 0.003973 0.003840 1.595198 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.205086 0.004572 0.771382	g/hr g/hp-hr g/hr	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002694 0.004572 0.007132 2.205086 0.004034 0.004072 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--

Table L1-226. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																						
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.65	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.77</b>	--	--	--	--	--	--	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--		
		--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--		
		--	--	--	--	--	--	--	--	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	--	--	--	--		
		--	--	--	--	--	--	--	--	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	--	--	--	--		
		--	--	--	--	--	--	--	--	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	<b>1.54</b>	--	--	--	--		
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	
		<b>0.53</b>	<b>0.89</b>	<b>0.89</b>	<b>1.88</b>	<b>1.88</b>	<b>1.88</b>	<b>1.88</b>	<b>1.88</b>	<b>3.31</b>	<b>3.31</b>	<b>4.85</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.07</b>	<b>3.84</b>	<b>3.13</b>	<b>1.54</b>	<b>1.54</b>	<b>0.06</b>	<b>0.06</b>	--	
<b>15 - Floodway Control and Diversion Structures</b>																								
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
		--	--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	
17	Excavation (Wet Conditions)	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.14</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1-226. PM10 Exhaust Emissions from Offroad**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
11	Riprap - Class 3	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0013
		--	--	--	0.0001
		--	--	--	<b>0.0015</b>
12	RSP Bedding Material	--	--	--	0.0018
		--	--	--	0.0012
		--	--	--	0.0037
		--	--	--	0.0356
		--	--	--	<b>0.0423</b>
13	Erosion Control Seeding	--	--	--	0.0000
		--	--	--	0.0003
		--	--	--	<b>0.0003</b>
		--	--	--	<b>0.1350</b>
<b>15 - Floodway Control and Diversion Structures</b>					
14	Mobilization and Demobilization	--	0.04	--	0.0000
		--	0.01	--	0.0000
		--	0.01	--	0.0000
		--	--	--	--
		--	<b>0.06</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.0004
		--	--	--	0.0002
		--	--	--	0.0007
		--	--	--	<b>0.0012</b>
16	Construction Site Dewatering (Pumping)	0.01	--	--	0.0006
		0.04	--	--	0.0024
		<b>0.05</b>	--	--	<b>0.0031</b>
17	Excavation (Wet Conditions)	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0005
		--	--	--	0.0002
		--	--	--	<b>0.0009</b>
18	Sheet Pile Wall	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	<b>0.0005</b>
19	Headworks Structure Concrete Piles	--	--	--	0.0002
		--	--	--	0.0003
		--	--	--	0.0002
		--	--	--	0.0019
		--	--	--	0.0001
		--	--	--	0.0007
		--	--	--	0.0017
		--	--	--	<b>0.0051</b>

**Table L1-226. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.007132 0.069607 2.205086 0.771382	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.069607 2.205086 0.771382	g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002694 1.595198 0.771382	g/hp-hr g/hr g/hr	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	<b>0.06</b>
<b>08 - Roads, Railroads, and Bridges</b>																
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--
<b>Mobilization Subtotal</b>														--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002694 0.004572 0.007132 2.205086 0.004034 0.004072 0.771382	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.007132 0.069607 2.205086 0.771382	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.002694 2.205086 0.771382	g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.205086 0.003799 0.771382 0.000000	g/hr g/hp-hr g/hr g/hr	0.04	--	--
<b>Mobilization Subtotal</b>														<b>0.06</b>	--	--

Table L1-226. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.23	0.23	--	--	--	--	0.23	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--	--	0.29	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	--	--	--	--	<b>0.58</b>	--	--	--	--	--	--			
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>0.34</b>	<b>0.34</b>	--	--	--	--	--	--	--	--	--			
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.05	0.05		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>			
<b>08 - Roads, Railroads, and Bridges</b>		<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.49</b>	<b>0.51</b>	<b>0.51</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.95</b>	<b>0.63</b>	<b>0.39</b>	<b>0.39</b>	<b>0.05</b>	<b>0.05</b>	<b>0.63</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>		
23	Mobilization	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	0.04	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	--	--	--	--	<b>0.06</b>	--	--	--	--	--			
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	--	--	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	0.08	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	0.10	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.19</b>	--	--	--	--	<b>0.19</b>	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>0.17</b>	<b>0.17</b>	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.32</b>	<b>0.19</b>	<b>0.17</b>	<b>0.17</b>	<b>0.06</b>	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>																									
27	Mobilization	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

**Table L1-226. PM10 Exhaust Emissions from Offroad**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	0.0003
		--	--	--	0.0003
		--	--	--	0.0021
		--	--	--	0.0026
		--	--	--	<b>0.0052</b>
21	Headworks Channel Transition	--	--	--	0.0001
		--	--	--	0.0008
		--	--	--	0.0008
		--	--	--	<b>0.0017</b>
22	Hinged Bottom Gates	0.01	--	--	0.0002
		0.03	--	--	0.0003
		0.05	--	--	0.0007
		<b>0.10</b>	--	--	<b>0.0012</b>
		<b>0.15</b>	<b>0.06</b>	--	<b>0.0189</b>
<b>08 - Roads, Railroads, and Bridges</b>					
23	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0002
		--	--	--	<b>0.0006</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0001</b>
26	Pedestrian Bridge Span Installation	--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	0.0003
		--	--	--	<b>0.0007</b>
		--	--	--	<b>0.0015</b>
<b>19 - Buildings, Grounds, and Utilities</b>					
27	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0001</b>

**Table L1-226. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.004329	g/hp-hr	--	0.01	0.01
				Scraper	Scrapers	1	367					0.004525	g/hp-hr	--	0.03	0.03
				Motor Grader	Graders	1	187					0.003797	g/hp-hr	--	0.01	0.01
				Compactor	Rollers	1	80					0.003693	g/hp-hr	--	0.01	0.01
				4000 gallon Water Truck	n/a - onroad	1	MHDT					2.205086	g/hr	--	0.04	0.04
				10 TN Smooth Roller	Rollers	1	157					0.003412	g/hp-hr	--	0.01	0.01
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.771382	g/hr	--	0.10	0.10
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.007132	g/hp-hr	--	0.01	0.01
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.069607	g/hp-hr	--	0.01	0.01
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.003799	g/hp-hr	--	0.01	0.01
				Concrete Mixer Truck	n/a - onroad	1	MHDT					2.205086	g/hr	--	0.04	0.04
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>												
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.007132	g/hp-hr	--	--	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.069607	g/hp-hr	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT					2.205086	g/hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.771382	g/hr	--	--	--
<b>Concrete Duct Banc Subtotal</b>													--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>													<b>0.06</b>	<b>0.27</b>	<b>0.27</b>	
<b>20 -Permanent Operating Equipment</b>																
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	2.205086	g/hr	--	--	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.003799	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.771382	g/hr	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr	--	--	--
				<b>Mobilization Subtotal</b>												
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.003799	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.771382	g/hr	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.003799	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.771382	g/hr	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>													--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.771382	g/hr	--	--	--
<b>Electrical Control Equipment CMU Building Subtotal</b>													--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.771382	g/hr	--	--	--
<b>Electrical Power Equipment CMU Building Subtotal</b>													--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.771382	g/hr	--	--	--
<b>Communication Equipment Subtotal</b>													--	--	--	
<b>20 -Permanent Operating Equipment Total</b>													--	--	--	
<b>GRAND TOTAL</b>													<b>0.24</b>	<b>0.99</b>	<b>1.05</b>	



Table L1-226. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																						
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	
28	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>0.27</b>	<b>0.46</b>	<b>0.27</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
																		<b>0.06</b>	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	
																			<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>		
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	
																			<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>		
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	
																				<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	
																				<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04		
																				--	--	--	<b>0.04</b>	
																			<b>0.06</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.22</b>	
<b>GRAND TOTAL</b>		<b>0.94</b>	<b>1.49</b>	<b>1.30</b>	<b>2.43</b>	<b>2.39</b>	<b>2.39</b>	<b>2.25</b>	<b>2.25</b>	<b>3.68</b>	<b>4.26</b>	<b>5.48</b>	<b>3.52</b>	<b>3.78</b>	<b>3.32</b>	<b>3.29</b>	<b>4.64</b>	<b>3.24</b>	<b>1.65</b>	<b>1.77</b>	<b>0.39</b>	<b>0.39</b>	<b>0.37</b>	

**Table L1-226. PM10 Exhaust Emissions from Offroad**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	--	0.0002
		--	--	--	0.0004
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0006
		--	--	--	0.0001
		--	--	--	0.0014
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0040</b>
29	Concrete Duct Banc	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0002</b>
		--	--	--	<b>0.0043</b>
<b>20 -Permanent Operating Equipment</b>					
30	Mobilization	--	0.04	--	0.0000
		--	0.01	--	0.0000
		--	0.01	--	0.0000
		--	--	--	--
		--	<b>0.06</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	--	--	0.0001
		0.04	--	--	0.0006
		<b>0.05</b>	--	--	<b>0.0007</b>
32	CMU Building Mechanical Equipment	0.01	--	--	0.0001
		0.04	--	--	0.0006
		<b>0.05</b>	--	--	<b>0.0007</b>
33	Electrical Control Equipment CMU Building	0.04	--	--	0.0006
		<b>0.04</b>	--	--	<b>0.0006</b>
34	Electrical Power Equipment CMU Building	0.04	--	--	0.0006
		<b>0.04</b>	--	--	<b>0.0006</b>
35	Communication Equipment	0.04	--	--	0.0002
		<b>0.04</b>	--	--	<b>0.0002</b>
		<b>0.22</b>	<b>0.06</b>	--	<b>0.0030</b>
<b>GRAND TOTAL</b>		<b>0.37</b>	<b>0.32</b>	<b>0.06</b>	<b>0.1642</b>

**Table L1-227. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 g/hr 0.003495 g/hp-hr 0.362050 g/hr 0.000000 g/hr		0.02 -- -- 0.01 -- -- 0.01 -- -- -- -- --			
													<b>Mobilization and Demobilization Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>--</b>
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.003306 g/hp-hr 0.003532 g/hp-hr 0.003712 g/hp-hr 0.949858 g/hr 0.668754 g/hr 0.362050 g/hr		-- 0.02 0.02 -- 0.01 0.01 -- 0.01 0.01 -- 0.02 0.02 -- 0.01 0.01 -- 0.04 0.04			
													<b>Fremont Weir Demo Subtotal</b>		<b>--</b>	<b>0.10</b>	<b>0.10</b>
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.003493 g/hp-hr 0.949858 g/hr 0.362050 g/hr 0.668754 g/hr		-- -- -- -- -- -- -- -- -- -- -- --			
													<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.949858 g/hr 0.362050 g/hr		0.02 -- -- 0.01 -- --			
													<b>Temporary Electrical Power Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>--</b>
													<b>02 - Relocations Total</b>		<b>0.06</b>	<b>0.10</b>	<b>0.10</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 g/hr 0.003495 g/hp-hr 0.362050 g/hr 0.000000 g/hr		0.02 -- -- 0.01 -- -- 0.01 -- -- -- -- --			
													<b>Mobilization and Demobilization Subtotal</b>		<b>0.03</b>	<b>--</b>	<b>--</b>
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.004149 g/hp-hr 0.027906 g/hp-hr 0.211604 g/hp-hr 0.949858 g/hr 0.362050 g/hr 0.668754 g/hr		-- 0.02 0.02 -- 0.14 0.14 -- 0.06 0.06 -- 0.03 0.03 -- 0.08 0.08 -- 0.02 0.02			
													<b>Clearing and Grubbing Subtotal</b>		<b>--</b>	<b>0.35</b>	<b>0.35</b>
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.003306 g/hp-hr 0.003655 g/hp-hr 0.003532 g/hp-hr 0.668754 g/hr 0.362050 g/hr		-- -- -- -- -- -- -- -- -- -- -- -- -- -- --			
													<b>Excavation (Wet Conditions) Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.003655 g/hp-hr 0.004163 g/hp-hr 0.003493 g/hp-hr 0.949858 g/hr 0.362050 g/hr		-- -- -- -- -- -- -- -- -- -- -- -- -- -- --			
													<b>Excavation/Grading (Dry Conditions) Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.003655 g/hp-hr 0.949858 g/hr 0.003139 g/hp-hr 0.362050 g/hr		-- -- -- -- -- -- -- -- -- -- -- --			
													<b>Earthen Backfill Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.003306 g/hp-hr 0.003649 g/hp-hr 0.668754 g/hr 0.362050 g/hr		-- -- -- -- -- -- -- -- -- -- -- --			
													<b>Riprap - Class 2 Subtotal</b>		<b>--</b>	<b>--</b>	<b>--</b>

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																				
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--	--
6	Clearing and Grubbing	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.35</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	--	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--
		--	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--
		--	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	<b>0.64</b>	--	--	--	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--
		--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--
		--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--	--
		--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--
		--	--	--	--	--	--	--	--	--	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	--	--

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>					
1	Mobilization and Demobilization	--	--	0.02	0.0000
		--	--	0.01	0.0000
		--	--	0.01	0.0000
		--	--	--	--
		--	--	<b>0.03</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0002
		--	--	--	<b>0.0006</b>
3	Levee O&M Road Regrading (6" AB)	--	0.01	--	0.0000
		--	0.02	--	0.0000
		--	0.01	--	0.0000
		--	0.06	--	0.0001
		--	<b>0.09</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
		--	<b>0.09</b>	<b>0.03</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>					
5	Mobilization and Demobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	0.0002
		--	--	--	0.0016
		--	--	--	0.0007
		--	--	--	0.0004
		--	--	--	0.0009
		--	--	--	0.0003
		--	--	--	<b>0.0040</b>
7	Excavation (Wet Conditions)	--	--	--	0.0011
		--	--	--	0.0017
		--	--	--	0.0009
		--	--	--	0.0048
		--	--	--	0.0020
		--	--	--	<b>0.0106</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	0.0016
		--	--	--	0.0100
		--	--	--	0.0010
		--	--	--	0.0014
		--	--	--	0.0038
		--	--	--	<b>0.0178</b>
9	Earthen Backfill	--	--	--	0.0003
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	<b>0.0009</b>
10	Riprap - Class 2	--	--	--	0.0015
		--	--	--	0.0010
		--	--	--	0.0136
		--	--	--	0.0016
		--	--	--	<b>0.0176</b>

**Table L1-227. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.003306 0.003649 0.668754 0.362050	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Riprap - Class 3 Subtotal</b>														--	--	--
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.003306 0.003649 0.362050 0.668754	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>RSP Bedding Material Subtotal</b>														--	--	--
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.003712 0.362050	g/hp-hr g/hr	--	--	--
<b>Erosion Control Seeding Subtotal</b>														--	--	--
<b>09 - Channels and Canals Total</b>														<b>0.03</b>	<b>0.35</b>	<b>0.35</b>
<b>15 - Floodway Control and Diversion Structures</b>																
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	0.02 0.01 0.01 --
<b>Mobilization and Demobilization Subtotal</b>														--	--	<b>0.03</b>
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.949858 0.004207 0.362050	g/hr g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>														--	--	--
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.006561 0.362050	g/hp-hr g/hr	--	--	--
<b>Construction Site Dewatering (Pumping) Subtotal</b>														--	--	--
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003306 0.003655 0.003532 0.668754 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Excavation (Wet Conditions) Subtotal</b>														--	--	--
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.949858 0.004207 0.362050	g/hr g/hp-hr g/hr	--	--	--
<b>Sheet Pile Wall Subtotal</b>														--	--	--
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002479 0.004207 0.006561 0.949858 0.003712 0.003746 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Headworks Structure Concrete Piles Subtotal</b>														--	--	--

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.35</b>	--	--	--	--	--	--		
12	RSP Bedding Material	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--			
		--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--			
		--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--			
		--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--	--	--	--			
		--	--	--	--	--	--	--	--	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	--	--	--	--			
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--		
		<b>0.35</b>	<b>0.64</b>	<b>0.64</b>	<b>1.17</b>	<b>1.17</b>	<b>1.17</b>	<b>1.17</b>	<b>1.17</b>	<b>1.81</b>	<b>1.81</b>	<b>2.52</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.41</b>	<b>1.76</b>	<b>1.44</b>	<b>0.70</b>	<b>0.70</b>	<b>0.03</b>	<b>0.03</b>	--		
<b>15 - Floodway Control and Diversion Structures</b>																									
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Cofferdam)	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
		--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02		
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>		
17	Excavation (Wet Conditions)	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	<b>0.07</b>	<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	--	--	--	--	--	--	--	--	--	--	--	--		

**Table L1-227. PM2.5 Exhaust Emissions from Offroad**

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
11	Riprap - Class 3	--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0005
		--	--	--	0.0001
		--	--	--	<b>0.0007</b>
12	RSP Bedding Material	--	--	--	0.0016
		--	--	--	0.0011
		--	--	--	0.0018
		--	--	--	0.0149
		--	--	--	<b>0.0194</b>
13	Erosion Control Seeding	--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	<b>0.0002</b>
		--	--	--	<b>0.0712</b>
<b>15 - Floodway Control and Diversion Structures</b>					
14	Mobilization and Demobilization	--	0.02	--	0.0000
		--	0.01	--	0.0000
		--	0.01	--	0.0000
		--	--	--	--
		--	<b>0.03</b>	--	<b>0.0000</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	<b>0.0006</b>
16	Construction Site Dewatering (Pumping)	0.01	--	--	0.0006
		0.02	--	--	0.0011
		<b>0.03</b>	--	--	<b>0.0017</b>
17	Excavation (Wet Conditions)	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	<b>0.0005</b>
18	Sheet Pile Wall	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0003</b>
19	Headworks Structure Concrete Piles	--	--	--	0.0002
		--	--	--	0.0003
		--	--	--	0.0002
		--	--	--	0.0008
		--	--	--	0.0001
		--	--	--	0.0007
		--	--	--	<b>0.0030</b>



**Table L1-227. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.006561 0.064038 0.949858 0.362050	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Structure Subtotal</b>														--	--	--
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.064038 0.949858 0.362050	g/hp-hr g/hr g/hr	--	--	--
<b>Headworks Channel Transition Subtotal</b>														--	--	--
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002479 0.668754 0.362050	g/hp-hr g/hr g/hr	--	--	--
<b>Hinged Bottom Gates Subtotal</b>														--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>														--	--	<b>0.03</b>
<b>08 - Roads, Railroads, and Bridges</b>																
23	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr	--	--	--
<b>Mobilization Subtotal</b>														--	--	--
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002479 0.004207 0.006561 0.949858 0.003712 0.003746 0.362050	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Piles Subtotal</b>														--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.006561 0.064038 0.949858 0.362050	g/hp-hr g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>														--	--	--
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.002479 0.949858 0.362050	g/hp-hr g/hr g/hr	--	--	--
<b>Pedestrian Bridge Span Installation Subtotal</b>														--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>														--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																
27	Mobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.949858 0.003495 0.362050 0.000000	g/hr g/hp-hr g/hr g/hr	0.02	--	--
<b>Mobilization Subtotal</b>														<b>0.03</b>	--	--

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	0.10	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	0.13	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	--	--	--	--	<b>0.29</b>	--	--	--	--	--	--			
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.07	0.07	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.16</b>	<b>0.16</b>	--	--	--	--	--	--	--	--				
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	0.03		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>			
<b>08 - Roads, Railroads, and Bridges</b>		<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.26</b>	<b>0.29</b>	<b>0.29</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.51</b>	<b>0.32</b>	<b>0.19</b>	<b>0.19</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	
23	Mobilization	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--	--	<b>0.03</b>	--	--	--	--	--			
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	<b>0.19</b>	--	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.09</b>	--	--	--	--	--	--	--	--			
		--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.19</b>	<b>0.10</b>	<b>0.09</b>	<b>0.09</b>	<b>0.03</b>	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities</b>																									
27	Mobilization	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	0.0003
		--	--	--	0.0002
		--	--	--	0.0009
		--	--	--	0.0012
		--	--	--	<b>0.0026</b>
21	Headworks Channel Transition	--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	0.0004
		--	--	--	<b>0.0008</b>
22	Hinged Bottom Gates	0.01	--	--	0.0002
		0.01	--	--	0.0001
		0.03	--	--	0.0003
		<b>0.05</b>	--	--	<b>0.0006</b>
		<b>0.08</b>	<b>0.03</b>	--	<b>0.0102</b>
<b>08 - Roads, Railroads, and Bridges</b>					
23	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	0.0000
		--	--	--	0.0001
		--	--	--	<b>0.0004</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Span Installation	--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0003</b>
		--	--	--	<b>0.0008</b>
<b>19 - Buildings, Grounds, and Utilities</b>					
27	Mobilization	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	--
		--	--	--	<b>0.0000</b>

**Table L1-227. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	15-Apr	22-Apr	29-Apr
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.003983	g/hp-hr	--	0.01	0.01
				Scraper	Scrapers	1	367					0.004163	g/hp-hr	--	0.03	0.03
				Motor Grader	Graders	1	187					0.003493	g/hp-hr	--	0.01	0.01
				Compactor	Rollers	1	80					0.003398	g/hp-hr	--	0.00	0.00
				4000 gallon Water Truck	n/a - onroad	1	MHDT					0.949858	g/hr	--	0.02	0.02
				10 TN Smooth Roller	Rollers	1	157					0.003139	g/hp-hr	--	0.01	0.01
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.362050	g/hr	--	0.04	0.04
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.006561	g/hp-hr	--	0.01	0.01
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.064038	g/hp-hr	--	0.01	0.01
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.003495	g/hp-hr	--	0.01	0.01
				Concrete Mixer Truck	n/a - onroad	1	MHDT					0.949858	g/hr	--	0.02	0.02
				<b>CMU Building and Earthwork Pad Construction Subtotal</b>												
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.006561	g/hp-hr	--	--	--
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.064038	g/hp-hr	--	--	--
				Concrete Mixer Truck	n/a - onroad	2	MHDT					0.949858	g/hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.362050	g/hr	--	--	--
<b>Concrete Duct Banc Subtotal</b>													--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>													<b>0.03</b>	<b>0.17</b>	<b>0.17</b>	
<b>20 -Permanent Operating Equipment</b>																
30	Mobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.949858	g/hr	--	--	--
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.003495	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.362050	g/hr	--	--	--
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr	--	--	--
				<b>Mobilization Subtotal</b>												
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.003495	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.362050	g/hr	--	--	--
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													--	--	--	
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.003495	g/hp-hr	--	--	--
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.362050	g/hr	--	--	--
<b>CMU Building Mechanical Equipment Subtotal</b>													--	--	--	
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.362050	g/hr	--	--	--
<b>Electrical Control Equipment CMU Building Subtotal</b>													--	--	--	
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.362050	g/hr	--	--	--
<b>Electrical Power Equipment CMU Building Subtotal</b>													--	--	--	
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.362050	g/hr	--	--	--
<b>Communication Equipment Subtotal</b>													--	--	--	
<b>20 -Permanent Operating Equipment Total</b>													--	--	--	
<b>GRAND TOTAL</b>													<b>0.12</b>	<b>0.62</b>	<b>0.65</b>	

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																							
		6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep		
28	CMU Building and Earthwork Pad Construction	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
		<b>0.17</b>	<b>0.26</b>	<b>0.17</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment</b>																									
30	Mobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>		
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>		
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>		
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>		
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>		
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>		
<b>GRAND TOTAL</b>		<b>0.59</b>	<b>0.97</b>	<b>0.87</b>	<b>1.46</b>	<b>1.46</b>	<b>1.46</b>	<b>1.39</b>	<b>1.39</b>	<b>2.03</b>	<b>2.32</b>	<b>2.84</b>	<b>1.63</b>	<b>1.79</b>	<b>1.54</b>	<b>1.52</b>	<b>2.17</b>	<b>1.50</b>	<b>0.76</b>	<b>0.82</b>	<b>0.20</b>	<b>0.20</b>	<b>0.19</b>		

Table L1-227. PM2.5 Exhaust Emissions from Offroad

#	Activity				Annual Emissions, tpy
		7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Construction	--	--	--	0.0002
		--	--	--	0.0004
		--	--	--	0.0002
		--	--	--	0.0001
		--	--	--	0.0003
		--	--	--	0.0001
		--	--	--	0.0007
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	0.0001
		--	--	--	<b>0.0025</b>
29	Concrete Duct Banc	--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	0.0000
		--	--	--	<b>0.0001</b>
		--	--	--	<b>0.0026</b>
<b>20 -Permanent Operating Equipment</b>					
30	Mobilization	--	0.02	--	0.0000
		--	0.01	--	0.0000
		--	0.01	--	0.0000
		--	--	--	--
		--	<b>0.03</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	0.01	--	--	0.0001
		0.02	--	--	0.0003
		<b>0.03</b>	--	--	<b>0.0004</b>
32	CMU Building Mechanical Equipment	0.01	--	--	0.0001
		0.02	--	--	0.0003
		<b>0.03</b>	--	--	<b>0.0004</b>
33	Electrical Control Equipment CMU Building	0.02	--	--	0.0003
		<b>0.02</b>	--	--	<b>0.0003</b>
34	Electrical Power Equipment CMU Building	0.02	--	--	0.0003
		<b>0.02</b>	--	--	<b>0.0003</b>
35	Communication Equipment	0.02	--	--	0.0001
		<b>0.02</b>	--	--	<b>0.0001</b>
		<b>0.11</b>	<b>0.03</b>	--	<b>0.0015</b>
<b>GRAND TOTAL</b>		<b>0.19</b>	<b>0.15</b>	<b>0.03</b>	<b>0.0870</b>

**Table L1-228. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	323.905 306.881 312.57 24535.8 34432 8626.38	0.00819 0.00646 0.00972 0 0 0	0 0 0 0 0 0	324.11 307.043 312.814 24535.8 34432 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	11.17 4.83 2.91 2.36 3.31 4.97
												<b>Fremont Weir Demo Subtotal</b>			<b>29.55</b>		
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	346.665 24535.8 8626.38 34432	0.00749 0 0 0	0 0 0 0	346.853 24535.8 8626.38 34432	g/hp-hr g/hr g/hr g/hr	1.56 0.59 0.21 4.13
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>			<b>6.48</b>		
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	24535.8 8626.38	0 0	0 0	24535.8 8626.38	g/hr g/hr	0.20 0.14
												<b>Temporary Electrical Power Subtotal</b>			<b>0.33</b>		
												<b>02 - Relocations Total</b>			<b>37.44</b>		
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	363.734 227.324 395.092 24535.8 8626.38 34432	0.01221 0.0068 0 0 0 0	0 0 0 0 0 0	364.039 227.494 395.092 24535.8 8626.38 34432	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	14.74 11.72 1.16 9.03 19.05 12.67
												<b>Clearing and Grubbing Subtotal</b>			<b>68.37</b>		
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	323.905 335.255 306.881 34432 8626.38	0.00819 0.0091 0.00646 0 0	0 0 0 0 0	324.11 335.483 307.043 34432 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	100.11 144.93 72.51 223.12 43.48
												<b>Excavation (Wet Conditions) Subtotal</b>			<b>584.15</b>		
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	335.255 409.124 346.665 24535.8 8626.38	0.0091 0.00916 0.00749 0 0	0 0 0 0 0	335.483 409.353 346.853 24535.8 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	135.27 895.68 87.17 32.98 81.16
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>			<b>1,232.25</b>		
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	335.255 24535.8 318.273 8626.38	0.0091 0 0.00532 0	0 0 0 0	335.483 24535.8 318.406 8626.38	g/hp-hr g/hr g/hp-hr g/hr	22.54 5.50 11.20 5.80
												<b>Earthen Backfill Subtotal</b>			<b>45.04</b>		
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	323.905 363.751 34432 8626.38	0.00819 0.00842 0 0	0 0 0 0	324.11 363.962 34432 8626.38	g/hp-hr g/hp-hr g/hr g/hr	133.27 87.35 633.55 34.51
												<b>Riprap - Class 2 Subtotal</b>			<b>888.68</b>		

**Table L1-228. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	1	1,000	4	323.905	0.00819	0	324.11	g/hp-hr	5.33
				300 HP Dozer Crawler	Crawler Tractors	1	300	363.751				0.00842	0	363.962	g/hp-hr	3.49	
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT	34432				0	0	34432	g/hr	25.34	
				Pickup Truck Conventional	n/a - onroad	5	LDT2	8626.38				0	0	8626.38	g/hr	1.38	
												<b>Riprap - Class 3 Subtotal</b>					<b>35.55</b>
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator	Excavators	2	257	1,000	2	2,000	55	323.905	0.00819	0	324.11	g/hp-hr	146.60
				300 HP Dozer Crawler	Crawler Tractors	1	300	363.751				0.00842	0	363.962	g/hp-hr	96.09	
				Pickup Truck Conventional	n/a - onroad	5	LDT2	8626.38				0	0	8626.38	g/hr	37.96	
				16 CY 3 Axle Dump Truck	n/a - onroad	23	HHDT	34432				0	0	34432	g/hr	696.90	
												<b>RSP Bedding Material Subtotal</b>					<b>977.55</b>
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel	Tractors/Loaders/Backhoes	1	97	2	1	2	10	312.57	0.00972	0	312.814	g/hp-hr	2.43
				Pickup Truck Conventional	n/a - onroad	4	LDT2	8626.38				0	0	8626.38	g/hr	2.76	
												<b>Erosion Control Seeding Subtotal</b>					<b>5.19</b>
												<b>09 - Channels and Canals Total</b>					<b>3,837.84</b>



**Table L1-228. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	24535.8 426.943 8626.38	0 0.00799 0	0 0 0	24535.8 427.142 8626.38	g/hr g/hp-hr g/hr	3.53 13.59 7.45
												<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>			<b>24.58</b>		
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	420.626 8626.38	0.00738 0	0 0	420.811 8626.38	g/hp-hr g/hr	33.93 24.84
												<b>Construction Site Dewatering (Pumping) Subtotal</b>			<b>58.78</b>		
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	323.905 335.255 306.881 34432 8626.38	0.00819 0.0091 0.00646 0 0	0 0 0 0 0	324.11 335.483 307.043 34432 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	4.45 6.44 3.22 9.92 1.93
												<b>Excavation (Wet Conditions) Subtotal</b>			<b>25.96</b>		
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	24535.8 426.943 8626.38	0 0.00799 0	0 0 0	24535.8 427.142 8626.38	g/hr g/hp-hr g/hr	1.37 5.29 2.90
												<b>Sheet Pile Wall Subtotal</b>			<b>9.56</b>		
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	244.429 426.943 420.626 24535.8 312.57 323.983 8626.38	0.00533 0.00799 0.00738 0 0.00972 0.00926 0	0 0 0 0 0 0 0	244.562 427.142 420.811 24535.8 312.814 324.215 8626.38	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr	18.78 24.17 9.05 18.84 7.77 52.12 17.67
												<b>Headworks Structure Concrete Piles Subtotal</b>			<b>148.40</b>		
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	420.626 244.363 24535.8 8626.38	0.00738 0.02567 0 0	0 0 0 0	420.811 245.004 24535.8 8626.38	g/hp-hr g/hp-hr g/hr g/hr	15.27 0.85 21.20 26.09
												<b>Headworks Structure Subtotal</b>			<b>63.40</b>		
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	244.363 24535.8 8626.38	0.02567 0 0	0 0 0	245.004 24535.8 8626.38	g/hp-hr g/hr g/hr	0.31 7.85 8.28
												<b>Headworks Channel Transition Subtotal</b>			<b>16.45</b>		
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	244.429 34432 8626.38	0.00533 0 0	0 0 0	244.562 34432 8626.38	g/hp-hr g/hr g/hr	14.09 6.61 6.63
												<b>Hinged Bottom Gates Subtotal</b>			<b>27.32</b>		
												<b>15 - Floodway Control and Diversion Structures Total</b>			<b>375.53</b>		
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24535.8 340.989 8626.38 0	0 0.01013 0 0	0 0 0 0	24535.8 341.242 8626.38 0	g/hr g/hp-hr g/hr g/hr	0.39 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>		
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks	1 1 1 3 1 2	300 221 84 MHDT 97 314	180	1	180	4	244.429 426.943 420.626 24535.8 312.57 323.983	0.00533 0.00799 0.00738 0 0.00972 0.00926	0 0 0 0 0 0	244.562 427.142 420.811 24535.8 312.814 324.215	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr	2.35 3.02 1.13 2.36 0.97 6.52

**Table L1-228. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
				Pickup Truck Conventional	n/a - onroad	8	LDT2					8626.38	0	0	8626.38	g/hr	2.21
												<b>Pedestrian Bridge Concrete Piles Subtotal</b>					<b>18.55</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	420.626	0.00738	0	420.811	g/hp-hr	0.28
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.02
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	0.39
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	0.48
												<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>					<b>1.17</b>
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	8	244.429	0.00533	0	244.562	g/hp-hr	7.04
				Flatbed Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	3.14
				Pickup Truck Conventional	n/a - onroad	5	LDT2					8626.38	0	0	8626.38	g/hr	2.76
												<b>Pedestrian Bridge Span Installation Subtotal</b>					<b>12.94</b>
												<b>08 - Roads, Railroads, and Bridges Total</b>					<b>33.74</b>

**Table L1-228. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 3) - Mitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24535.8	0	0	24535.8	g/hr	0.39
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8626.38	0	0	8626.38	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	342.96	0.00931	0	343.193	g/hp-hr	13.59
				Scraper	Scrapers	1	367					409.124	0.00916	0	409.353	g/hp-hr	36.06
				Motor Grader	Graders	1	187					346.665	0.00749	0	346.853	g/hp-hr	15.57
				Compactor	Rollers	1	80					318.262	0.00765	0	318.453	g/hp-hr	6.11
				4000 gallon Water Truck	n/a - onroad	1	MHDT					24535.8	0	0	24535.8	g/hr	5.89
				10 TN Smooth Roller	Rollers	1	157					318.273	0.00532	0	318.406	g/hp-hr	12.00
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	14.49
				Concrete Pump Boom Truck Mounted	Pumps	1	84					420.626	0.00738	0	420.811	g/hp-hr	8.48
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.47
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	8.19
				Concrete Mixer Truck	n/a - onroad	1	MHDT					24535.8	0	0	24535.8	g/hr	5.89
												<b>CMU Building and Earthwork Pad Construction Subtotal</b>					<b>126.74</b>
29	Concrete Duct Banc	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	420.626	0.00738	0	420.811	g/hp-hr	0.57
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					244.363	0.02567	0	245.004	g/hp-hr	0.03
				Concrete Mixer Truck	n/a - onroad	2	MHDT					24535.8	0	0	24535.8	g/hr	0.79
				Pickup Truck Conventional	n/a - onroad	7	LDT2					8626.38	0	0	8626.38	g/hr	0.97
												<b>Concrete Duct Banc Subtotal</b>					<b>2.35</b>
												<b>19 - Buildings, Grounds, and Utilities Total</b>					<b>130.16</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24535.8	0	0	24535.8	g/hr	0.39
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					340.989	0.01013	0	341.242	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2					8626.38	0	0	8626.38	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>					<b>1.08</b>
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.989	0.01013	0	341.242	g/hp-hr	8.19
				Pickup Truck Conventional	n/a - onroad	3	LDT2					8626.38	0	0	8626.38	g/hr	6.21
												<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>					<b>14.40</b>
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.989	0.01013	0	341.242	g/hp-hr	8.19
				Pickup Truck Conventional	n/a - onroad	3	LDT2					8626.38	0	0	8626.38	g/hr	6.21
												<b>CMU Building Mechanical Equipment Subtotal</b>					<b>14.40</b>
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8626.38	0	0	8626.38	g/hr	6.21
												<b>Electrical Control Equipment CMU Building Subtotal</b>					<b>6.21</b>
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8626.38	0	0	8626.38	g/hr	6.21
												<b>Electrical Power Equipment CMU Building Subtotal</b>					<b>6.21</b>
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	8626.38	0	0	8626.38	g/hr	2.48
												<b>Communication Equipment Subtotal</b>					<b>2.48</b>
												<b>20 -Permanent Operating Equipment Total</b>					<b>44.78</b>
<b>GRAND TOTAL</b>																	<b>4,459.50</b>

**Table L1-229. PM10 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																					
	Material Handling		0.13	0.13																		
	Grading	n/a	n/a																			
	Bulldozing	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a																			
	Paved Road Dust	n/a	n/a																			
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																					
	Material Handling																					
	Grading																					
	Bulldozing																					
	Unpaved Road Dust																					
	Paved Road Dust																					
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization																					
	Material Handling	n/a																			n/a	
	Grading	n/a																			n/a	
	Bulldozing	n/a																			n/a	
	Unpaved Road Dust	n/a																			n/a	
	Paved Road Dust	n/a																			n/a	
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																					
	Material Handling	n/a	n/a	n/a																		
	Grading		1.06	1.06	1.06																	
	Bulldozing	n/a	n/a	n/a																		
	Unpaved Road Dust	n/a	n/a	n/a																		
	Paved Road Dust	n/a	n/a	n/a																		
	<b>Clearing and Grubbing Subtotal</b>	--	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																					
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust							90.53	90.53	90.53	90.53	90.53	90.53	90.53	90.53							
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	<b>90.53</b>	--	--	--	--	--	--	--

**Table L1-229. PM10 Emissions Summary from Fugitive I**

#	Activity	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a		n/a
	Grading					0.53		0.00
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.53</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling							n/a
	Grading							0.01
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
7	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							2.03
	Paved Road Dust							n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>2.03</b>

**Table L1-229. PM10 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89								
	Grading					15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91								
	Bulldozing					7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05								
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	24.84	24.84	24.84	24.84	24.84	24.84	24.84	24.84	24.84	--	--	--	--	--	--	--	--	
9	Earthen Backfill																						
	Material Handling							0.18	0.18	0.18	0.18	0.18	0.18	0.18									
	Grading							0.53	0.53	0.53	0.53	0.53	0.53	0.53									
	Bulldozing							2.35	2.35	2.35	2.35	2.35	2.35	2.35									
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	3.06	3.06	3.06	3.06	3.06	3.06	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2																						
	Material Handling														3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
11	Riprap - Class 3																						
	Material Handling																				1.65		
	Grading																			n/a			
	Bulldozing																			n/a			
	Unpaved Road Dust																			n/a			
	Paved Road Dust																			n/a			
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	--	--	
12	RSP Bedding Material																						
	Material Handling														3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>09 - Channels and Canals Total</b>	--	1.06	1.06	1.06	24.84	24.84	118.43	118.43	118.43	118.43	118.43	118.67	118.67	121.97	6.60	6.60	6.60	6.60	8.24	6.60	3.30	3.30
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1-229. PM10 Emissions Summary from Fugitive I

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.05
	Grading							0.45
	Bulldozing							0.20
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.69</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.01
	Bulldozing							0.03
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.04</b>
10	Riprap - Class 2							
	Material Handling							0.08
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.08</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.09
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.09</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>2.96</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	<b>--</b>

**Table L1-229. PM10 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	<b>Construction Site Dewatering (Pumping) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							46.27															
	Paved Road Dust							n/a															
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	46.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall																						
	Material Handling								n/a	n/a													
	Grading								n/a	n/a													
	Bulldozing								n/a	n/a													
	Unpaved Road Dust								n/a	n/a													
	Paved Road Dust								n/a	n/a													
	<b>Sheet Pile Wall Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles																						
	Material Handling								n/a	n/a	n/a	n/a	n/a	n/a									
	Grading								n/a	n/a	n/a	n/a	n/a	n/a									
	Bulldozing								n/a	n/a	n/a	n/a	n/a	n/a									
	Unpaved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	Paved Road Dust								n/a	n/a	n/a	n/a	n/a	n/a									
	<b>Headworks Structure Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	Headworks Structure																						
	Material Handling													n/a	n/a					n/a			
	Grading													n/a	n/a					n/a			
	Bulldozing													n/a	n/a					n/a			
	Unpaved Road Dust													n/a	n/a					n/a			
	Paved Road Dust													n/a	n/a					n/a			
	<b>Headworks Structure Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
21	Headworks Channel Transition																						
	Material Handling															n/a	n/a						
	Grading															n/a	n/a						
	Bulldozing															n/a	n/a						
	Unpaved Road Dust															n/a	n/a						
	Paved Road Dust															n/a	n/a						
	<b>Headworks Channel Transition Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Hinged Bottom Gates Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<b>15 - Floodway Control and Diversion Structures Total</b>	--	--	--	--	--	--	46.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
08 - Roads, Railroads, and Bridges																							
23	Mobilization and Demobilization																						
	Material Handling															n/a				n/a			
	Grading															n/a				n/a			
	Bulldozing															n/a				n/a			
	Unpaved Road Dust															n/a				n/a			
	Paved Road Dust															n/a				n/a			
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



Table L1-229. PM10 Emissions Summary from Fugitive I

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.08
	Paved Road Dust							n/a
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	--	<b>0.08</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	<b>0.08</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-229. PM10 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Concrete Piles Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																				n/a	n/a	
	Grading																				n/a	n/a	
	Bulldozing																				n/a	n/a	
	Unpaved Road Dust																				n/a	n/a	
	Paved Road Dust																				n/a	n/a	
	<b>Pedestrian Bridge Span Installation Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>08 - Roads, Railroads, and Bridges Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a	n/a															
	Grading	2.12	2.12	2.12	2.12	2.12	2.12	2.12															
	Bulldozing	2.35	2.35	2.35	2.35	2.35	2.35	2.35															
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a															
	Paved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a	n/a															
	<b>CMU Building and Earthwork Pad Construction Subtotal</b>	--	4.47	4.47	4.47	4.47	4.47	4.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							n/a															
	Paved Road Dust							n/a															
	<b>Concrete Duct Banc Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>19 - Buildings, Grounds, and Utilities Total</b>	--	4.47	4.47	4.47	4.47	4.47	4.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1-229. PM10 Emissions Summary from Fugitive I

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concete Piles Subtotal</b>		--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.03
	Bulldozing							0.04
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	<b>0.07</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	<b>0.07</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-229. PM10 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM10 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>GRAND TOTAL</b>	--	5.66	5.66	5.53	29.31	29.31	164.70	118.43	118.43	118.43	118.43	118.67	118.67	121.97	6.60	6.60	6.60	6.60	8.24	6.60	3.30	3.30
	<i>Percent Reduction (Compared to Unmitigated)</i>	n/a	0%	0%	0%	0%	0%	-54%	-52%	-52%	-52%	-52%	-52%	-52%	-52%	0%	0%	0%	0%	0%	0%	0%	0%

**Table L1-229. PM10 Emissions Summary from Fugitive I**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust			n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--
<b>GRAND TOTAL</b>						<b>0.53</b>		<b>3.11</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0%</i>	<i>n/a</i>	<i>-49%</i>

Table L1-230. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
02 - Relocations																						
1	Mobilization and Demobilization	n/a																				
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo																					
	Material Handling		0.02	0.02																		
	Grading	n/a	n/a																			
	Bulldozing	n/a	n/a																			
	Unpaved Road Dust	n/a	n/a																			
	Paved Road Dust	n/a	n/a																			
	<b>Fremont Weir Demo Subtotal</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)																					
	Material Handling																					
	Grading																					
	Bulldozing																					
	Unpaved Road Dust																					
	Paved Road Dust																					
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power																					
	Material Handling	n/a																				
	Grading	n/a																				
	Bulldozing	n/a																				
	Unpaved Road Dust	n/a																				
	Paved Road Dust	n/a																				
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	<b>0.02</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09 - Channels and Canals																						
5	Mobilization and Demobilization	n/a																				
	Material Handling	n/a																				n/a
	Grading	n/a																				n/a
	Bulldozing	n/a																				n/a
	Unpaved Road Dust	n/a																				n/a
	Paved Road Dust	n/a																				n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing																					
	Material Handling	n/a	n/a	n/a																		
	Grading		0.11	0.11	0.11																	
	Bulldozing	n/a	n/a	n/a																		
	Unpaved Road Dust	n/a	n/a	n/a																		
	Paved Road Dust	n/a	n/a	n/a																		
	<b>Clearing and Grubbing Subtotal</b>	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)																					
	Material Handling						n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Grading						n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Bulldozing						n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	Unpaved Road Dust						9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05							
	Paved Road Dust						n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	<b>9.05</b>	--	--	--	--	--	--	--

**Table L1-230. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>								
1	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
2	Fremont Weir Demo							0.00
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Fremont Weir Demo Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
3	Levee O&M Road Regrading (6" AB)							
	Material Handling					n/a	n/a	n/a
	Grading					0.06	n/a	0.00
	Bulldozing					n/a	n/a	n/a
	Unpaved Road Dust					n/a	n/a	n/a
	Paved Road Dust					n/a	n/a	n/a
	<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
4	Temporary Electrical Power							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Temporary Electrical Power Subtotal</b>	--	--	--	--	--	--	--
	<b>02 - Relocations Total</b>	--	--	--	--	<b>0.06</b>	--	<b>0.00</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	--
6	Clearing and Grubbing							
	Material Handling						n/a	0.00
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	n/a
	Paved Road Dust						n/a	n/a
	<b>Clearing and Grubbing Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
7	Excavation (Wet Conditions)							
	Material Handling						n/a	n/a
	Grading						n/a	n/a
	Bulldozing						n/a	n/a
	Unpaved Road Dust						n/a	0.20
	Paved Road Dust						n/a	n/a
	<b>Excavation (Wet Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.20</b>

Table L1-230. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
8	Excavation/Grading (Dry Conditions)																						
	Material Handling					0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29								
	Grading					1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72								
	Bulldozing					3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87								
	Unpaved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
	Paved Road Dust					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a								
<b>Excavation/Grading (Dry Conditions) Subtotal</b>		--	--	--	--	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	--	--	--	--	--	--	--	--	
9	Earthen Backfill																						
	Material Handling							0.03	0.03	0.03	0.03	0.03											
	Grading							0.06	0.06	0.06	0.06	0.06											
	Bulldozing							1.29	1.29	1.29	1.29	1.29											
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a											
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a											
<b>Earthen Backfill Subtotal</b>		--	--	--	--	--	--	1.38	1.38	1.38	1.38	1.38	--	--	--	--	--	--	--	--	--	--	
10	Riprap - Class 2																						
	Material Handling														0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
	Grading														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust														n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Riprap - Class 2 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
11	Riprap - Class 3																						
	Material Handling																				0.25		
	Grading																			n/a			
	Bulldozing																			n/a			
	Unpaved Road Dust																			n/a			
	Paved Road Dust																			n/a			
<b>Riprap - Class 3 Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	
12	RSP Bedding Material																						
	Material Handling													0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
	Grading													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Bulldozing													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Unpaved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Paved Road Dust													n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>RSP Bedding Material Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	--	
13	Erosion Control Seeding																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
<b>Erosion Control Seeding Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>		--	0.11	0.11	0.11	5.88	5.88	16.31	16.31	16.31	16.31	16.31	15.43	15.43	15.93	1.00	1.00	1.00	1.00	1.25	1.00	0.50	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



**Table L1-230. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
8	Excavation/Grading (Dry Conditions)							
	Material Handling							0.01
	Grading							0.05
	Bulldozing							0.11
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Excavation/Grading (Dry Conditions) Subtotal</b>	--	--	--	--	--	--	<b>0.16</b>
9	Earthen Backfill							
	Material Handling							0.00
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Earthen Backfill Subtotal</b>	--	--	--	--	--	--	<b>0.02</b>
10	Riprap - Class 2							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 2 Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
11	Riprap - Class 3							
	Material Handling							0.00
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Riprap - Class 3 Subtotal</b>	--	--	--	--	--	--	<b>0.00</b>
12	RSP Bedding Material							
	Material Handling							0.01
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>RSP Bedding Material Subtotal</b>	--	--	--	--	--	--	<b>0.01</b>
13	Erosion Control Seeding							
	Material Handling	n/a	n/a					n/a
	Grading	n/a	n/a					n/a
	Bulldozing	n/a	n/a					n/a
	Unpaved Road Dust	n/a	n/a					n/a
	Paved Road Dust	n/a	n/a					n/a
	<b>Erosion Control Seeding Subtotal</b>	--	--	--	--	--	--	<b>--</b>
	<b>09 - Channels and Canals Total</b>	--	--	--	--	--	--	<b>0.41</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
	<b>Mobilization and Demobilization Subtotal</b>	--	--	--	--	--	--	<b>--</b>
15	Construction Site Dewatering (Temporary Cofferdam)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
	<b>Construction Site Dewatering (Temporary Cofferdam) Sub</b>	--	--	--	--	--	--	<b>--</b>

**Table L1-230. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
16	Construction Site Dewatering (Pumping)																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Grading							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)																						
	Material Handling							n/a															
	Grading							n/a															
	Bulldozing							n/a															
	Unpaved Road Dust							4.63															
	Paved Road Dust							n/a															
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall																						
	Material Handling							n/a	n/a														
	Grading							n/a	n/a														
	Bulldozing							n/a	n/a														
	Unpaved Road Dust							n/a	n/a														
	Paved Road Dust							n/a	n/a														
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles																						
	Material Handling							n/a	n/a	n/a	n/a	n/a	n/a										
	Grading							n/a	n/a	n/a	n/a	n/a	n/a										
	Bulldozing							n/a	n/a	n/a	n/a	n/a	n/a										
	Unpaved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a										
	Paved Road Dust							n/a	n/a	n/a	n/a	n/a	n/a										
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	Headworks Structure																						
	Material Handling												n/a	n/a						n/a			
	Grading												n/a	n/a					n/a				
	Bulldozing												n/a	n/a					n/a				
	Unpaved Road Dust												n/a	n/a					n/a				
	Paved Road Dust												n/a	n/a					n/a				
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	Headworks Channel Transition																						
	Material Handling														n/a	n/a							
	Grading														n/a	n/a							
	Bulldozing														n/a	n/a							
	Unpaved Road Dust														n/a	n/a							
	Paved Road Dust														n/a	n/a							
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	Hinged Bottom Gates																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization																						
	Material Handling															n/a				n/a			
	Grading															n/a				n/a			
	Bulldozing															n/a				n/a			
	Unpaved Road Dust															n/a				n/a			
	Paved Road Dust															n/a				n/a			
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-230. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
16	Construction Site Dewatering (Pumping)							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Construction Site Dewatering (Pumping) Subtotal</b>		--	--	--	--	--	--	--
17	Excavation (Wet Conditions)							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							0.01
	Paved Road Dust							n/a
<b>Excavation (Wet Conditions) Subtotal</b>		--	--	--	--	--	--	<b>0.01</b>
18	Sheet Pile Wall							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Sheet Pile Wall Subtotal</b>		--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
20	Headworks Structure							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Structure Subtotal</b>		--	--	--	--	--	--	--
21	Headworks Channel Transition							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Headworks Channel Transition Subtotal</b>		--	--	--	--	--	--	--
22	Hinged Bottom Gates							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Hinged Bottom Gates Subtotal</b>		--	--	--	--	--	--	--
<b>15 - Floodway Control and Diversion Structures Total</b>		--	--	--	--	--	--	<b>0.01</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-230. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
24	Pedestrian Bridge Concrete Piles																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization																						
	Material Handling	n/a																					n/a
	Grading	n/a																					n/a
	Bulldozing	n/a																					n/a
	Unpaved Road Dust	n/a																					n/a
	Paved Road Dust	n/a																					
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction																						
	Material Handling	n/a	n/a	n/a	n/a	n/a	n/a																
	Grading	0.23	0.23	0.23	0.23	0.23	0.23																
	Bulldozing	1.29	1.29	1.29	1.29	1.29	1.29																
	Unpaved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a																
	Paved Road Dust	n/a	n/a	n/a	n/a	n/a	n/a																
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	1.52	1.52	1.52	1.52	1.52	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Banc																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>																							
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table L1-230. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions, tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
24	Pedestrian Bridge Concrete Piles							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Piles Subtotal</b>		--	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>		--	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Pedestrian Bridge Span Installation Subtotal</b>		--	--	--	--	--	--	--
<b>08 - Roads, Railroads, and Bridges Total</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--
28	CMU Building and Earthwork Pad Construction							
	Material Handling							n/a
	Grading							0.00
	Bulldozing							0.02
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>CMU Building and Earthwork Pad Construction Subtotal</b>		--	--	--	--	--	--	<b>0.02</b>
29	Concrete Duct Banc							
	Material Handling							n/a
	Grading							n/a
	Bulldozing							n/a
	Unpaved Road Dust							n/a
	Paved Road Dust							n/a
<b>Concrete Duct Banc Subtotal</b>		--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities Total</b>		--	--	--	--	--	--	<b>0.02</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization							
	Material Handling					n/a		n/a
	Grading					n/a		n/a
	Bulldozing					n/a		n/a
	Unpaved Road Dust					n/a		n/a
	Paved Road Dust					n/a		n/a
<b>Mobilization and Demobilization Subtotal</b>		--	--	--	--	--	--	--

**Table L1-230. PM2.5 Emissions Summary from Fugitive Dust (Alternative 3) - Mitigated**

#	Activity	PM2.5 Daily Emissions Summary, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep
31	Mechanical Hydraulic Cylinders & Housing																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>CMU Building Mechanical Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Control Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building																						
	Material Handling																						n/a
	Grading																						n/a
	Bulldozing																						n/a
	Unpaved Road Dust																						n/a
	Paved Road Dust																						n/a
	<b>Electrical Power Equipment CMU Building Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment																						
	Material Handling																						
	Grading																						
	Bulldozing																						
	Unpaved Road Dust																						
	Paved Road Dust																						
	<b>Communication Equipment Subtotal</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<b>20 -Permanent Operating Equipment Total</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		--	1.65	1.65	1.63	7.40	7.40	20.93	16.31	16.31	16.31	16.31	15.43	15.43	15.93	1.00	1.00	1.00	1.00	1.25	1.00	0.50	0.50
<i>Percent Reduction (Compared to Unmitigated)</i>		n/a	0%	0%	0%	0%	0%	-48%	-44%	-44%	-44%	-44%	-46%	-46%	-45%	0%	0%	0%	0%	0%	0%	0%	0%

**Table L1-230. PM2.5 Emissions Summary from Fugitive**

#	Activity							Annual Emissions , tpy
		16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
31	Mechanical Hydraulic Cylinders & Housing							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>		--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>CMU Building Mechanical Equipment Subtotal</b>		--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Control Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building							
	Material Handling	n/a	n/a	n/a	n/a			n/a
	Grading	n/a	n/a	n/a	n/a			n/a
	Bulldozing	n/a	n/a	n/a	n/a			n/a
	Unpaved Road Dust	n/a	n/a	n/a	n/a			n/a
	Paved Road Dust	n/a	n/a	n/a	n/a			n/a
<b>Electrical Power Equipment CMU Building Subtotal</b>		--	--	--	--	--	--	--
35	Communication Equipment							
	Material Handling			n/a	n/a			n/a
	Grading			n/a	n/a			n/a
	Bulldozing			n/a	n/a			n/a
	Unpaved Road Dust			n/a	n/a			n/a
	Paved Road Dust			n/a	n/a			n/a
<b>Communication Equipment Subtotal</b>		--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment Total</b>		--	--	--	--	--	--	--
<b>GRAND TOTAL</b>						<b>0.06</b>		<b>0.45</b>
<i>Percent Reduction (Compared to Unmitigated)</i>		<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>0% n/a</i>		<i>-40%</i>

**Alternative 3: West Side Small Gated Notch  
Fugitive Dust Emissions - Unpaved Road Dust (Haul Roads)**

Equation (AP-42, Chapter 13.2.2):

$$E = k(s/12)^a(W/3)^b$$

where:

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

Variables

k (PM10)	1.5
k (PM2.5)	0.15
a	0.9
b	0.45
s, %	1.6 crushed limestone (AP-42, Table 13.2.4-1)
W, tons	180 loaded 74 unloaded

**Table L1-231. Mitigated Unpaved Road Dust Emission Factors (lb/VMT)**

Weight	PM10	PM2.5
Loaded	1.54	0.15
Unloaded	1.04	0.10
Average	1.29	0.13

**Table L1-232. Mitigated Unpaved Road Dust Emissions (Alternative 3)**

Activity	Total Daily Output	Total Quantity	Unit	Estimated Duration, Days	VMT per Day	VMT per Year	PM10, lb/day	PM2.5, lb/day	PM10, tpy	PM2.5, tpy
<b>09 - Channels and Canals</b>										
Excavation (Wet Conditions)	3,600	161,750	CY	45	180	8,088	90.5	9.1	2.0	0.2
<b>15 - Floodway Control and Diversion Structures</b>										
Excavation (Wet Conditions)	1,800	6,460	CY	4	92	324	46.3	4.6	0.1	0.01

Notes:

Assumes payload of each truck is 100 tons.

Half of truck trips will be loaded and other half will be unloaded.

Only includes materials that will be transported to spoil site by dump trucks.



Distance to borrow area

2 miles (spoils site located within a 1-mile radius of the project access point(s) and it is an average of 1 mile travel distance from point of excavati

Density

1.25 tons/cy

*Note: CalEEMod assumes haul trucks can handle 20 tons or 16 cy.*

Dust Control

61% reduction from watering at least 3 times per day

Source: CalEEMod

## Offroad Exhaust Emissions Summary

**Table L1 -233. Maximum Daily Offroad Construction Equipment Emissions (Alternative 4)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	1.07	20.99	14.88	0.05	0.57	0.45
09 - Channels and Canals	38.17	612.27	290.94	1.28	16.94	13.66
15 - Floodway Control and Diversion Structures	4.93	59.98	44.88	0.17	2.56	1.99
08 - Roads, Railroads, and Bridges	2.29	25.87	22.55	0.10	1.16	0.96
19 - Buildings, Grounds, and Utilities	3.67	42.91	39.08	0.11	2.11	1.78
20 -Permanent Operating Equipment	0.60	3.68	11.36	0.03	0.35	0.23
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>40.81</b>	<b>634.73</b>	<b>313.28</b>	<b>1.35</b>	<b>18.34</b>	<b>14.70</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

**Table L1 -234. Annual Offroad Construction Equipment Emissions (Alternative 4)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.01	0.11	0.10	0.00	0.00	0.00	37.99
09 - Channels and Canals	1.28	16.61	8.54	0.04	0.47	0.38	3,937.93
15 - Floodway Control and Diversion Structures	0.11	1.09	0.99	0.00	0.06	0.04	378.00
08 - Roads, Railroads, and Bridges	0.01	0.10	0.07	0.00	0.00	0.00	33.86
19 - Buildings, Grounds, and Utilities	0.05	0.56	0.51	0.00	0.03	0.02	130.24
20 -Permanent Operating Equipment	0.01	0.06	0.17	0.00	0.01	0.00	45.09
<b>Annual Construction Exhaust Emissions Total</b>	<b>1.46</b>	<b>18.52</b>	<b>10.38</b>	<b>0.04</b>	<b>0.57</b>	<b>0.46</b>	<b>4,563.12</b>

Notes:

Total may not add exactly because of rounding.

**Table L1 -235. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.045120 0.103491 0.090102 3.122501 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.113149 3.122501 1.479690 6.999774	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	3.122501 1.479690	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.238441 0.075360 72.563070 3.122501 1.479690 6.999774	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.045120 0.160818 0.103491 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.160818 0.119269 0.113149 3.122501 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.160818 3.122501 0.059817 1.479690	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.29	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.30	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.11</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.29</b>	<b>1.07</b>	<b>1.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.93	0.93	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	20.48	20.48	20.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.31	0.31	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	--	--	--	--	--
		--	--	--	--	--	--	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	--	--	--	--	--
		--	--	--	--	--	--	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	--	--	--	--	--
		--	--	--	--	--	--	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	--	--	--	--	--
		--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--
		--	--	--	--	--	--	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	<b>7.87</b>	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	--	--	--	--	--
		--	--	--	--	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	--	--	--	--	--
		--	--	--	--	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	--	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--
		--	--	--	--	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	--	--	--	--	--
		--	--	--	--	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	<b>14.66</b>	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.85	0.85	0.85	0.85	0.85	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	<b>1.15</b>	--	--	--	--	--	--	--	--

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	0.10	0.0001
		--	--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--	--
									<b>0.18</b>	<b>0.0002</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0007
										0.0009	
										<b>0.0064</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.37	--	0.0006
		--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	0.62	--	0.0009
								<b>1.07</b>	--	<b>0.0016</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
										<b>0.0001</b>	
									<b>1.07</b>	<b>0.18</b>	<b>0.0083</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	0.0001
		0.10	--	--	--	--	--	--	--	--	0.0001
		0.03	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0002</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	0.0043
		--	--	--	--	--	--	--	--	--	0.2355
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0036
										0.0028	
										<b>0.2581</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0154
		--	--	--	--	--	--	--	--	--	0.0766
		--	--	--	--	--	--	--	--	--	0.0269
		--	--	--	--	--	--	--	--	--	0.0500
		--	--	--	--	--	--	--	--	--	0.0082
										<b>0.1771</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0715
		--	--	--	--	--	--	--	--	--	0.2877
		--	--	--	--	--	--	--	--	--	0.0313
		--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	0.0153
										<b>0.4105</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0119
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	0.0011
										<b>0.0161</b>	

**Table L1 -235. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.045120 0.100372 6.999774 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.045120 0.100372 6.999774 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.045120 0.100372 1.479690 6.999774	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.090102 1.479690	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	3.122501 0.055013 1.479690	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.264018 1.479690	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.045120 0.160818 0.103491 6.999774 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	3.122501 0.055013 1.479690	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.070325 0.055013 0.264018 3.122501 0.090102 0.070980 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06
		--	--	--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26
		--	--	--	--	--	--	--	--	--	--	--	--	--	7.82	7.82	7.82	7.82	7.82	7.82
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.53
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.84
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.91
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
		--	--	--	--	--	--	--	--	--	--	--	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
		--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
		--	--	--	--	--	--	--	--	--	--	--	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68
		--	--	--	--	--	--	--	--	--	--	--	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	<b>22.44</b>	<b>22.44</b>	<b>22.44</b>	<b>14.66</b>	<b>14.66</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>23.68</b>	<b>30.35</b>	<b>30.35</b>	<b>38.17</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>15.64</b>	<b>19.55</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.16	0.16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>0.43</b>	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
		--	--	--	--	--	--	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.70	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.60	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>3.94</b>	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.06	0.06	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.16	0.16	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.43</b>	<b>0.43</b>	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.37	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	
		--	--	--	--	--	--	--	0.39	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	
		--	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	
		--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	
		--	--	--	--	--	--	--	0.79	0.79	0.79	0.79	0.79	0.79	--	--	--	--	--	
		--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	
		--	--	--	--	--	--	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	<b>2.29</b>	--	--	--	--	--		

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
10	Riprap - Class 2	0.82	0.82	0.82	--	--	--	--	--	--	0.0205
		1.06	1.06	1.06	--	--	--	--	--	--	0.0266
		5.68	5.68	5.68	--	--	--	--	--	--	0.1420
		0.26	0.26	0.26	--	--	--	--	--	--	0.0065
		<b>7.82</b>	<b>7.82</b>	<b>7.82</b>	--	--	--	--	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--
12	RSP Bedding Material	0.82	--	--	--	--	--	--	--	--	0.0225
		1.06	--	--	--	--	--	--	--	--	0.0292
		0.26	--	--	--	--	--	--	--	--	0.0072
		5.68	--	--	--	--	--	--	--	--	0.1562
		<b>7.82</b>	--	--	--	--	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	0.15	0.15	--	--	--	--	0.0008
		--	--	--	0.10	0.10	--	--	--	--	0.0005
		--	--	--	<b>0.26</b>	<b>0.26</b>	--	--	--	--	<b>0.0013</b>
		<b>15.82</b>	<b>7.82</b>	<b>7.82</b>	<b>0.26</b>	<b>0.26</b>	--	--	--	--	<b>1.2816</b>
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.10	--	0.0001
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.18</b>	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	<b>0.0038</b>
16	Construction Site Dewatering (Pumping)	0.39	0.39	0.39	0.39	0.39	0.39	0.39	--	--	0.0235
		0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	--	0.0047
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	--	--	<b>0.0282</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.0079</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0015</b>
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0060
		--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	0.0126
		--	--	--	--	--	--	--	--	0.0033	
		--	--	--	--	--	--	--	--	--	<b>0.0367</b>



**Table L1 -235. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.264018 0.284463 3.122501 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.284463 3.122501 1.479690	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.070325 6.999774 1.479690	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.070325 0.055013 0.264018 3.122501 0.090102 0.070980 1.479690	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.264018 0.284463 3.122501 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.070325 3.122501 1.479690	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17
		--	--	--	--	--	--	--	--	--	--	--	--	0.12	0.12	--	--	--	--	0.12
		--	--	--	--	--	--	--	--	--	--	--	--	0.33	0.33	--	--	--	--	0.33
		--	--	--	--	--	--	--	--	--	--	--	--	0.55	0.55	--	--	--	--	0.55
		--	--	--	--	--	--	--	--	--	--	--	2.17	2.17	--	--	--	--	2.17	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.22	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.18	0.43	0.43	0.43	4.41	3.19	3.19	2.76	2.76	2.76	4.93	2.64	1.08	1.08	0.47	0.47	2.64
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.37	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.79	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.29	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.72	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.11	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.80	0.80	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	2.29	0.72	0.80	0.80	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		0.10	--	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.18	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	--	--	<b>0.0196</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	<b>0.0031</b>	
22	Hinged Bottom Gates	--	--	--	0.37	0.37	0.37	0.37	--	--	--	0.0045
		--	--	--	0.12	0.12	0.12	0.12	--	--	--	0.0015
		--	--	--	0.10	0.10	0.10	0.10	--	--	--	0.0013
		--	--	--	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	--	--	<b>0.0072</b>	
		<b>0.47</b>	<b>0.47</b>	<b>0.47</b>	<b>1.07</b>	<b>1.07</b>	<b>1.07</b>	<b>1.07</b>	<b>0.18</b>	--	<b>0.1080</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.10	--	--	--	--	--	--	--	--	--	0.0001
		0.03	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0002</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	--	--	--	<b>0.0046</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0004</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0032</b>	
		<b>0.18</b>	--	--	--	--	--	--	--	--	<b>0.0083</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>	

**Table L1 -235. ROG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scrapper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.225807 0.119269 0.113149 0.109594 3.122501 0.059817 1.479690 0.264018 0.284463 0.058022 3.122501	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	2	0.264018 0.284463 3.122501 1.479690	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Bank Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	3.122501 0.058022 1.479690 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.058022 1.479690	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.058022 1.479690	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.479690	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.479690	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.479690	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
28	CMU Building and Earthwork Pad Construction	--	0.66	0.66	0.66	0.66	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.77	0.77	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.37	0.37	0.37	0.37	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.39	0.39	0.39	0.39	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.95	2.95	2.95	2.95	2.95	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--		
		0.18	2.95	2.95	2.95	3.67	2.95	0.18	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																					
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		0.66	26.47	26.65	25.82	18.76	18.03	28.27	26.87	26.87	26.44	26.44	33.11	35.28	40.81	16.91	19.02	16.83	16.91	22.99	

Table L1 -235. ROG Exhaust Emissions from Offroad

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0099
		--	--	--	--	--	--	--	--	--	0.0116
		--	--	--	--	--	--	--	--	--	0.0056
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	--	--	0.0059
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	<b>0.0442</b>
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>
		--	--	--	--	--	--	--	--	--	<b>0.0451</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.06	--	--	--	--	--	0.06	--	0.0001
		--	0.10	--	--	--	--	--	0.10	--	0.0001
		--	0.03	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.18</b>	--	--	--	--	--	<b>0.18</b>	--	<b>0.0002</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>
32	CMU Building Mechanical Equipment	--	--	0.10	0.10	0.10	0.10	0.10	--	--	0.0015
		--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	--	--	<b>0.0027</b>
33	Electrical Control Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
34	Electrical Power Equipment CMU Building	--	--	0.08	0.08	0.08	0.08	0.08	--	--	0.0012
		--	--	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
35	Communication Equipment	--	--	--	--	--	0.08	0.08	--	--	0.0005
		--	--	--	--	--	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0005</b>
		--	<b>0.18</b>	<b>0.52</b>	<b>0.52</b>	<b>0.52</b>	<b>0.60</b>	<b>0.60</b>	<b>0.18</b>	--	<b>0.0084</b>
<b>GRAND TOTAL</b>		<b>16.48</b>	<b>8.47</b>	<b>8.81</b>	<b>1.85</b>	<b>1.85</b>	<b>1.67</b>	<b>1.67</b>	<b>1.44</b>	<b>0.18</b>	<b>1.4598</b>

**Table L1 -236. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.508602 1.128421 1.103675 73.715363 155.969927 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	1.790685 73.715363 1.651465 155.969927	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	73.715363 1.651465	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	2.425960 0.772717 1.287316 73.715363 1.651465 155.969927	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.508602 2.008554 1.128421 155.969927 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	2.008554 1.661803 1.790685 73.715363 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	2.008554 73.715363 0.794277 1.651465	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	3.22	3.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.26	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.89	1.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.75	2.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>1.36</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.31</b>	<b>12.60</b>	<b>12.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	9.41	9.41	9.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.82	3.82	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.36	0.36	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.60	2.60	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.35	0.35	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.50	5.50	5.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	--	--	--	--	--
		--	--	--	--	--	--	42.51	42.51	42.51	42.51	42.51	42.51	42.51	42.51	--	--	--	--	--
		--	--	--	--	--	--	13.06	13.06	13.06	13.06	13.06	13.06	13.06	13.06	--	--	--	--	--
		--	--	--	--	--	--	49.51	49.51	49.51	49.51	49.51	49.51	49.51	49.51	--	--	--	--	--
		--	--	--	--	--	--	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--
		--	--	--	--	--	--	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	<b>113.18</b>	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	31.88	31.88	31.88	31.88	31.88	31.88	31.88	31.88	31.88	31.88	--	--	--	--	--
		--	--	--	--	143.14	143.14	143.14	143.14	143.14	143.14	143.14	143.14	143.14	143.14	--	--	--	--	--
		--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--	--
		--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--
		--	--	--	--	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	--	--	--	--	--
		--	--	--	--	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	<b>197.25</b>	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	10.63	10.63	10.63	10.63	10.63	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	<b>14.21</b>	--	--	--	--	--	--	--	--



Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	1.30	0.0013
		--	--	--	--	--	--	--	--	1.62	0.0016
		--	--	--	--	--	--	--	--	0.03	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>2.95</b>	<b>0.0029</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0193
		--	--	--	--	--	--	--	--	--	0.0196
		--	--	--	--	--	--	--	--	--	0.0113
		--	--	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	--	--	0.0165
		--	--	--	--	--	--	--	--	0.0010	
		--	--	--	--	--	--	--	--	<b>0.0756</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	5.91	--	0.0089
		--	--	--	--	--	--	--	1.30	--	0.0020
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	13.75	--	0.0206
		--	--	--	--	--	--	<b>20.99</b>	--	<b>0.0315</b>	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>
		--	--	--	--	--	--	--	<b>20.99</b>	<b>2.95</b>	<b>0.1107</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	0.0013
		1.62	--	--	--	--	--	--	--	--	0.0016
		0.03	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	<b>0.0029</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.1082
		--	--	--	--	--	--	--	--	--	0.0439
		--	--	--	--	--	--	--	--	--	0.0042
		--	--	--	--	--	--	--	--	--	0.0299
		--	--	--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	--	0.0633	
		--	--	--	--	--	--	--	--	--	<b>0.2535</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.1732
		--	--	--	--	--	--	--	--	--	0.9565
		--	--	--	--	--	--	--	--	--	0.2937
		--	--	--	--	--	--	--	--	--	1.1141
		--	--	--	--	--	--	--	--	0.0092	
		--	--	--	--	--	--	--	--	--	<b>2.5466</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.8927
		--	--	--	--	--	--	--	--	--	4.0080
		--	--	--	--	--	--	--	--	--	0.4961
		--	--	--	--	--	--	--	--	--	0.1092
		--	--	--	--	--	--	--	--	0.0171	
		--	--	--	--	--	--	--	--	--	<b>5.5231</b>
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.1488
		--	--	--	--	--	--	--	--	--	0.0182
		--	--	--	--	--	--	--	--	--	0.0308
		--	--	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	--	--	<b>0.1990</b>

**Table L1 -236. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.508602 1.404915 155.969927 1.651465	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.508602 1.404915 155.969927 1.651465	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.508602 1.404915 1.651465 155.969927	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	1.103675 1.651465	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	73.715363 0.779403 1.651465	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.228825 1.651465	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.508602 2.008554 1.128421 155.969927 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	73.715363 0.779403 1.651465	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.991811 0.779403 2.228825 73.715363 1.103675 0.746082 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22	9.22
		--	--	--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	14.87
		--	--	--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	126.54
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.61
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.43
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63.27
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>75.46</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22
		--	--	--	--	--	--	--	--	--	--	--	14.87	14.87	14.87	14.87	14.87	14.87	14.87	14.87
		--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
		--	--	--	--	--	--	--	--	--	--	--	126.54	126.54	126.54	126.54	126.54	126.54	126.54	126.54
		--	--	--	--	--	--	--	--	--	--	--	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	<b>150.92</b>
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	<b>22.04</b>	<b>22.04</b>	<b>22.04</b>	<b>197.25</b>	<b>197.25</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>324.65</b>	<b>461.35</b>	<b>461.35</b>	<b>612.27</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>301.83</b>	<b>377.29</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>2.95</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.04	3.04	3.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>4.51</b>	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
		--	--	--	--	--	--	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	3.85	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	21.25	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	6.53	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	24.76	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>56.59</b>	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	--	1.30	1.30	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	3.04	3.04	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>4.51</b>	<b>4.51</b>	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	5.25	5.25	5.25	5.25	5.25	5.25	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.04	3.04	3.04	3.04	3.04	3.04	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.30	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.90	3.90	3.90	3.90	3.90	3.90	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.89	1.89	1.89	1.89	1.89	1.89	--	--	--	--	--	--	--
		--	--	--	--	--	--	8.26	8.26	8.26	8.26	8.26	8.26	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.23	0.23	0.23	0.23	0.23	0.23	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	<b>25.87</b>	--	--	--	--	--	--	--

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions , tpy
10	Riprap - Class 2	9.22	9.22	9.22	--	--	--	--	--	--	0.2305
		14.87	14.87	14.87	--	--	--	--	--	--	0.3717
		126.54	126.54	126.54	--	--	--	--	--	--	3.1634
		0.29	0.29	0.29	--	--	--	--	--	--	0.0073
		<b>150.92</b>	<b>150.92</b>	<b>150.92</b>	--	--	--	--	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0092
		--	--	--	--	--	--	--	--	--	0.0149
		--	--	--	--	--	--	--	--	--	0.1265
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--
12	RSP Bedding Material	9.22	--	--	--	--	--	--	--	--	0.2536
		14.87	--	--	--	--	--	--	--	--	0.4088
		0.29	--	--	--	--	--	--	--	--	0.0080
		126.54	--	--	--	--	--	--	--	--	3.4798
		<b>150.92</b>	--	--	--	--	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	1.89	1.89	--	--	--	--	0.0094
		--	--	--	0.12	0.12	--	--	--	--	0.0006
		--	--	--	<b>2.00</b>	<b>2.00</b>	--	--	--	--	<b>0.0100</b>
		<b>304.78</b>	<b>150.92</b>	<b>150.92</b>	<b>2.00</b>	<b>2.00</b>	--	--	--	--	<b>16.6092</b>
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	1.30	--	0.0013
		--	--	--	--	--	--	--	1.62	--	0.0016
		--	--	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>2.95</b>	--	--	<b>0.0029</b>
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0117
		--	--	--	--	--	--	--	--	--	0.0273
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	<b>0.0406</b>
16	Construction Site Dewatering (Pumping)	3.30	3.30	3.30	3.30	3.30	3.30	3.30	--	--	0.1981
		0.09	0.09	0.09	0.09	0.09	0.09	0.09	--	--	0.0052
		<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	--	--	<b>0.2034</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0077
		--	--	--	--	--	--	--	--	--	0.0425
		--	--	--	--	--	--	--	--	--	0.0131
		--	--	--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	<b>0.1132</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	<b>0.0158</b>
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0840
		--	--	--	--	--	--	--	--	--	0.0486
		--	--	--	--	--	--	--	--	--	0.0528
		--	--	--	--	--	--	--	--	--	0.0624
		--	--	--	--	--	--	--	--	--	0.0302
		--	--	--	--	--	--	--	--	--	0.1322
		--	--	--	--	--	--	--	--	0.0037	
		--	--	--	--	--	--	--	--	--	<b>0.4140</b>

**Table L1 -236. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.228825 1.781417 73.715363 1.651465	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.781417 73.715363 1.651465	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.991811 155.969927 1.651465	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.991811 0.779403 2.228825 73.715363 1.103675 0.746082 1.651465	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.228825 1.781417 73.715363 1.651465	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.991811 73.715363 1.651465	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	73.715363 0.918721 1.651465 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	9.91	9.91	--	--	--	--	9.91
		--	--	--	--	--	--	--	--	--	--	--	--	0.75	0.75	--	--	--	--	0.75
		--	--	--	--	--	--	--	--	--	--	--	--	7.80	7.80	--	--	--	--	7.80
		--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.61	--	--	--	--	0.61
		--	--	--	--	--	--	--	--	--	--	--	--	19.07	19.07	--	--	--	--	19.07
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.50	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.20	5.20	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.35	0.35	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.05	6.05	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	2.95	4.51	4.51	4.51	59.98	33.77	33.77	29.26	29.26	29.26	48.33	22.46	9.44	9.44	3.39	3.39	22.46
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.30	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.62	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	--	--	--	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.25	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.89	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.26	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.87	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.30	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.36	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.87	7.87	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.60	2.60	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.62	10.62	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	25.87	6.36	10.62	10.62
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	1.30	--	--	--	--	--	1.30	--	--	--	--	--	--	--	--	--	--	--	--
		1.62	--	--	--	--	--	1.62	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.95	--	--	--	--	--	2.95	--	--	--	--	--	--	--	--	--	--	--	--

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0892
		--	--	--	--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	--	--	--	0.0702
		--	--	--	--	--	--	--	--	--	--	0.0055
		--	--	--	--	--	--	--	--	--	<b>0.1716</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0025
		--	--	--	--	--	--	--	--	--	--	0.0260
		--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	<b>0.0303</b>	
22	Hinged Bottom Gates	--	--	--	5.25	5.25	5.25	5.25	--	--	--	0.0630
		--	--	--	2.75	2.75	2.75	2.75	--	--	--	0.0330
		--	--	--	0.12	0.12	0.12	0.12	--	--	--	0.0014
		--	--	--	<b>8.11</b>	<b>8.11</b>	<b>8.11</b>	<b>8.11</b>	--	--	<b>0.0974</b>	
		<b>3.39</b>	<b>3.39</b>	<b>3.39</b>	<b>11.50</b>	<b>11.50</b>	<b>11.50</b>	<b>11.50</b>	<b>2.95</b>	--	<b>1.0892</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	1.30	--	--	--	--	--	--	--	--	--	0.0013
		1.62	--	--	--	--	--	--	--	--	--	0.0016
		0.03	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>2.95</b>	--	--	--	--	--	--	--	--	<b>0.0029</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0105
		--	--	--	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	--	--	--	0.0066
		--	--	--	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	--	--	0.0165
		--	--	--	--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	--	--	--	<b>0.0517</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0032</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0315
		--	--	--	--	--	--	--	--	--	--	0.0104
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	<b>0.0425</b>	
		<b>2.95</b>	--	--	--	--	--	--	--	--	<b>0.1003</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0029</b>	

**Table L1 -236. NOx Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.684280	g/hp-hr
				Scraper	Scrapers	1	367					1.661803	g/hp-hr
				Motor Grader	Graders	1	187					1.790685	g/hp-hr
				Compactor	Rollers	1	80					1.346578	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					73.715363	g/hr
				10 TN Smooth Roller	Rollers	1	157					0.794277	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					1.651465	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.228825	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.781417	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.918721	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					73.715363	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	2.228825	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.781417	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					73.715363	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					1.651465	g/hr
<b>Concrete Duct Bank Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	73.715363	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.918721	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					1.651465	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.918721	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.651465	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.918721	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					1.651465	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.651465	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	1.651465	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	1.651465	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													



Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	7.81	7.81	7.81	7.81	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	10.76	10.76	10.76	10.76	10.76	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.90	1.90	1.90	1.90	1.90	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.20	2.20	2.20	2.20	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.20	0.20	0.20	0.20	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.30	3.30	3.30	3.30	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.25	0.25	0.25	0.25	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.62	1.62	1.62	1.62	1.62	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.30	1.30	1.30	1.30	1.30	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	36.55	36.55	36.55	36.55	36.55	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Bank	--	--	--	--	3.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	2.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	6.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		2.95	36.55	36.55	36.55	42.91	36.55	2.95	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		10.21	71.19	74.14	63.11	244.68	238.32	387.58	358.43	358.43	353.91	353.91	490.62	509.69	634.73	314.22	337.15	311.58	315.84	410.37

Table L1 -236. NOx Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.1172
		--	--	--	--	--	--	--	--	--	0.1613
		--	--	--	--	--	--	--	--	--	0.0886
		--	--	--	--	--	--	--	--	--	0.0285
		--	--	--	--	--	--	--	--	--	0.0195
		--	--	--	--	--	--	--	--	--	0.0330
		--	--	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	--	--	0.0495
		--	--	--	--	--	--	--	--	--	0.0038
		--	--	--	--	--	--	--	--	--	0.0243
		--	--	--	--	--	--	--	--	--	0.0195
		--	--	--	--	--	--	--	--	--	<b>0.5483</b>
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	<b>0.0064</b>
		--	--	--	--	--	--	--	--	--	<b>0.5576</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	1.30	--	--	--	--	--	1.30	--	0.0013
		--	1.62	--	--	--	--	--	1.62	--	0.0016
		--	0.03	--	--	--	--	--	0.03	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>2.95</b>	--	--	--	--	--	<b>2.95</b>	--	<b>0.0029</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	1.62	1.62	1.62	1.62	1.62	--	--	0.0243
		--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		--	--	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>
32	CMU Building Mechanical Equipment	--	--	1.62	1.62	1.62	1.62	1.62	--	--	0.0243
		--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		--	--	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	<b>1.71</b>	--	--	<b>0.0256</b>
33	Electrical Control Equipment CMU Building	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		--	--	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>
34	Electrical Power Equipment CMU Building	--	--	0.09	0.09	0.09	0.09	0.09	--	--	0.0013
		--	--	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0013</b>
35	Communication Equipment	--	--	--	--	--	0.09	0.09	--	--	0.0005
		--	--	--	--	--	<b>0.09</b>	<b>0.09</b>	--	--	<b>0.0005</b>
		--	<b>2.95</b>	<b>3.59</b>	<b>3.59</b>	<b>3.59</b>	<b>3.68</b>	<b>3.68</b>	<b>2.95</b>	--	<b>0.0573</b>
<b>GRAND TOTAL</b>		<b>311.12</b>	<b>157.25</b>	<b>157.90</b>	<b>17.10</b>	<b>17.10</b>	<b>15.18</b>	<b>15.18</b>	<b>26.89</b>	<b>2.95</b>	<b>18.5243</b>

**Table L1 -237. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.632109 1.792667 2.050657 12.088781 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.734429 12.088781 12.867992 34.690767	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	12.088781 12.867992	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	2.546292 1.111618 ##### 12.088781 12.867992 34.690767	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.632109 1.116611 1.792667 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	1.116611 1.039280 0.734429 12.088781 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	1.116611 12.088781 1.797415 12.867992	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	4.00	4.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.19	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.51	3.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.61	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.67</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>5.09</b>	<b>14.88</b>	<b>14.88</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	9.88	9.88	9.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	5.49	5.49	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	41.25	41.25	41.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.43	0.43	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.72	2.72	2.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.22	1.22	1.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	--	--	--	--
		--	--	--	--	--	--	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	23.63	--	--	--	--
		--	--	--	--	--	--	20.74	20.74	20.74	20.74	20.74	20.74	20.74	20.74	20.74	--	--	--	--
		--	--	--	--	--	--	11.01	11.01	11.01	11.01	11.01	11.01	11.01	11.01	11.01	--	--	--	--
		--	--	--	--	--	--	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	--	--	--	--
		--	--	--	--	--	--	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	<b>68.13</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72	--	--	--	--
		--	--	--	--	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	89.52	--	--	--	--
		--	--	--	--	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	--	--	--	--
		--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--
		--	--	--	--	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	--	--	--	--
		--	--	--	--	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	<b>119.92</b>	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	5.91	5.91	5.91	5.91	5.91	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	<b>11.78</b>	--	--	--	--	--	--	--	--

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.21	0.0002
		--	--	--	--	--	--	--	--	3.98	0.0040
		--	--	--	--	--	--	--	--	0.23	0.0002
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	4.42	0.0044	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0240
		--	--	--	--	--	--	--	--	--	0.0311
		--	--	--	--	--	--	--	--	--	0.0210
		--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	--	0.0082	
		--	--	--	--	--	--	--	--	0.0893	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	2.42	--	0.0036
		--	--	--	--	--	--	--	0.21	--	0.0003
		--	--	--	--	--	--	--	0.23	--	0.0003
		--	--	--	--	--	--	--	3.06	--	0.0046
		--	--	--	--	--	--	5.92	--	0.0089	
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	5.92	4.42	0.1029
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	0.0002
		3.98	--	--	--	--	--	--	--	--	0.0040
		0.23	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		4.42	--	--	--	--	--	--	--	0.0044	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.1136
		--	--	--	--	--	--	--	--	--	0.0631
		--	--	--	--	--	--	--	--	--	0.4744
		--	--	--	--	--	--	--	--	--	0.0049
		--	--	--	--	--	--	--	--	--	0.0313
		--	--	--	--	--	--	--	--	0.0141	
		--	--	--	--	--	--	--	--	0.7014	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.2152
		--	--	--	--	--	--	--	--	--	0.5317
		--	--	--	--	--	--	--	--	--	0.4667
		--	--	--	--	--	--	--	--	--	0.2478
		--	--	--	--	--	--	--	--	0.0715	
		--	--	--	--	--	--	--	--	1.5329	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.4963
		--	--	--	--	--	--	--	--	--	2.5066
		--	--	--	--	--	--	--	--	--	0.2035
		--	--	--	--	--	--	--	--	--	0.0179
		--	--	--	--	--	--	--	--	0.1334	
		--	--	--	--	--	--	--	--	3.3577	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0827
		--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	--	0.0697
		--	--	--	--	--	--	--	--	--	0.0095
		--	--	--	--	--	--	--	--	0.1649	

**Table L1 -237. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.632109 0.904885 34.690767 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.632109 0.904885 34.690767 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.632109 0.904885 12.867992 34.690767	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	2.050657 12.867992	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	12.088781 0.776246 12.867992	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	2.527815 12.867992	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.632109 1.116611 1.792667 34.690767 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	12.088781 0.776246 12.867992	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.508233 0.776246 2.527815 12.088781 2.050657 0.643118 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46
		--	--	--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58
		--	--	--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.79
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.07
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>25.72</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	11.46	11.46	11.46	11.46	11.46	11.46	11.46	11.46
		--	--	--	--	--	--	--	--	--	--	--	9.58	9.58	9.58	9.58	9.58	9.58	9.58	9.58
		--	--	--	--	--	--	--	--	--	--	--	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
		--	--	--	--	--	--	--	--	--	--	--	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14
		--	--	--	--	--	--	--	--	--	--	--	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	<b>51.45</b>
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	<b>60.99</b>	<b>60.99</b>	<b>60.99</b>	<b>119.92</b>	<b>119.92</b>	<b>199.82</b>	<b>199.82</b>	<b>199.82</b>	<b>199.82</b>	<b>199.82</b>	<b>239.49</b>	<b>239.49</b>	<b>290.94</b>	<b>102.90</b>	<b>102.90</b>	<b>102.90</b>	<b>102.90</b>	<b>128.62</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>4.42</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	3.03	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	1.36	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74
		--	--	--	--	--	--	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
		--	--	--	--	--	--	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	4.78	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	11.82	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	10.37	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	5.51	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>34.06</b>	--	--	--	--	--	--	--	--	--	--	--	--
18	Sheet Pile Wall	--	--	--	--	--	--	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	3.03	3.03	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.36	1.36	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>4.60</b>	<b>4.60</b>	--	--	--	--	--	--	--	--	--	--	--
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	2.69	2.69	2.69	2.69	2.69	2.69	2.69	--	--	--	--	--	--
		--	--	--	--	--	--	3.03	3.03	3.03	3.03	3.03	3.03	3.03	--	--	--	--	--	--
		--	--	--	--	--	--	3.74	3.74	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--
		--	--	--	--	--	--	0.64	0.64	0.64	0.64	0.64	0.64	0.64	--	--	--	--	--	--
		--	--	--	--	--	--	3.51	3.51	3.51	3.51	3.51	3.51	3.51	--	--	--	--	--	--
		--	--	--	--	--	--	7.12	7.12	7.12	7.12	7.12	7.12	7.12	--	--	--	--	--	--
		--	--	--	--	--	--	1.82	1.82	1.82	1.82	1.82	1.82	1.82	--	--	--	--	--	--
		--	--	--	--	--	--	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	<b>22.55</b>	--	--	--	--	--	--

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
10	Riprap - Class 2	11.46	11.46	11.46	--	--	--	--	--	--	0.2865
		9.58	9.58	9.58	--	--	--	--	--	--	0.2394
		28.14	28.14	28.14	--	--	--	--	--	--	0.7036
		2.27	2.27	2.27	--	--	--	--	--	--	0.0567
		<b>51.45</b>	<b>51.45</b>	<b>51.45</b>	--	--	--	--	--	--	--
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	--	--	--	0.0096
		--	--	--	--	--	--	--	--	--	0.0281
		--	--	--	--	--	--	--	--	--	0.0023
		--	--	--	--	--	--	--	--	--	--
12	RSP Bedding Material	11.46	--	--	--	--	--	--	--	--	0.3152
		9.58	--	--	--	--	--	--	--	--	0.2633
		2.27	--	--	--	--	--	--	--	--	0.0624
		28.14	--	--	--	--	--	--	--	--	0.7740
		<b>51.45</b>	--	--	--	--	--	--	--	--	--
13	Erosion Control Seeding	--	--	--	3.51	3.51	--	--	--	--	0.0175
		--	--	--	0.91	0.91	--	--	--	--	0.0045
		--	--	--	<b>4.42</b>	<b>4.42</b>	--	--	--	--	<b>0.0221</b>
		<b>107.32</b>	<b>51.45</b>	<b>51.45</b>	<b>4.42</b>	<b>4.42</b>	--	--	--	--	<b>8.5359</b>
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.21	--	0.0002
		--	--	--	--	--	--	--	3.98	--	0.0040
		--	--	--	--	--	--	--	0.23	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>4.42</b>	--	--
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0272
		--	--	--	--	--	--	--	--	--	0.0123
		--	--	--	--	--	--	--	--	--	<b>0.0414</b>
16	Construction Site Dewatering (Pumping)	3.74	3.74	3.74	3.74	3.74	3.74	3.74	--	--	0.2247
		0.68	0.68	0.68	0.68	0.68	0.68	0.68	--	--	0.0409
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	--	--	<b>0.2655</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0096
		--	--	--	--	--	--	--	--	--	0.0236
		--	--	--	--	--	--	--	--	--	0.0207
		--	--	--	--	--	--	--	--	--	0.0110
		--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	<b>0.0681</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0106
		--	--	--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	--	--	<b>0.0161</b>
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0430
		--	--	--	--	--	--	--	--	--	0.0484
		--	--	--	--	--	--	--	--	--	0.0599
		--	--	--	--	--	--	--	--	--	0.0102
		--	--	--	--	--	--	--	--	--	0.0561
		--	--	--	--	--	--	--	--	--	0.1140
		--	--	--	--	--	--	--	--	0.0290	
		--	--	--	--	--	--	--	--	--	<b>0.3607</b>



**Table L1 -237. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	2.527815 1.492125 12.088781 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	1.492125 12.088781 12.867992	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.508233 34.690767 12.867992	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.508233 0.776246 2.527815 12.088781 2.050657 0.643118 12.867992	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	2.527815 1.492125 12.088781 12.867992	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.508233 12.088781 12.867992	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	12.088781 2.255582 12.867992 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	11.23	11.23	--	--	--	--	11.23
		--	--	--	--	--	--	--	--	--	--	--	--	0.63	0.63	--	--	--	--	0.63
		--	--	--	--	--	--	--	--	--	--	--	--	1.28	1.28	--	--	--	--	1.28
		--	--	--	--	--	--	--	--	--	--	--	--	4.77	4.77	--	--	--	--	4.77
		--	--	--	--	--	--	--	--	--	--	--	--	17.91	17.91	--	--	--	--	17.91
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	0.42	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.85	0.85	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.72	2.72	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.00	4.00	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	4.42	4.60	4.60	4.60	38.49	31.57	31.57	26.97	26.97	26.97	44.88	22.34	8.42	8.42	4.43	4.43	22.34
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.98	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	--	--	--	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.69	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.03	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.64	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.51	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.12	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.82	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22.55	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.74	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.59	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.97	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.03	4.03	4.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	0.43	0.43
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	1.13	1.13
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.59	5.59
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	22.55	5.97	5.59	5.59
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--
		3.98	--	--	--	--	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--
		0.23	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4.42	--	--	--	--	--	4.42	--	--	--	--	--	--	--	--	--	--	--	--

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.1011
		--	--	--	--	--	--	--	--	--	--	0.0057
		--	--	--	--	--	--	--	--	--	--	0.0115
		--	--	--	--	--	--	--	--	--	--	0.0429
		--	--	--	--	--	--	--	--	--	<b>0.1612</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0021	
		--	--	--	--	--	--	--	--	--	0.0043	
		--	--	--	--	--	--	--	--	--	0.0136	
		--	--	--	--	--	--	--	--	<b>0.0200</b>		
22	Hinged Bottom Gates	--	--	--	2.69	2.69	2.69	2.69	--	--	0.0323	
		--	--	--	0.61	0.61	0.61	0.61	--	--	0.0073	
		--	--	--	0.91	0.91	0.91	0.91	--	--	0.0109	
		--	--	--	<b>4.21</b>	<b>4.21</b>	<b>4.21</b>	<b>4.21</b>	--	--	<b>0.0505</b>	
		<b>4.43</b>	<b>4.43</b>	<b>4.43</b>	<b>8.63</b>	<b>8.63</b>	<b>8.63</b>	<b>8.63</b>	<b>4.42</b>	--	<b>0.9880</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.21	--	--	--	--	--	--	--	--	--	0.0002
		3.98	--	--	--	--	--	--	--	--	--	0.0040
		0.23	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	--
		<b>4.42</b>	--	--	--	--	--	--	--	--	<b>0.0044</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0054
		--	--	--	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	--	--	--	0.0075
		--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0070
		--	--	--	--	--	--	--	--	--	--	0.0142
		--	--	--	--	--	--	--	--	--	--	0.0036
		--	--	--	--	--	--	--	--	--	<b>0.0451</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	<b>0.0030</b>		
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0161	
		--	--	--	--	--	--	--	--	--	0.0017	
		--	--	--	--	--	--	--	--	--	0.0045	
		--	--	--	--	--	--	--	--	<b>0.0224</b>		
		<b>4.42</b>	--	--	--	--	--	--	--	<b>0.0749</b>		
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0040
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0044</b>	

**Table L1 -237. CO Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	2.096774	g/hp-hr
				Scraper	Scrapers	1	367					1.039280	g/hp-hr
				Motor Grader	Graders	1	187					0.734429	g/hp-hr
				Compactor	Rollers	1	80					2.079224	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					12.088781	g/hr
				10 TN Smooth Roller	Rollers	1	157					1.797415	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.867992	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					2.527815	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.492125	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.255582	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					12.088781	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	2.527815	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					1.492125	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					12.088781	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					12.867992	g/hr
<b>Concrete Duct Bank Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	12.088781	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					2.255582	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					12.867992	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.255582	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.867992	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	2.255582	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					12.867992	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.867992	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	12.867992	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	12.867992	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	6.10	6.10	6.10	6.10	6.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	6.73	6.73	6.73	6.73	6.73	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.42	2.42	2.42	2.42	2.42	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	2.93	2.93	2.93	2.93	2.93	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	4.98	4.98	4.98	4.98	4.98	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.59	1.59	1.59	1.59	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.74	3.74	3.74	3.74	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	3.98	3.98	3.98	3.98	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	33.11	33.11	33.11	33.11	33.11	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	--	--	--	--	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--		
		4.42	33.11	33.11	33.11	39.08	33.11	4.42	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		13.92	108.98	113.40	98.70	163.60	157.63	242.73	231.40	231.40	226.80	226.80	266.47	284.38	313.28	115.74	133.87	113.30	112.92	156.56

Table L1 -237. CO Exhaust Emissions from Offroad C

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0915
		--	--	--	--	--	--	--	--	--	0.1009
		--	--	--	--	--	--	--	--	--	0.0363
		--	--	--	--	--	--	--	--	--	0.0440
		--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	0.0747
		--	--	--	--	--	--	--	--	--	0.0238
		--	--	--	--	--	--	--	--	--	0.0562
		--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	0.0597
		--	--	--	--	--	--	--	--	--	0.0032
		--	--	--	--	--	--	--	--	--	<b>0.4967</b>
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	<b>0.0060</b>
		--	--	--	--	--	--	--	--	--	<b>0.5070</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.21	--	--	--	--	--	0.21	--	0.0002
		--	3.98	--	--	--	--	--	3.98	--	0.0040
		--	0.23	--	--	--	--	--	0.23	--	0.0002
		--	--	--	--	--	--	--	--	--	--
		--	<b>4.42</b>	--	--	--	--	--	<b>4.42</b>	--	<b>0.0044</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	3.98	3.98	3.98	3.98	3.98	--	--	0.0597
		--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		--	--	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
32	CMU Building Mechanical Equipment	--	--	3.98	3.98	3.98	3.98	3.98	--	--	0.0597
		--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		--	--	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	<b>4.66</b>	--	--	<b>0.0699</b>
33	Electrical Control Equipment CMU Building	--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
34	Electrical Power Equipment CMU Building	--	--	0.68	0.68	0.68	0.68	0.68	--	--	0.0102
		--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0102</b>
35	Communication Equipment	--	--	--	--	--	0.68	0.68	--	--	0.0041
		--	--	--	--	--	<b>0.68</b>	<b>0.68</b>	--	--	<b>0.0041</b>
		--	<b>4.42</b>	<b>10.68</b>	<b>10.68</b>	<b>10.68</b>	<b>11.36</b>	<b>11.36</b>	<b>4.42</b>	--	<b>0.1687</b>
<b>GRAND TOTAL</b>		<b>116.16</b>	<b>60.29</b>	<b>66.55</b>	<b>23.73</b>	<b>23.73</b>	<b>19.99</b>	<b>19.99</b>	<b>14.76</b>	<b>4.42</b>	<b>10.3775</b>

**Table L1 -238. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.003180 0.003453 0.003667 0.172052 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.003901 0.172052 0.047380 0.228106	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	0.172052 0.047380	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.004267 0.002558 0.016272 0.172052 0.047380 0.228106	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.003180 0.003291 0.003453 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.003291 0.004016 0.003901 0.172052 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.003291 0.172052 0.003581 0.047380	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1 -238. SO2 Exhaust Emissions from Offroad C

#	Activity	Maximum Daily Emissions, lbs/day																			
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
<b>02 - Relocations</b>																					
1	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																					
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--	
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	
		--	--	--	--	--	--	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	--	--	--	--	--
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--
		--	--	--	--	--	--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	
		--	--	--	--	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	--	--	--	--	--	
		--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	
		--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	
		--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--
		--	--	--	--	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	--	--	--	--	--	--	
9	Earthen Backfill	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	



Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--	0.00	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.0000</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0003</b>
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	<b>0.04</b>	--	<b>0.0001</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	--	--	<b>0.04</b>	<b>0.01</b>	<b>0.0004</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	0.0000
		0.01	--	--	--	--	--	--	--	--	0.0000
		0.00	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0007</b>
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0054</b>
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0097
		--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	--	--	<b>0.0130</b>
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0005</b>

**Table L1 -238. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.003180 0.003570 0.228106 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.003180 0.003570 0.228106 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.003180 0.003570 0.047380 0.228106	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.003667 0.047380	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	0.172052 0.004796 0.047380	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.004933 0.047380	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.003180 0.003291 0.003453 0.228106 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	0.172052 0.004796 0.047380	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.002399 0.004796 0.004933 0.172052 0.003667 0.003180 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.14</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
		--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
		--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
		--	--	--	--	--	--	--	--	--	--	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.01</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.46</b>	<b>0.46</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.74</b>	<b>0.99</b>	<b>0.99</b>	<b>1.28</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.72</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
		--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		--	--	--	--	--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	--	0.01	0.01	--	--	--	--	--	--	--	--		
		--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--			
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--		
		--	--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	--	--	--	--		
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--		
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--		
		--	--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--		
		--	--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	0.04	--	--	--	--		
		--	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--			
		--	--	--	--	--	--	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--			

Table L1 -238. SO2 Exhaust Emissions from Offroad C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	0.06	0.06	0.06	--	--	--	--	--	--	0.0014
		0.04	0.04	0.04	--	--	--	--	--	--	0.0009
		0.19	0.19	0.19	--	--	--	--	--	--	0.0046
		0.01	0.01	0.01	--	--	--	--	--	--	0.0002
		<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	--	--	--	--	--	--	<b>0.0072</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0003</b>	
12	RSP Bedding Material	0.06	--	--	--	--	--	--	--	0.0016	
		0.04	--	--	--	--	--	--	--	0.0010	
		0.01	--	--	--	--	--	--	--	0.0002	
		0.19	--	--	--	--	--	--	--	0.0051	
		<b>0.29</b>	--	--	--	--	--	--	--	<b>0.0079</b>	
13	Erosion Control Seeding	--	--	--	0.01	0.01	--	--	--	0.0000	
		--	--	--	0.00	0.00	--	--	--	0.0000	
		--	--	--	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0000</b>	
		<b>0.59</b>	<b>0.29</b>	<b>0.29</b>	<b>0.01</b>	<b>0.01</b>	--	--	--	<b>0.0351</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
16	Construction Site Dewatering (Pumping)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--	0.0004	
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	--	0.0002	
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	<b>0.0006</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0002</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	<b>0.0001</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	0.0006	
		--	--	--	--	--	--	--	0.0001		
		--	--	--	--	--	--	--	--	<b>0.0015</b>	

**Table L1 -238. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.004933 0.003803 0.172052 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.003803 0.172052 0.047380	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.002399 0.228106 0.047380	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.002399 0.004796 0.004933 0.172052 0.003667 0.003180 0.047380	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.004933 0.003803 0.172052 0.047380	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.002399 0.172052 0.047380	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	0.172052 0.004000 0.047380 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--	--	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.06</b>	--	--	--	--	<b>0.06</b>
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	0.03	0.03	0.03	0.13	0.13	0.13	0.11	0.11	0.11	0.17	0.07	0.03	0.03	0.01	0.01	0.07
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	--	--	--	--
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.02</b>	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	0.01	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--
		0.00	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	--	--	--	--

Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	<b>0.0005</b>
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>
22	Hinged Bottom Gates	--	--	--	0.01	0.01	0.01	0.01	--	--	0.0002
		--	--	--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	--	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	--	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0002</b>
		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0036</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.00	--	--	--	--	--	--	--	--	0.0000
		0.01	--	--	--	--	--	--	--	--	0.0000
		0.00	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>
		<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0003</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>

**Table L1 -238. SO2 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units	
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.003773	g/hp-hr	
				Scraper	Scrapers	1	367						0.004016	g/hp-hr
				Motor Grader	Graders	1	187						0.003901	g/hp-hr
				Compactor	Rollers	1	80						0.003733	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT						0.172052	g/hr
				10 TN Smooth Roller	Rollers	1	157						0.003581	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.047380	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84						0.004933	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.003803	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.004000	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT						0.172052	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>														
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.004933	g/hp-hr	
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8						0.003803	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT						0.172052	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2						0.047380	g/hr
<b>Concrete Duct Bank Subtotal</b>														
<b>19 - Buildings, Grounds, and Utilities Total</b>														
<b>20 -Permanent Operating Equipment</b>														
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	0.172052	g/hr	
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100						0.004000	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2						0.047380	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a						0.000000	g/hr
<b>Mobilization and Demobilization Subtotal</b>														
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.047380	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>														
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.004000	g/hp-hr	
				Pickup Truck Conventional	n/a - onroad	3	LDT2						0.047380	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>														
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.047380	g/hr	
<b>Electrical Control Equipment CMU Building Subtotal</b>														
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.047380	g/hr	
<b>Electrical Power Equipment CMU Building Subtotal</b>														
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.047380	g/hr	
<b>Communication Equipment Subtotal</b>														
<b>20 -Permanent Operating Equipment Total</b>														
<b>GRAND TOTAL</b>														



Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.00	0.00	0.00	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Bank	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	0.09	0.09	0.09	0.11	0.09	0.01	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>		0.04	0.20	0.21	0.18	0.60	0.58	0.88	0.87	0.87	0.84	0.84	1.10	1.16	1.35	0.62	0.71	0.61	0.62	0.82

Table L1 -238. SO2 Exhaust Emissions from Offroad (

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0014</b>
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>
		--	--	--	--	--	--	--	--	--	<b>0.0014</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.00	--	--	--	--	--	0.00	--	0.0000
		--	0.01	--	--	--	--	--	0.01	--	0.0000
		--	0.00	--	--	--	--	--	0.00	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	<b>0.01</b>	--	--	--	--	--	<b>0.01</b>	--	<b>0.0000</b>
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
32	CMU Building Mechanical Equipment	--	--	0.01	0.01	0.01	0.01	0.01	--	--	0.0001
		--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	--	--	<b>0.0001</b>
33	Electrical Control Equipment CMU Building	--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
34	Electrical Power Equipment CMU Building	--	--	0.00	0.00	0.00	0.00	0.00	--	--	0.0000
		--	--	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
35	Communication Equipment	--	--	--	--	--	0.00	0.00	--	--	0.0000
		--	--	--	--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.0000</b>
		--	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.01</b>	--	<b>0.0004</b>
<b>GRAND TOTAL</b>		<b>0.61</b>	<b>0.31</b>	<b>0.32</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.01</b>	<b>0.0411</b>

**Table L1 -239. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.017022 0.061709 0.065071 2.474210 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Fremont Weir Demo Subtotal</b>	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.056730 2.474210 0.862254 1.897267	g/hp-hr g/hr g/hr g/hr
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>	
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	2.474210 0.862254	g/hr g/hr
												<b>Temporary Electrical Power Subtotal</b>	
												<b>02 - Relocations Total</b>	
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
												<b>Mobilization and Demobilization Subtotal</b>	
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.199712 0.030333 0.230004 2.474210 0.862254 1.897267	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
												<b>Clearing and Grubbing Subtotal</b>	
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.017022 0.091737 0.061709 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation (Wet Conditions) Subtotal</b>	
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.091737 0.064651 0.056730 2.474210 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>	
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.091737 2.474210 0.036504 0.862254	g/hp-hr g/hr g/hp-hr g/hr
												<b>Earthen Backfill Subtotal</b>	

Table L1 -239. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
<b>02 - Relocations</b>																				
1	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.07</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.20</b>	<b>0.57</b>	<b>0.57</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																				
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	Clearing and Grubbing	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.15	0.15	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.18	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.07	0.07	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	--	--	--	--
		--	--	--	--	--	--	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	--	--	--	--
		--	--	--	--	--	--	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	--	--	--	--
		--	--	--	--	--	--	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	--	--	--	--
		--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--
		--	--	--	--	--	--	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	<b>3.73</b>	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	--	--	--	--
		--	--	--	--	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.57	--	--	--	--
		--	--	--	--	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	--	--	--	--
		--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--
		--	--	--	--	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	--	--	--	--
		--	--	--	--	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	<b>8.04</b>	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.49	0.49	0.49	0.49	0.49	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>	--	--	--	--	--	--	--	--

**Table L1 -239. PM10 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions , tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
<b>02 - Relocations</b>												
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.04	0.0000
		--	--	--	--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	<b>0.12</b>	<b>0.0001</b>	
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0005	
		--	--	--	--	--	--	--	--	--	<b>0.0034</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.19	--	0.0003	
		--	--	--	--	--	--	--	0.04	--	0.0001	
		--	--	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	0.17	--	0.0003	
		--	--	--	--	--	--	<b>0.41</b>	--	<b>0.0006</b>		
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	<b>0.0000</b>	
		--	--	--	--	--	--	--	<b>0.41</b>	<b>0.12</b>	<b>0.0042</b>	
<b>09 - Channels and Canals</b>												
5	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.02	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	0.0008	
		--	--	--	--	--	--	--	--	--	<b>0.0153</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	--	--	--	0.0437
		--	--	--	--	--	--	--	--	--	--	0.0161
		--	--	--	--	--	--	--	--	--	--	0.0136
		--	--	--	--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	--	--	<b>0.0839</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	--	0.0408
		--	--	--	--	--	--	--	--	--	--	0.1559
		--	--	--	--	--	--	--	--	--	--	0.0157
		--	--	--	--	--	--	--	--	--	--	0.0037
		--	--	--	--	--	--	--	--	--	--	0.0089
		--	--	--	--	--	--	--	--	--	<b>0.2250</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	0.0068
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	<b>0.0095</b>	

**Table L1 -239. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.017022 0.055309 1.897267 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.017022 0.055309 1.897267 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.017022 0.055309 0.862254 1.897267	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.065071 0.862254	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	2.474210 0.023627 0.862254	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.125950 0.862254	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.017022 0.091737 0.061709 1.897267 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	2.474210 0.023627 0.862254	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.039905 0.023627 0.125950 2.474210 0.065071 0.027366 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -239. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15
		--	--	--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.77
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>1.29</b>	
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
		--	--	--	--	--	--	--	--	--	--	--	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
		--	--	--	--	--	--	--	--	--	--	--	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
		--	--	--	--	--	--	--	--	--	--	--	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
		--	--	--	--	--	--	--	--	--	--	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		<b>0.12</b>	<b>1.33</b>	<b>1.33</b>	<b>1.33</b>	<b>8.04</b>	<b>8.04</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>12.44</b>	<b>14.35</b>	<b>14.35</b>	<b>16.94</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>5.17</b>	<b>6.46</b>
<b>15 - Floodway Control and Diversion Structures</b>																				
14	Mobilization and Demobilization	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	<b>0.12</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	
		--	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.97	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>1.86</b>	--	--	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.04	0.04	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.21	0.21	0.21	0.21	0.21	0.21	--	--	--	--	--	
		--	--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	
		--	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	
		--	--	--	--	--	--	--	0.13	0.13	0.13	0.13	0.13	0.13	--	--	--	--	--	
		--	--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	
		--	--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	--	--	--	--	--	
		--	--	--	--	--	--	0.12	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--		
		--	--	--	--	--	--	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	--	--	--	--	--		

**Table L1 -239. PM10 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	0.31	0.31	0.31	--	--	--	--	--	--	0.0077
		0.59	0.59	0.59	--	--	--	--	--	--	0.0146
		1.54	1.54	1.54	--	--	--	--	--	--	0.0385
		0.15	0.15	0.15	--	--	--	--	--	--	0.0038
		<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	--	--	--	--	--	--	<b>0.0646</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	<b>0.0026</b>	
12	RSP Bedding Material	0.31	--	--	--	--	--	--	--	--	0.0085
		0.59	--	--	--	--	--	--	--	--	0.0161
		0.15	--	--	--	--	--	--	--	--	0.0042
		1.54	--	--	--	--	--	--	--	--	0.0423
		<b>2.59</b>	--	--	--	--	--	--	--	<b>0.0711</b>	
13	Erosion Control Seeding	--	--	--	0.11	0.11	--	--	--	--	0.0006
		--	--	--	0.06	0.06	--	--	--	--	0.0003
		--	--	--	<b>0.17</b>	<b>0.17</b>	--	--	--	<b>0.0009</b>	
		<b>5.29</b>	<b>2.59</b>	<b>2.59</b>	<b>0.17</b>	<b>0.17</b>	--	--	--	<b>0.4729</b>	
<b>15 - Floodway Control and Diversion Structures</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.04	--	0.0000
		--	--	--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>	
15	Construction Site Dewatering (Temporary Cofferdam)	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	--	<b>0.0020</b>	
16	Construction Site Dewatering (Pumping)	0.19	0.19	0.19	0.19	0.19	0.19	0.19	--	--	0.0112
		0.05	0.05	0.05	0.05	0.05	0.05	0.05	--	--	0.0027
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	--	--	<b>0.0139</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0019
		--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	<b>0.0037</b>	
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	<b>0.0008</b>	
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0034
		--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	0.0030
		--	--	--	--	--	--	--	--	--	0.0021
		--	--	--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	--	--	0.0048
		--	--	--	--	--	--	--	--	0.0019	
		--	--	--	--	--	--	--	--	<b>0.0185</b>	



**Table L1 -239. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.125950 0.069610 2.474210 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.069610 2.474210 0.862254	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.039905 1.897267 0.862254	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.039905 0.023627 0.125950 2.474210 0.065071 0.027366 0.862254	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.125950 0.069610 2.474210 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.039905 2.474210 0.862254	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -239. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.56	--	--	--	--	0.56
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03
		--	--	--	--	--	--	--	--	--	--	--	--	0.26	0.26	--	--	--	--	0.26
		--	--	--	--	--	--	--	--	--	--	--	--	0.32	0.32	--	--	--	--	0.32
		--	--	--	--	--	--	--	--	--	--	--	1.17	1.17	--	--	--	--	1.17	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	0.18	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.38	0.38	--	--	--	
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.12	0.23	0.23	0.23	2.10	1.62	1.62	1.39	1.39	1.39	2.56	1.40	0.61	0.61	0.23	0.23	1.40
<b>08 - Roads, Railroads, and Bridges</b>																				
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.16	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	--	--	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	--	0.32	0.32
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	--	0.09	0.09
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	0.08	0.08
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.48	--	0.48	0.48	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	1.16	0.39	0.48	0.48	
<b>19 - Buildings, Grounds, and Utilities</b>																				
27	Mobilization and Demobilization	0.04	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--
		0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.12	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	

**Table L1 -239. PM10 Exhaust Emissions from Offroad**

#	Activity										Annual Emissions, tpy	
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct		
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	0.0050
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0024
		--	--	--	--	--	--	--	--	--	--	0.0029
		--	--	--	--	--	--	--	--	--	<b>0.0105</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	<b>0.0019</b>	
22	Hinged Bottom Gates	--	--	--	0.21	0.21	0.21	0.21	--	--	--	0.0025
		--	--	--	0.03	0.03	0.03	0.03	--	--	--	0.0004
		--	--	--	0.06	0.06	0.06	0.06	--	--	--	0.0007
		--	--	--	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	--	--	<b>0.0037</b>	
		<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.54</b>	<b>0.12</b>	--	<b>0.0552</b>	
<b>08 - Roads, Railroads, and Bridges</b>												
23	Mobilization and Demobilization	0.04	--	--	--	--	--	--	--	--	--	0.0000
		0.06	--	--	--	--	--	--	--	--	--	0.0001
		0.02	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>	
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	--	--	<b>0.0023</b>	
25	Pedestrian Bridge Concrete Abutments and Wingwalls	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	<b>0.0002</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	--	--	<b>0.0019</b>	
		<b>0.12</b>	--	--	--	--	--	--	--	--	<b>0.0046</b>	
<b>19 - Buildings, Grounds, and Utilities</b>												
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	<b>0.0001</b>	

**Table L1 -239. PM10 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer Scraper Motor Grader Compactor 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Extended Boom Pallet Loader Concrete Mixer Truck	Rubber Tired Dozers Scrapers Graders Rollers n/a - onroad Rollers n/a - onroad Pumps Plate Compactors Rough Terrain Forklifts n/a - onroad	1 1 1 1 1 1 7 1 1 1 1	165 367 187 80 MHDT 157 LDT2 84 8 100 MHDT	-	1	1	30	0.152735 0.064651 0.056730 0.082320 2.474210 0.036504 0.862254 0.125950 0.069610 0.035596 2.474210	g/hp-hr g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hp-hr g/hp-hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	2	0.125950 0.069610 2.474210 0.862254	g/hp-hr g/hp-hr g/hr g/hr
<b>Concrete Duct Bank Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	2.474210 0.035596 0.862254 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.035596 0.862254	g/hp-hr g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader Pickup Truck Conventional	Rough Terrain Forklifts n/a - onroad	1 3	100 LDT2	-	1	1	30	0.035596 0.862254	g/hp-hr g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.862254	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.862254	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.862254	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													

Table L1 -239. PM10 Exhaust Emissions from Offroad

#	Activity	Maximum Daily Emissions, lbs/day																		
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
28	CMU Building and Earthwork Pad Construction	--	0.44	0.44	0.44	0.44	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.42	0.42	0.42	0.42	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.12	0.12	0.12	0.12	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04	0.04	0.04	--	--	--	--	--	--	--	--	--	--	--	--	
		--	1.72	1.72	1.72	1.72	1.72	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--		
		0.12	1.72	1.72	1.72	2.11	1.72	0.12	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment</b>																				
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>		0.44	3.61	3.73	3.27	10.37	9.98	14.66	14.06	14.06	13.83	13.83	15.74	16.91	18.34	5.90	6.94	5.79	5.88	8.35

**Table L1 -239. PM10 Exhaust Emissions from Offroad**

#	Activity	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	Annual Emissions, tpy	
28	CMU Building and Earthwork Pad Construction	--	--	--	--	--	--	--	--	--	0.0067	
		--	--	--	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	--	--	0.0017
		--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	--	--	--	0.0028
		--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	--	--	--	0.0007	
		--	--	--	--	--	--	--	--	--	<b>0.0258</b>	
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0002	
		--	--	--	--	--	--	--	--	--	0.0000	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	--	--	--	<b>0.0004</b>	
		--	--	--	--	--	--	--	--	--	<b>0.0263</b>	
<b>20 -Permanent Operating Equipment</b>												
30	Mobilization and Demobilization	--	0.04	--	--	--	--	--	0.04	--	0.0000	
		--	0.06	--	--	--	--	--	0.06	--	0.0001	
		--	0.02	--	--	--	--	--	0.02	--	0.0000	
		--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.12</b>	--	--	--	--	--	<b>0.12</b>	--	<b>0.0001</b>	
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009	
		--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>	
32	CMU Building Mechanical Equipment	--	--	0.06	0.06	0.06	0.06	0.06	--	--	0.0009	
		--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	--	--	<b>0.0016</b>	
33	Electrical Control Equipment CMU Building	--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
34	Electrical Power Equipment CMU Building	--	--	0.05	0.05	0.05	0.05	0.05	--	--	0.0007	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
		--	--	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0007</b>	
35	Communication Equipment	--	--	--	--	--	0.05	0.05	--	--	0.0003	
		--	--	--	--	--	<b>0.05</b>	<b>0.05</b>	--	--	<b>0.0003</b>	
		--	<b>0.12</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.35</b>	<b>0.35</b>	<b>0.12</b>	--	<b>0.0050</b>	
<b>GRAND TOTAL</b>		<b>5.65</b>	<b>2.94</b>	<b>3.13</b>	<b>1.02</b>	<b>1.02</b>	<b>0.89</b>	<b>0.89</b>	<b>0.66</b>	<b>0.12</b>	<b>0.5682</b>	

**Table L1 -240. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
<b>02 - Relocations</b>													
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	0.015661 0.056772 0.059866 1.207340 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Fremont Weir Demo Subtotal</b>													
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	0.052192 1.207340 0.448991 0.959260	g/hp-hr g/hr g/hr g/hr
<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>													
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	1.207340 0.448991	g/hr g/hr
<b>Temporary Electrical Power Subtotal</b>													
<b>02 - Relocations Total</b>													
<b>09 - Channels and Canals</b>													
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	0.183735 0.027906 0.211603 1.207340 0.448991 0.959260	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr
<b>Clearing and Grubbing Subtotal</b>													
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	0.015661 0.084398 0.056772 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	0.084398 0.059479 0.052192 1.207340 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation/Grading (Dry Conditions) Subtotal</b>													
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	0.084398 1.207340 0.033583 0.448991	g/hp-hr g/hr g/hp-hr g/hr
<b>Earthen Backfill Subtotal</b>													

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		-- --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	Fremont Weir Demo	--	0.10	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.16	0.16 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.05	0.05 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	Temporary Electrical Power	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.04</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.12</b>	<b>0.45</b>	<b>0.45</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	0.02 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02 --	--
		0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06 --	--
		0.01 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01 --	--
		-- --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-- --	--
		<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>
6	Clearing and Grubbing	--	0.71	0.71	0.71 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.14	0.14	0.14 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.04	0.04	0.04 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.10	0.10	0.10 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.03	0.03	0.03 --	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	Excavation (Wet Conditions)	--	--	--	--	--	--	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24 --	--	--	--	--	--	--	--
		--	--	--	--	--	--	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79 --	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.66	0.66	0.66	0.66	0.66	0.66	0.66 --	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.30	0.30	0.30	0.30	0.30	0.30	0.30 --	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.11	0.11	0.11	0.11	0.11	0.11	0.11 --	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	<b>3.10</b>	--	--	--	--	--	--	--	--
8	Excavation/Grading (Dry Conditions)	--	--	--	--	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34 --	--	--	--	--	--	--	--
		--	--	--	--	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12 --	--	--	--	--	--	--	--
		--	--	--	--	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52 --	--	--	--	--	--	--	--	--
		--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06 --	--	--	--	--	--	--	--	--
		--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17 --	--	--	--	--	--	--	--	--
		--	--	--	--	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	<b>7.21</b>	--	--	--	--	--	--	--	--
9	Earthen Backfill	--	--	--	--	--	--	0.45	0.45	0.45	0.45	0.45	0.45 --	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.09	0.09	0.09	0.09	0.09 --	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02 --	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	--	--	--	--	--	--	--	--	--	--



Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>									
1	Mobilization and Demobilization	--	--	--	--	--	--	0.02	0.0000
		--	--	--	--	--	--	0.06	0.0001
		--	--	--	--	--	--	0.01	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.09</b>	<b>0.0001</b>
2	Fremont Weir Demo	--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	0.0003	
		--	--	--	--	--	--	<b>0.0027</b>	
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	0.17	--	0.0003
		--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	0.08	--	0.0001
		--	--	--	--	--	<b>0.29</b>	--	<b>0.0004</b>
4	Temporary Electrical Power	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0000</b>	
		--	--	--	--	--	<b>0.29</b>	<b>0.09</b>	<b>0.0032</b>
<b>09 - Channels and Canals</b>									
5	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	
6	Clearing and Grubbing	--	--	--	--	--	--	--	0.0082
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	0.0004	
		--	--	--	--	--	--	<b>0.0124</b>	
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0053
		--	--	--	--	--	--	--	0.0402
		--	--	--	--	--	--	--	0.0148
		--	--	--	--	--	--	--	0.0069
		--	--	--	--	--	--	0.0025	
		--	--	--	--	--	--	<b>0.0696</b>	
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	0.0375
		--	--	--	--	--	--	--	0.1435
		--	--	--	--	--	--	--	0.0145
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	0.0047	
		--	--	--	--	--	--	<b>0.2019</b>	
9	Earthen Backfill	--	--	--	--	--	--	--	0.0063
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0013
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	<b>0.0082</b>	

**Table L1 -240. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	0.015661 0.050884 0.959260 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 2 Subtotal</b>													
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	0.015661 0.050884 0.959260 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Riprap - Class 3 Subtotal</b>													
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	0.015661 0.050884 0.448991 0.959260	g/hp-hr g/hp-hr g/hr g/hr
<b>RSP Bedding Material Subtotal</b>													
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel Pickup Truck Conventional	Tractors/Loaders/Backhoes n/a - onroad	1 4	97 LDT2	2	1	2	10	0.059866 0.448991	g/hp-hr g/hr
<b>Erosion Control Seeding Subtotal</b>													
<b>09 - Channels and Canals Total</b>													
<b>15 - Floodway Control and Diversion Structures</b>													
14	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	18	1.207340 0.021737 0.448991	g/hr g/hp-hr g/hr
<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>													
16	Construction Site Dewatering (Pumping)	-	-	6" Dia. Pump Engine Drive Pickup Truck Conventional	Pumps n/a - onroad	1 3	84 LDT2	-	1	1	120	0.115874 0.448991	g/hp-hr g/hr
<b>Construction Site Dewatering (Pumping) Subtotal</b>													
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	1	1,800	4	0.015661 0.084398 0.056772 0.959260 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr
<b>Excavation (Wet Conditions) Subtotal</b>													
18	Sheet Pile Wall	7,940	SF	Flatbed Truck 75 TN Crane Crawler Pile Hammer Pickup Truck Conventional	n/a - onroad Bore/Drill Rigs n/a - onroad	1 1 6	MHDT 221 LDT2	1,200	1	1,200	7	1.207340 0.021737 0.448991	g/hr g/hp-hr g/hr
<b>Sheet Pile Wall Subtotal</b>													
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	32	0.036712 0.021737 0.115874 1.207340 0.059866 0.025177 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Headworks Structure Concrete Piles Subtotal</b>													

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																					
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	
10	Riprap - Class 2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
														<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>		
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	
																		<b>0.84</b>					
12	RSP Bedding Material	--	--	--	--	--	--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	--	
		--	--	--	--	--	--	--	--	--	--	--	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	--	
		--	--	--	--	--	--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--	
		--	--	--	--	--	--	--	--	--	--	--	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	--	
												<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	<b>1.68</b>	--		
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>7.21</b>	<b>7.21</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>10.89</b>	<b>11.98</b>	<b>11.98</b>	<b>13.66</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>3.36</b>	<b>4.20</b>	<b>3.45</b>	<b>1.68</b>
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				<b>0.09</b>																			
15	Construction Site Dewatering (Temporary Co	--	--	--	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				<b>0.15</b>	<b>0.15</b>	<b>0.15</b>																	
16	Construction Site Dewatering (Pumping)	--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	
		--	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
		--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Excavation (Wet Conditions)	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
								<b>1.55</b>															
18	Sheet Pile Wall	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
								<b>0.15</b>	<b>0.15</b>														
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	0.19	0.19	0.19	0.19	0.19	0.19	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.08	0.08	0.08	0.08	0.08	0.08	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	0.17	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.06	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.10	0.10	0.10	0.10	0.10	0.10	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	0.28	0.28	0.28	0.28	0.28	0.28	--	--	--	--	--	--	--	--	--	--
								<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>	<b>0.96</b>										

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions, tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
10	Riprap - Class 2	0.28	--	--	--	--	--	--	0.0071
		0.54	--	--	--	--	--	--	0.0135
		0.78	--	--	--	--	--	--	0.0195
		0.08	--	--	--	--	--	--	0.0020
		<b>1.68</b>	--	--	--	--	--	--	<b>0.0420</b>
11	Riprap - Class 3	--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0017</b>
12	RSP Bedding Material	--	--	--	--	--	--	--	0.0078
		--	--	--	--	--	--	--	0.0148
		--	--	--	--	--	--	--	0.0022
		--	--	--	--	--	--	--	0.0214
		--	--	--	--	--	--	--	<b>0.0462</b>
13	Erosion Control Seeding	--	0.10	0.10	--	--	--	--	0.0005
		--	0.03	0.03	--	--	--	--	0.0002
		--	<b>0.13</b>	<b>0.13</b>	--	--	--	--	<b>0.0007</b>
		<b>1.68</b>	<b>0.13</b>	<b>0.13</b>	--	--	--	--	<b>0.3828</b>
<b>15 - Floodway Control and Diversion Structures</b>									
14	Mobilization and Demobilization	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	<b>0.0014</b>
16	Construction Site Dewatering (Pumping)	0.17	0.17	0.17	0.17	0.17	--	--	0.0103
		0.02	0.02	0.02	0.02	0.02	--	--	0.0014
		<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	--	--	<b>0.0117</b>
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0018
		--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.0031</b>
18	Sheet Pile Wall	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.0005</b>
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	0.0031
		--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	0.0027
		--	--	--	--	--	--	--	0.0010
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0045
		--	--	--	--	--	--	0.0010	
		--	--	--	--	--	--	--	<b>0.0153</b>

**Table L1 -240. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	3	180	18	0.115874 0.064041 1.207340 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Headworks Structure Subtotal</b>													
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Plate Compactors n/a - onroad n/a - onroad	1 2 6	8 MHDT LDT2	70	2	140	10	0.064041 1.207340 0.448991	g/hp-hr g/hr g/hr
<b>Headworks Channel Transition Subtotal</b>													
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane Haul Truck Oversize Transport Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 1 4	300 HHDT LDT2	0.1	1	0.1	24	0.036712 0.959260 0.448991	g/hp-hr g/hr g/hr
<b>Hinged Bottom Gates Subtotal</b>													
<b>15 - Floodway Control and Diversion Structures Total</b>													
<b>08 - Roads, Railroads, and Bridges</b>													
23	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane 100 FT Auger Track-mounted Drill Rig Concrete Pump Boom Truck Mounted Concrete Mixer Truck 0.8 CY Backhoe Loader 24 TN Truck End Dump Pickup Truck Conventional	Cranes Bore/Drill Rigs Pumps n/a - onroad Tractors/Loaders/Backhoes Off-Highway Trucks n/a - onroad	1 1 1 3 1 2 8	300 221 84 MHDT 97 314 LDT2	180	1	180	4	0.036712 0.021737 0.115874 1.207340 0.059866 0.025177 0.448991	g/hp-hr g/hp-hr g/hp-hr g/hr g/hp-hr g/hp-hr g/hr
<b>Pedestrian Bridge Concrete Piles Subtotal</b>													
25	Pedestrian Bridge Concrete Abutments and	48	CY	Concrete Pump Boom Truck Mounted 2.5" Dia. Concrete Vibrator Concrete Mixer Truck Pickup Truck Conventional	Pumps Plate Compactors n/a - onroad n/a - onroad	1 1 2 7	84 8 MHDT LDT2	60	1	60	1	0.115874 0.064041 1.207340 0.448991	g/hp-hr g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>													
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane Flatbed Truck Pickup Truck Conventional	Cranes n/a - onroad n/a - onroad	1 2 5	450 MHDT LDT2	390	1	390	8	0.036712 1.207340 0.448991	g/hp-hr g/hr g/hr
<b>Pedestrian Bridge Span Installation Subtotal</b>													
<b>08 - Roads, Railroads, and Bridges Total</b>													
<b>19 - Buildings, Grounds, and Utilities</b>													
27	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	1.207340 0.032748 0.448991 0.000000	g/hr g/hp-hr g/hr g/hr
<b>Mobilization and Demobilization Subtotal</b>													

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
20	Headworks Structure	--	--	--	--	--	--	--	--	--	--	--	--	0.51	0.51	--	--	--	--	0.51	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.03	--	--	--	--	0.03	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.13	0.13	--	--	--	--	0.13	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.17	--	--	--	--	0.17	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	<b>0.84</b>	<b>0.84</b>	--	--	--	--	<b>0.84</b>	--	--
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	0.02	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09	0.09	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.10	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.20</b>	<b>0.20</b>	--	--	--	--	--
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	0.09	0.15	0.15	0.15	1.74	1.31	1.31	1.15	1.15	1.15	1.99	1.03	0.39	0.39	0.20	0.20	1.03	0.20	0.20
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	0.06	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	0.01	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	--	--	--	--	<b>0.09</b>	--
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.96</b>	--	--	--	--	--	--
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.28</b>	--	--	--	--	--	--
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.29	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	0.04	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.37</b>	<b>0.37</b>	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.09</b>	<b>0.96</b>	<b>0.28</b>	<b>0.37</b>	<b>0.37</b>	<b>0.09</b>	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	0.02	--	--	--	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		<b>0.09</b>	--	--	--	--	--	<b>0.09</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
20	Headworks Structure	--	--	--	--	--	--	--	0.0046
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0011
		--	--	--	--	--	--	--	0.0015
		--	--	--	--	--	--	<b>0.0075</b>	
21	Headworks Channel Transition	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0005
		--	--	--	--	--	--	<b>0.0010</b>	
22	Hinged Bottom Gates	--	0.19	0.19	0.19	0.19	--	--	0.0023
		--	0.02	0.02	0.02	0.02	--	--	0.0002
		--	0.03	0.03	0.03	0.03	--	--	0.0004
		--	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	--	--	<b>0.0029</b>
		<b>0.20</b>	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	<b>0.44</b>	<b>0.09</b>	--	<b>0.0436</b>
<b>08 - Roads, Railroads, and Bridges</b>									
23	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	<b>0.0001</b>
24	Pedestrian Bridge Concete Piles	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0006
		--	--	--	--	--	--	0.0001	
		--	--	--	--	--	--	<b>0.0019</b>	
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	<b>0.0001</b>	
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	0.0012
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	<b>0.0015</b>	
		--	--	--	--	--	--	<b>0.0036</b>	
<b>19 - Buildings, Grounds, and Utilities</b>									
27	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	<b>0.0001</b>	

**Table L1 -240. PM2.5 Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factor	Units
28	CMU Building and Earthwork Pad Constructi	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	0.140516	g/hp-hr
				Scraper	Scrapers	1	367					0.059479	g/hp-hr
				Motor Grader	Graders	1	187					0.052192	g/hp-hr
				Compactor	Rollers	1	80					0.075735	g/hp-hr
				4000 gallon Water Truck	n/a - onroad	1	MHDT					1.207340	g/hr
				10 TN Smooth Roller	Rollers	1	157					0.033583	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.448991	g/hr
				Concrete Pump Boom Truck Mounted	Pumps	1	84					0.115874	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.064041	g/hp-hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.032748	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	1	MHDT					1.207340	g/hr
<b>CMU Building and Earthwork Pad Construction Subtotal</b>													
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	0.115874	g/hp-hr
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8					0.064041	g/hp-hr
				Concrete Mixer Truck	n/a - onroad	2	MHDT					1.207340	g/hr
				Pickup Truck Conventional	n/a - onroad	7	LDT2					0.448991	g/hr
<b>Concrete Duct Bank Subtotal</b>													
<b>19 - Buildings, Grounds, and Utilities Total</b>													
<b>20 -Permanent Operating Equipment</b>													
30	Mobilization and Demobilization	-	-	Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	1.207340	g/hr
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100					0.032748	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	1	LDT2					0.448991	g/hr
				Temp. Mobile Office Building	n/a - onroad	1	n/a					0.000000	g/hr
<b>Mobilization and Demobilization Subtotal</b>													
31	Mechanical Hydraulic Cylinders & Housing	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.032748	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.448991	g/hr
<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>													
32	CMU Building Mechanical Equipment	-	-	Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	0.032748	g/hp-hr
				Pickup Truck Conventional	n/a - onroad	3	LDT2					0.448991	g/hr
<b>CMU Building Mechanical Equipment Subtotal</b>													
33	Electrical Control Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.448991	g/hr
<b>Electrical Control Equipment CMU Building Subtotal</b>													
34	Electrical Power Equipment CMU Building	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	0.448991	g/hr
<b>Electrical Power Equipment CMU Building Subtotal</b>													
35	Communication Equipment	-	-	Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	0.448991	g/hr
<b>Communication Equipment Subtotal</b>													
<b>20 -Permanent Operating Equipment Total</b>													
<b>GRAND TOTAL</b>													



Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity	Maximum Daily Emissions, lbs/day																				
		15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep
28	CMU Building and Earthwork Pad Constructi	--	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.38	0.38	0.38	0.38	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.11	0.11	0.11	0.11	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.09	0.09	0.09	0.09	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.17	0.17	0.17	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.01	0.01	0.01	0.01	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.06	0.06	0.06	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	0.02	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	1.50	1.50	1.50	1.50	1.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Concrete Duct Bank	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.09	1.50	1.50	1.50	1.78	1.50	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09
<b>GRAND TOTAL</b>		0.30	3.04	3.12	2.74	9.14	8.87	12.72	12.20	12.20	12.04	12.04	13.14	13.98	14.70	3.84	4.71	3.83	3.93	5.60	3.73	1.96

Table L1 -240. PM2.5 Exhaust Emissions fr

#	Activity								Annual Emissions , tpy
		9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	0.0061
		--	--	--	--	--	--	--	0.0058
		--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	0.0016
		--	--	--	--	--	--	--	0.0003
		--	--	--	--	--	--	--	0.0014
		--	--	--	--	--	--	--	0.0008
		--	--	--	--	--	--	--	0.0026
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	0.0009
		--	--	--	--	--	--	0.0003	
								<b>0.0225</b>	
29	Concrete Duct Bank	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	<b>0.0003</b>	
		--	--	--	--	--	--	<b>0.0229</b>	
<b>20 -Permanent Operating Equipment</b>									
30	Mobilization and Demobilization	--	--	--	--	--	0.02	--	0.0000
		--	--	--	--	--	0.06	--	0.0001
		--	--	--	--	--	0.01	--	0.0000
		--	--	--	--	--	--	--	--
		--	--	--	--	--	<b>0.09</b>	--	<b>0.0001</b>
31	Mechanical Hydraulic Cylinders & Housing	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
32	CMU Building Mechanical Equipment	0.06	0.06	0.06	0.06	0.06	--	--	0.0009
		0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	--	--	<b>0.0012</b>
33	Electrical Control Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
34	Electrical Power Equipment CMU Building	0.02	0.02	0.02	0.02	0.02	--	--	0.0004
		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0004</b>
35	Communication Equipment	--	--	--	0.02	0.02	--	--	0.0001
		--	--	--	<b>0.02</b>	<b>0.02</b>	--	--	<b>0.0001</b>
		<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.23</b>	<b>0.23</b>	<b>0.09</b>	--	<b>0.0034</b>
<b>GRAND TOTAL</b>		<b>2.09</b>	<b>0.78</b>	<b>0.78</b>	<b>0.67</b>	<b>0.67</b>	<b>0.46</b>	<b>0.09</b>	<b>0.4595</b>

**Table L1 -241. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated**

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr
												CO2	CH4	N2O	CO2e	Units	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	24743.4 341.554 8716.75 0	g/hr g/hp-hr g/hr g/hr	0.40 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>			
2	Fremont Weir Demo	470	CY	3.5 CY Hydraulic Excavator 3.5 CY Front End Loader Wheel 0.8 CY Loader/Backhoe, Wheel 4000 gallon Water Truck 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Loaders Tractors/Loaders/Backhoes n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 1 6	359 164 97 MHDT HHDT LDT2	40	1	40	12	323.936 306.887 312.57 24743.4 36496.5 8716.75	0.01421 0.01857 0.01854 0 0 0	0 0 0 0 0 0	324.292 307.351 313.034 24743.4 36496.5 8716.75	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	11.18 4.84 2.91 2.38 3.50 5.02
												<b>Fremont Weir Demo Subtotal</b>		<b>29.83</b>			
3	Levee O&M Road Regrading (6" AB)	89,000	SF	12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Graders n/a - onroad n/a - onroad n/a - onroad	1 1 1 5	187 MHDT LDT2 HHDT	39,400	1	39,400	3	346.669 24743.4 8716.75 36496.5	0.01722 0 0 0	0 0 0 0	347.099 24743.4 8716.75 36496.5	g/hp-hr g/hr g/hr g/hr	1.56 0.59 0.21 4.38
												<b>Levee O&amp;M Road Regrading (6" AB) Subtotal</b>		<b>6.74</b>			
4	Temporary Electrical Power	100	LF	Flatbed Truck Pickup Truck Conventional	n/a - onroad n/a - onroad	1 2	MHDT LDT2	1,500	1	1,500	1	24743.4 8716.75	0 0	0 0	24743.4 8716.75	g/hr g/hr	0.20 0.14
												<b>Temporary Electrical Power Subtotal</b>		<b>0.34</b>			
												<b>02 - Relocations Total</b>		<b>37.99</b>			
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	-	-	Flatbed Truck Extended Boom Pallet Loader Pickup Truck Conventional Temp. Mobile Office Building	n/a - onroad Rough Terrain Forklifts n/a - onroad n/a - onroad	1 1 1 1	MHDT 100 LDT2 n/a	-	1	1	2	24743.4 340.986 8716.75 0	0 0.02272 0 0	0 0 0 0	24743.4 341.554 8716.75 0	g/hr g/hp-hr g/hr g/hr	0.40 0.55 0.14 0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>			
6	Clearing and Grubbing	88	ACR	1.5 CY Front End Loader Crawler Trailer Mounted Brush Chipper Chainsaw 4000 gallon Water Truck Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Crawler Tractors Shredders Chainsaws n/a - onroad n/a - onroad n/a - onroad	1 1 1 1 6 1	110 140 8 MHDT LDT2 HHDT	2	2	4	23	363.718 227.324 395.091 24743.4 8716.75 36496.5	0.03898 0.0068 0 0 0 0	0 0 0 0 0 0	364.692 227.494 395.091 24743.4 8716.75 36496.5	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr g/hr	14.76 11.72 1.16 9.11 19.25 13.43
												<b>Clearing and Grubbing Subtotal</b>		<b>69.43</b>			
7	Excavation (Wet Conditions)	161,750	CY	4.5 CY Hydraulic Excavator 300 HP Dozer 3.5 CY Front End Loader Wheel 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Rubber Tired Dozers Rubber Tired Loaders n/a - onroad n/a - onroad	1 2 2 9 7	429 300 164 HHDT LDT2	1,800	2	3,600	45	323.936 335.303 306.887 36496.5 8716.75	0.01421 0.02493 0.01857 0 0	0 0 0 0 0	324.292 335.926 307.351 36496.5 8716.75	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	100.17 145.12 72.58 236.50 43.93
												<b>Excavation (Wet Conditions) Subtotal</b>		<b>598.30</b>			
8	Excavation/Grading (Dry Conditions)	581,540	CY	300 HP Dozer 21 CY Scrapers 12' Blade Grader 4000 gallon Water Truck Pickup Truck Conventional	Rubber Tired Dozers Scrapers Graders n/a - onroad n/a - onroad	1 4 1 1 7	300 407 187 MHDT LDT2	3,500	3	10,500	56	335.303 409.183 346.669 24743.4 8716.75	0.02493 0.02415 0.01722 0 0	0 0 0 0 0	335.926 409.787 347.099 24743.4 8716.75	g/hp-hr g/hp-hr g/hp-hr g/hr g/hr	135.45 896.63 87.24 33.26 82.01
												<b>Excavation/Grading (Dry Conditions) Subtotal</b>		<b>1,234.57</b>			
9	Earthen Backfill	27,510	CY	300 HP Dozer 4000 gallon Water Truck 10 TN Smooth Roller Pickup Truck Conventional	Rubber Tired Dozers n/a - onroad Rollers n/a - onroad	1 1 1 3	300 MHDT 157 LDT2	1,000	1	1,000	28	335.303 24743.4 318.253 8716.75	0.02493 0 0.01911 0	0 0 0 0	335.926 24743.4 318.731 8716.75	g/hp-hr g/hr g/hp-hr g/hr	22.57 5.54 11.21 5.86
												<b>Earthen Backfill Subtotal</b>		<b>45.18</b>			
10	Riprap - Class 2	98,070	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	2	2,000	50	323.936 363.718 36496.5 8716.75	0.01421 0.02114 0 0	0 0 0 0	324.292 364.246 36496.5 8716.75	g/hp-hr g/hp-hr g/hr g/hr	133.35 87.42 671.54 34.87
												<b>Riprap - Class 2 Subtotal</b>		<b>927.17</b>			
11	Riprap - Class 3	3,600	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler 16 CY 3 Axle Dump Truck Pickup Truck Conventional	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 23 5	257 300 HHDT LDT2	1,000	1	1,000	4	323.936 363.718 36496.5 8716.75	0.01421 0.02114 0 0	0 0 0 0	324.292 364.246 36496.5 8716.75	g/hp-hr g/hp-hr g/hr g/hr	5.33 3.50 26.86 1.39
												<b>Riprap - Class 3 Subtotal</b>		<b>37.09</b>			
12	RSP Bedding Material	109,330	TN	2.5 CY Hydraulic Excavator 300 HP Dozer Crawler Pickup Truck Conventional 16 CY 3 Axle Dump Truck	Excavators Crawler Tractors n/a - onroad n/a - onroad	2 1 5 23	257 300 LDT2 HHDT	1,000	2	2,000	55	323.936 363.718 8716.75 36496.5	0.01421 0.02114 0 0	0 0 0 0	324.292 364.246 8716.75 36496.5	g/hp-hr g/hp-hr g/hr g/hr	146.68 96.16 38.35 738.69
												<b>RSP Bedding Material Subtotal</b>		<b>1,019.89</b>			

Table L1 -241. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr		
												CO2	CH4	N2O	CO2e	Units			
13	Erosion Control Seeding	18	ACR	0.8 CY Front End Loader Wheel	Tractors/Loaders/Backhoes	1	97	2	1	2	10	312.57	0.01854	0	313.034	g/hp-hr	2.43		
				Pickup Truck Conventional	n/a - onroad	4	LDT2							8716.75	0	0	8716.75	g/hr	2.79
												<b>Erosion Control Seeding Subtotal</b>		<b>5.22</b>					
												<b>09 - Channels and Canals Total</b>		<b>3,937.93</b>					
<b>15 - Floodway Control and Diversion Structures</b>																			
14	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							340.986	0.02272	0	341.554	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2							8716.75	0	0	8716.75	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>					
15	Construction Site Dewatering (Temporary Cofferdam)	21,000	SF	Flatbed Truck	n/a - onroad	1	MHDT	1,200	1	1,200	18	24743.4	0	0	24743.4	g/hr	3.56		
				75 TN Crane Crawler Pile Hammer	Bore/Drill Rigs	1	221							426.232	0.00931	0	426.465	g/hp-hr	13.57
				Pickup Truck Conventional	n/a - onroad	6	LDT2							8716.75	0	0	8716.75	g/hr	7.53
												<b>Construction Site Dewatering (Temporary Cofferdam) Subtotal</b>		<b>24.67</b>					
16	Construction Site Dewatering (Pumping)			6" Dia. Pump Engine Drive	Pumps	1	84	-	1	1	120	420.549	0.02382	0	421.145	g/hp-hr	33.96		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							8716.75	0	0	8716.75	g/hr	25.10
												<b>Construction Site Dewatering (Pumping) Subtotal</b>		<b>59.07</b>					
17	Excavation (Wet Conditions)	6,460	CY	4.5 CY Hydraulic Excavator	Excavators	1	429	1,800	1	1,800	4	323.936	0.01421	0	324.292	g/hp-hr	4.45		
				300 HP Dozer	Rubber Tired Dozers	2	300							335.303	0.02493	0	335.926	g/hp-hr	6.45
				3.5 CY Front End Loader Wheel	Rubber Tired Loaders	2	164							306.887	0.01857	0	307.351	g/hp-hr	3.23
				16 CY 3 Axle Dump Truck	n/a - onroad	9	HHDT							36496.5	0	0	36496.5	g/hr	10.51
				Pickup Truck Conventional	n/a - onroad	7	LDT2							8716.75	0	0	8716.75	g/hr	1.95
																<b>Excavation (Wet Conditions) Subtotal</b>		<b>26.59</b>	
18	Sheet Pile Wall	7,940	SF	Flatbed Truck	n/a - onroad	1	MHDT	1,200	1	1,200	7	24743.4	0	0	24743.4	g/hr	1.39		
				75 TN Crane Crawler Pile Hammer	Bore/Drill Rigs	1	221							426.232	0.00931	0	426.465	g/hp-hr	5.28
				Pickup Truck Conventional	n/a - onroad	6	LDT2							8716.75	0	0	8716.75	g/hr	2.93
												<b>Sheet Pile Wall Subtotal</b>		<b>9.59</b>					
19	Headworks Structure Concrete Piles	5,600	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	32	244.373	0.01266	0	244.69	g/hp-hr	18.79		
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221							426.232	0.00931	0	426.465	g/hp-hr	24.13
				Concrete Pump Boom Truck Mounted	Pumps	1	84							420.549	0.02382	0	421.145	g/hp-hr	9.06
				Concrete Mixer Truck	n/a - onroad	3	MHDT							24743.4	0	0	24743.4	g/hr	19.00
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97							312.57	0.01854	0	313.034	g/hp-hr	7.77
				24 TN Truck End Dump	Off-Highway Trucks	2	314							323.936	0.01518	0	324.316	g/hp-hr	52.14
				Pickup Truck Conventional	n/a - onroad	8	LDT2							8716.75	0	0	8716.75	g/hr	17.85
																<b>Headworks Structure Concrete Piles Subtotal</b>		<b>148.74</b>	
20	Headworks Structure	3,080	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	3	180	18	420.549	0.02382	0	421.145	g/hp-hr	15.28		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							244.373	0.02567	0	245.015	g/hp-hr	0.85
				Concrete Mixer Truck	n/a - onroad	2	MHDT							24743.4	0	0	24743.4	g/hr	21.38
				Pickup Truck Conventional	n/a - onroad	7	LDT2							8716.75	0	0	8716.75	g/hr	26.36
												<b>Headworks Structure Subtotal</b>		<b>63.87</b>					
21	Headworks Channel Transition	1,370	CY	2.5" Dia. Concrete Vibrator	Plate Compactors	1	8	70	2	140	10	244.373	0.02567	0	245.015	g/hp-hr	0.31		
				Concrete Mixer Truck	n/a - onroad	2	MHDT							24743.4	0	0	24743.4	g/hr	7.92
				Pickup Truck Conventional	n/a - onroad	6	LDT2							8716.75	0	0	8716.75	g/hr	8.37
												<b>Headworks Channel Transition Subtotal</b>		<b>16.60</b>					
22	Hinged Bottom Gates	3	EA	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	0.1	1	0.1	24	244.373	0.01266	0	244.69	g/hp-hr	14.09		
				Haul Truck Oversize Transport	n/a - onroad	1	HHDT							36496.5	0	0	36496.5	g/hr	7.01
				Pickup Truck Conventional	n/a - onroad	4	LDT2							8716.75	0	0	8716.75	g/hr	6.69
																<b>Hinged Bottom Gates Subtotal</b>		<b>27.80</b>	
												<b>15 - Floodway Control and Diversion Structures Total</b>		<b>378.00</b>					
<b>08 - Roads, Railroads, and Bridges</b>																			
23	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							340.986	0.02272	0	341.554	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2							8716.75	0	0	8716.75	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>		<b>1.08</b>					
24	Pedestrian Bridge Concrete Piles	640	LF	40 TN Truck-mounted Hydraulic Crane	Cranes	1	300	180	1	180	4	244.373	0.01266	0	244.69	g/hp-hr	2.35		
				100 FT Auger Track-mounted Drill Rig	Bore/Drill Rigs	1	221							426.232	0.00931	0	426.465	g/hp-hr	3.02
				Concrete Pump Boom Truck Mounted	Pumps	1	84							420.549	0.02382	0	421.145	g/hp-hr	1.13
				Concrete Mixer Truck	n/a - onroad	3	MHDT							24743.4	0	0	24743.4	g/hr	2.38
				0.8 CY Backhoe Loader	Tractors/Loaders/Backhoes	1	97							312.57	0.01854	0	313.034	g/hp-hr	0.97
				24 TN Truck End Dump	Off-Highway Trucks	2	314							323.936	0.01518	0	324.316	g/hp-hr	6.52
				Pickup Truck Conventional	n/a - onroad	8	LDT2							8716.75	0	0	8716.75	g/hr	2.23
																<b>Pedestrian Bridge Concrete Piles Subtotal</b>		<b>18.59</b>	

Table L1 -241. GHG Exhaust Emissions from Offroad Construction Equipment (Alternative 4) - Unmitigated

#	Activity	Quantity	Unit	Crew / Equipment	OFFROAD Name	Equipment Quantity per Crew	Size (hp)	Crew Daily Output	No. of Crews	Total Daily Output	Estimated Duration, Days	Emission Factors					Annual Emissions, MTCO2e/yr		
												CO2	CH4	N2O	CO2e	Units			
25	Pedestrian Bridge Concrete Abutments and Wingwalls	48	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	1	420.549	0.02382	0	421.145	g/hp-hr	0.28		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							244.373	0.02567	0	245.015	g/hp-hr	0.02
				Concrete Mixer Truck	n/a - onroad	2	MHDT							24743.4	0	0	24743.4	g/hr	0.40
				Pickup Truck Conventional	n/a - onroad	7	LDT2							8716.75	0	0	8716.75	g/hr	0.49
												<b>Pedestrian Bridge Concrete Abutments and Wingwalls Subtotal</b>			<b>1.18</b>				
26	Pedestrian Bridge Span Installation	2,930	SF	90 TN Truck-mounted Hydraulic Crane	Cranes	1	450	390	1	390	8	244.373	0.01266	0	244.69	g/hp-hr	7.05		
				Flatbed Truck	n/a - onroad	2	MHDT						24743.4	0	0	24743.4	g/hr	3.17	
				Pickup Truck Conventional	n/a - onroad	5	LDT2							8716.75	0	0	8716.75	g/hr	2.79
												<b>Pedestrian Bridge Span Installation Subtotal</b>			<b>13.00</b>				
												<b>08 - Roads, Railroads, and Bridges Total</b>			<b>33.86</b>				
<b>19 - Buildings, Grounds, and Utilities</b>																			
27	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							340.986	0.02272	0	341.554	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2							8716.75	0	0	8716.75	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>				
28	CMU Building and Earthwork Pad Construction	1	EA	165 HP Dozer	Rubber Tired Dozers	1	165	-	1	1	30	335.303	0.03353	0	336.141	g/hp-hr	13.31		
				Scraper	Scrapers	1	367							409.183	0.02415	0	409.787	g/hp-hr	36.09
				Motor Grader	Graders	1	187							346.669	0.01722	0	347.099	g/hp-hr	15.58
				Compactor	Rollers	1	80							318.253	0.02578	0	318.898	g/hp-hr	6.12
				4000 gallon Water Truck	n/a - onroad	1	MHDT							24743.4	0	0	24743.4	g/hr	5.94
				10 TN Smooth Roller	Rollers	1	157							318.253	0.01911	0	318.731	g/hp-hr	12.01
				Pickup Truck Conventional	n/a - onroad	7	LDT2							8716.75	0	0	8716.75	g/hr	14.64
				Concrete Pump Boom Truck Mounted	Pumps	1	84							420.549	0.02382	0	421.145	g/hp-hr	8.49
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							244.373	0.02567	0	245.015	g/hp-hr	0.47
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							340.986	0.02272	0	341.554	g/hp-hr	8.20
				Concrete Mixer Truck	n/a - onroad	1	MHDT							24743.4	0	0	24743.4	g/hr	5.94
																<b>CMU Building and Earthwork Pad Construction Subtotal</b>			<b>126.79</b>
29	Concrete Duct Bank	120	CY	Concrete Pump Boom Truck Mounted	Pumps	1	84	60	1	60	2	420.549	0.02382	0	421.145	g/hp-hr	0.57		
				2.5" Dia. Concrete Vibrator	Plate Compactors	1	8							244.373	0.02567	0	245.015	g/hp-hr	0.03
				Concrete Mixer Truck	n/a - onroad	2	MHDT							24743.4	0	0	24743.4	g/hr	0.79
				Pickup Truck Conventional	n/a - onroad	7	LDT2							8716.75	0	0	8716.75	g/hr	0.98
												<b>Concrete Duct Bank Subtotal</b>			<b>2.37</b>				
												<b>19 - Buildings, Grounds, and Utilities Total</b>			<b>130.24</b>				
<b>20 -Permanent Operating Equipment</b>																			
30	Mobilization and Demobilization			Flatbed Truck	n/a - onroad	1	MHDT	-	1	1	2	24743.4	0	0	24743.4	g/hr	0.40		
				Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100							340.986	0.02272	0	341.554	g/hp-hr	0.55
				Pickup Truck Conventional	n/a - onroad	1	LDT2							8716.75	0	0	8716.75	g/hr	0.14
				Temp. Mobile Office Building	n/a - onroad	1	n/a							0	0	0	0	g/hr	0.00
												<b>Mobilization and Demobilization Subtotal</b>			<b>1.08</b>				
31	Mechanical Hydraulic Cylinders & Housing			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.986	0.02272	0	341.554	g/hp-hr	8.20		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							8716.75	0	0	8716.75	g/hr	6.28
												<b>Mechanical Hydraulic Cylinders &amp; Housing Subtotal</b>			<b>14.47</b>				
32	CMU Building Mechanical Equipment			Extended Boom Pallet Loader	Rough Terrain Forklifts	1	100	-	1	1	30	340.986	0.02272	0	341.554	g/hp-hr	8.20		
				Pickup Truck Conventional	n/a - onroad	3	LDT2							8716.75	0	0	8716.75	g/hr	6.28
												<b>CMU Building Mechanical Equipment Subtotal</b>			<b>14.47</b>				
33	Electrical Control Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.75	0	0	8716.75	g/hr	6.28		
												<b>Electrical Control Equipment CMU Building Subtotal</b>			<b>6.28</b>				
34	Electrical Power Equipment CMU Building			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	30	8716.75	0	0	8716.75	g/hr	6.28		
												<b>Electrical Power Equipment CMU Building Subtotal</b>			<b>6.28</b>				
35	Communication Equipment			Pickup Truck Conventional	n/a - onroad	3	LDT2	-	1	1	12	8716.75	0	0	8716.75	g/hr	2.51		
												<b>Communication Equipment Subtotal</b>			<b>2.51</b>				
												<b>20 -Permanent Operating Equipment Total</b>			<b>45.09</b>				
<b>GRAND TOTAL</b>															<b>4,563.12</b>				

## Construction Worker Commuting Exhaust Emissions Summary

**Table L1-242. Maximum Daily Construction Worker Commuting Emissions (Alternative 4)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.02	0.10	1.03	0.00	0.46	0.12
09 - Channels and Canals	0.36	1.80	18.06	0.07	8.07	2.17
15 - Floodway Control and Diversion Structures	0.10	0.51	5.13	0.02	2.29	0.62
08 - Roads, Railroads, and Bridges	0.03	0.13	1.33	0.01	0.60	0.16
19 - Buildings, Grounds, and Utilities	0.04	0.19	1.95	0.01	0.87	0.23
20 -Permanent Operating Equipment	0.04	0.20	2.05	0.01	0.92	0.25
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>0.42</b>	<b>2.10</b>	<b>21.13</b>	<b>0.08</b>	<b>9.44</b>	<b>2.54</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-243. Annual Construction Worker Commuting Emissions (Alternative 4)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.00	0.01	0.00	0.00	0.00	2.84
09 - Channels and Canals	0.01	0.05	0.50	0.00	0.22	0.06	177.30
15 - Floodway Control and Diversion Structures	0.00	0.01	0.10	0.00	0.04	0.01	34.73
08 - Roads, Railroads, and Bridges	0.00	0.00	0.01	0.00	0.00	0.00	2.30
19 - Buildings, Grounds, and Utilities	0.00	0.00	0.02	0.00	0.01	0.00	6.07
20 -Permanent Operating Equipment	0.00	0.00	0.03	0.00	0.01	0.00	9.62
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.01</b>	<b>0.07</b>	<b>0.66</b>	<b>0.00</b>	<b>0.30</b>	<b>0.08</b>	<b>232.85</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.



Table L1-244. ROG Emissions from C

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0102	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0001
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0164	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0164</b>	<b>0.0102</b>	<b>0.0002</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.1086	--	--	--	--	--	--	--	--	0.0001
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0004
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0018
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0014
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0001
10	Riprap - Class 2	0.1148	0.1148	0.1148	--	--	--	--	--	--	0.0029
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0001
12	RSP Bedding Material	0.1148	--	--	--	--	--	--	--	--	0.0032
13	Erosion Control Seeding	--	--	--	0.0082	0.0082	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.3381</b>	<b>0.1148</b>	<b>0.1148</b>	<b>0.0082</b>	<b>0.0082</b>	--	--	--	--	<b>0.0100</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.1025	--	0.0001
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0001
16	Construction Site Dewatering (Pumping)	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	0.0061	--	--	0.0004
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0001
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0001
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0004
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0005
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0002
22	Hinged Bottom Gates	--	--	--	0.0123	0.0123	0.0123	0.0123	--	--	0.0001
	<b>15 - Floodway Control and Div</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0061</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.0184</b>	<b>0.1025</b>	--	<b>0.0020</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0102	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0001
	<b>08 - Roads, Railro</b>	<b>0.0102</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0003
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0003</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0041	--	--	--	--	--	0.0041	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
32	CMU Building Mechanical Equipment	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
33	Electrical Control Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
34	Electrical Power Equipment CMU Building	--	--	0.0082	0.0082	0.0082	0.0082	0.0082	--	--	0.0001
35	Communication Equipment	--	--	--	--	0.0082	0.0082	--	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0041</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0410</b>	<b>0.0410</b>	<b>0.0041</b>	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		<b>0.3545</b>	<b>0.1250</b>	<b>0.1537</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.0594</b>	<b>0.1229</b>	<b>0.0102</b>	<b>0.0132</b>





Table L1-245. NOx Emissions from Cc

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0510	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0816	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0816</b>	<b>0.0510</b>	<b>0.0008</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.5407	--	--	--	--	--	--	--	--	0.0005
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0021
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0092
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0069
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0006
10	Riprap - Class 2	0.5713	0.5713	0.5713	--	--	--	--	--	--	0.0143
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0006
12	RSP Bedding Material	0.5713	--	--	--	--	--	--	--	--	0.0157
13	Erosion Control Seeding	--	--	--	0.0408	0.0408	--	--	--	--	0.0002
	<b>09 - Cha</b>	<b>1.6832</b>	<b>0.5713</b>	<b>0.5713</b>	<b>0.0408</b>	<b>0.0408</b>	--	--	--	--	<b>0.0500</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.5101	--	0.0005
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0006
16	Construction Site Dewatering (Pumping)	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306	--	--	0.0018
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0002
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0021
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0025
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0008
22	Hinged Bottom Gates	--	--	--	0.0612	0.0612	0.0612	0.0612	--	--	0.0007
	<b>15 - Floodway Control and Div</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0306</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.0918</b>	<b>0.5101</b>	--	<b>0.0098</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0510	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0003
	<b>08 - Roads, Railro</b>	<b>0.0510</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0015
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0001
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0017</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0204	--	--	--	--	--	0.0204	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
32	CMU Building Mechanical Equipment	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
33	Electrical Control Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
34	Electrical Power Equipment CMU Building	--	--	0.0408	0.0408	0.0408	0.0408	0.0408	--	--	0.0006
35	Communication Equipment	--	--	--	--	--	0.0408	0.0408	--	--	0.0002
	<b>20 -Permanent Ope</b>	--	<b>0.0204</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.1632</b>	<b>0.2040</b>	<b>0.2040</b>	<b>0.0204</b>	--	<b>0.0027</b>
<b>GRAND TOTAL</b>		<b>1.7648</b>	<b>0.6223</b>	<b>0.7651</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.2958</b>	<b>0.6121</b>	<b>0.0510</b>	<b>0.0657</b>

Table L1-246. CO Emissions from Construction Worker Commuting (Alternative 4)

			Maximum Daily Table K-246. Emissions, lbs/day																				
#	Activity	Estimated Duration, Days	Emission Factor (g/mi)	15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	2	7.76E-01	0.5129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Concrete Demo	12	7.76E-01	--	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	3	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	1	7.76E-01	0.3078	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>				<b>0.8207</b>	<b>1.0259</b>	<b>1.0259</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	2	7.76E-01	5.4371	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	23	7.76E-01	--	1.8465	1.8465	1.8465	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	45	7.76E-01	--	--	--	--	--	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	4.1034	--	--	--	--	--	
8	Excavation/Grading (Dry Conditions)	56	7.76E-01	--	--	--	--	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	2.4621	--	--	--	--	--	
9	Earthen Backfill	28	7.76E-01	--	--	--	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	--	--	--	--	--	--	
10	Riprap - Class 2	50	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	
11	Riprap - Class 3	4	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8724	
12	RSP Bedding Material	55	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	5.7448	
13	Erosion Control Seeding	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>				<b>5.4371</b>	<b>1.8465</b>	<b>1.8465</b>	<b>1.8465</b>	<b>2.4621</b>	<b>2.4621</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>6.9758</b>	<b>12.3103</b>	<b>12.3103</b>	<b>18.0551</b>	<b>11.4896</b>	<b>11.4896</b>	<b>11.4896</b>	<b>11.4896</b>	<b>14.3620</b>	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	2	7.76E-01	--	--	5.1293	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co)	18	7.76E-01	--	--	--	0.7181	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	120	7.76E-01	--	--	--	--	--	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	
17	Excavation (Wet Conditions)	4	7.76E-01	--	--	--	--	--	2.0517	--	--	--	--	--	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7	7.76E-01	--	--	--	--	--	--	0.7181	0.7181	--	--	--	--	--	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	32	7.76E-01	--	--	--	--	--	--	1.3336	1.3336	1.3336	1.3336	1.3336	1.3336	1.3336	--	--	--	--	--	--	
20	Headworks Structure	18	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	2.7698	2.7698	--	--	--	--	2.7698	
21	Headworks Channel Transition	10	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6414	1.6414	--	--	--	--	
22	Hinged Bottom Gates	24	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>				--	--	<b>5.1293</b>	<b>0.7181</b>	<b>0.7181</b>	<b>0.7181</b>	<b>2.3595</b>	<b>2.3595</b>	<b>2.3595</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>4.4112</b>	<b>3.0776</b>	<b>1.9491</b>	<b>1.9491</b>	<b>0.3078</b>	<b>0.3078</b>	<b>3.0776</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5129	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	4	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3336	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	1	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9233	--	--	--	
26	Pedestrian Bridge Span Installation	8	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7181	0.7181	
<b>08 - Roads, Railroads, and Bridges Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.5129</b>	<b>1.3336</b>	<b>0.9233</b>	<b>0.7181</b>	<b>0.7181</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	2	7.76E-01	0.9233	--	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	
28	CMU Building and Earthwork Pad Constructi	30	7.76E-01	--	1.0259	1.0259	1.0259	1.0259	1.0259	--	--	--	--	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Bank	2	7.76E-01	--	--	--	--	0.9233	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>0.9233</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.0259</b>	<b>1.9491</b>	<b>1.0259</b>	<b>0.9233</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	2	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	30	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	12	7.76E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>7.1810</b>	<b>3.8983</b>	<b>9.0276</b>	<b>3.5905</b>	<b>5.1293</b>	<b>4.2060</b>	<b>10.2586</b>	<b>9.3353</b>	<b>9.3353</b>	<b>8.6172</b>	<b>8.6172</b>	<b>13.9517</b>	<b>16.7215</b>	<b>21.1327</b>	<b>13.9517</b>	<b>14.7724</b>	<b>12.7206</b>	<b>12.5155</b>	<b>18.1577</b>	

Table L1-246. CO Emissions from Cor

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.5129	0.0005
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0062
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.8207	--	0.0012
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0002
		--	--	--	--	--	--	--	<b>0.8207</b>	<b>0.5129</b>	<b>0.0081</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	5.4371	--	--	--	--	--	--	--	--	0.0054
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0212
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0923
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0689
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0057
10	Riprap - Class 2	5.7448	5.7448	5.7448	--	--	--	--	--	--	0.1436
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0057
12	RSP Bedding Material	5.7448	--	--	--	--	--	--	--	--	0.1580
13	Erosion Control Seeding	--	--	--	0.4103	0.4103	--	--	--	--	0.0021
	<b>09 - Cha</b>	<b>16.9267</b>	<b>5.7448</b>	<b>5.7448</b>	<b>0.4103</b>	<b>0.4103</b>	--	--	--	--	<b>0.5031</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	5.1293	--	0.0051
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0065
16	Construction Site Dewatering (Pumping)	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	0.3078	--	--	0.0185
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0041
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0025
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0213
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0249
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0082
22	Hinged Bottom Gates	--	--	--	0.6155	0.6155	0.6155	0.6155	--	--	0.0074
	<b>15 - Floodway Control and Div</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.3078</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>0.9233</b>	<b>5.1293</b>	--	<b>0.0985</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.5129	--	--	--	--	--	--	--	--	0.0005
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0027
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0005
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0029
	<b>08 - Roads, Railro</b>	<b>0.5129</b>	--	--	--	--	--	--	--	--	<b>0.0065</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0009
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0154
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0009
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0172</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.2052	--	--	--	--	--	0.2052	--	0.0002
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
32	CMU Building Mechanical Equipment	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
33	Electrical Control Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
34	Electrical Power Equipment CMU Building	--	--	0.4103	0.4103	0.4103	0.4103	0.4103	--	--	0.0062
35	Communication Equipment	--	--	--	--	0.4103	0.4103	--	--	--	0.0025
	<b>20 -Permanent Ope</b>	--	<b>0.2052</b>	<b>1.6414</b>	<b>1.6414</b>	<b>1.6414</b>	<b>2.0517</b>	<b>2.0517</b>	<b>0.2052</b>	--	<b>0.0273</b>
<b>GRAND TOTAL</b>		<b>17.7474</b>	<b>6.2577</b>	<b>7.6939</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>2.9750</b>	<b>6.1552</b>	<b>0.5129</b>	<b>0.6607</b>



Table L1-247. SOx Emissions from Cc

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0020	0.0000
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0032	--	0.0000
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0032</b>	<b>0.0020</b>	<b>0.0000</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.0212	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0001
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0004
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0003
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0000
10	Riprap - Class 2	0.0224	0.0224	0.0224	--	--	--	--	--	--	0.0006
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0000
12	RSP Bedding Material	0.0224	--	--	--	--	--	--	--	--	0.0006
13	Erosion Control Seeding	--	--	--	0.0016	0.0016	--	--	--	--	0.0000
	<b>09 - Cha</b>	<b>0.0659</b>	<b>0.0224</b>	<b>0.0224</b>	<b>0.0016</b>	<b>0.0016</b>	--	--	--	--	<b>0.0020</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.0200	--	0.0000
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0000
16	Construction Site Dewatering (Pumping)	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	--	--	0.0001
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0000
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0000
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0001
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0001
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0000
22	Hinged Bottom Gates	--	--	--	0.0024	0.0024	0.0024	0.0024	--	--	0.0000
	<b>15 - Floodway Control and Div</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0012</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0036</b>	<b>0.0200</b>	--	<b>0.0004</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0020	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0000
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0000
	<b>08 - Roads, Railro</b>	<b>0.0020</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0001
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0000
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0008	--	--	--	--	--	0.0008	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
32	CMU Building Mechanical Equipment	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
33	Electrical Control Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
34	Electrical Power Equipment CMU Building	--	--	0.0016	0.0016	0.0016	0.0016	0.0016	--	--	0.0000
35	Communication Equipment	--	--	--	--	--	0.0016	0.0016	--	--	0.0000
	<b>20 -Permanent Ope</b>	--	<b>0.0008</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0064</b>	<b>0.0080</b>	<b>0.0080</b>	<b>0.0008</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>0.0691</b>	<b>0.0244</b>	<b>0.0300</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0116</b>	<b>0.0240</b>	<b>0.0020</b>	<b>0.0026</b>



Table L1-248. PM10 Emissions from C

#	Activity										Annual Emissions , tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.2292	0.0002
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0028
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.3667	--	0.0006
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	<b>0.3667</b>	<b>0.2292</b>	<b>0.0036</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	2.4292	--	--	--	--	--	--	--	--	0.0024
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0095
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0413
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0308
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0026
10	Riprap - Class 2	2.5667	2.5667	2.5667	--	--	--	--	--	--	0.0642
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0026
12	RSP Bedding Material	2.5667	--	--	--	--	--	--	--	--	0.0706
13	Erosion Control Seeding	--	--	--	0.1833	0.1833	--	--	--	--	0.0009
<b>09 - Cha</b>		<b>7.5626</b>	<b>2.5667</b>	<b>2.5667</b>	<b>0.1833</b>	<b>0.1833</b>	--	--	--	--	<b>0.2248</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	2.2917	--	0.0023
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0029
16	Construction Site Dewatering (Pumping)	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	0.1375	--	--	0.0083
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0018
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0011
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0095
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0111
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0037
22	Hinged Bottom Gates	--	--	--	0.2750	0.2750	0.2750	0.2750	--	--	0.0033
<b>15 - Floodway Control and Div</b>		<b>0.1375</b>	<b>0.1375</b>	<b>0.1375</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>0.4125</b>	<b>2.2917</b>	--	<b>0.0440</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.2292	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0012
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0013
<b>08 - Roads, Railro</b>		<b>0.2292</b>	--	--	--	--	--	--	--	--	<b>0.0029</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0069
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0004
<b>19 - Buildings, Grou</b>		--	--	--	--	--	--	--	--	--	<b>0.0077</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0917	--	--	--	--	--	0.0917	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
32	CMU Building Mechanical Equipment	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
33	Electrical Control Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
34	Electrical Power Equipment CMU Building	--	--	0.1833	0.1833	0.1833	0.1833	0.1833	--	--	0.0028
35	Communication Equipment	--	--	--	--	0.1833	0.1833	--	--	--	0.0011
<b>20 -Permanent Ope</b>		--	<b>0.0917</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.7333</b>	<b>0.9167</b>	<b>0.9167</b>	<b>0.0917</b>	--	<b>0.0122</b>
<b>GRAND TOTAL</b>		<b>7.9293</b>	<b>2.7959</b>	<b>3.4375</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>1.3292</b>	<b>2.7500</b>	<b>0.2292</b>	<b>0.2952</b>





Table L1-249. PM2.5 Emissions from (

#	Activity										Annual Emissions, tpy
		26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>											
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	0.0616	0.0001
2	Fremont Weir Concrete Demo	--	--	--	--	--	--	--	--	--	0.0007
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	0.0985	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	<b>0.0985</b>	<b>0.0616</b>	<b>0.0010</b>
<b>09 - Channels and Canals</b>											
5	Mobilization and Demobilization	0.6527	--	--	--	--	--	--	--	--	0.0007
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	0.0025
7	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0111
8	Excavation/Grading (Dry Conditions)	--	--	--	--	--	--	--	--	--	0.0083
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	0.0007
10	Riprap - Class 2	0.6897	0.6897	0.6897	--	--	--	--	--	--	0.0172
11	Riprap - Class 3	--	--	--	--	--	--	--	--	--	0.0007
12	RSP Bedding Material	0.6897	--	--	--	--	--	--	--	--	0.0190
13	Erosion Control Seeding	--	--	--	0.0493	0.0493	--	--	--	--	0.0002
	<b>09 - Cha</b>	<b>2.0321</b>	<b>0.6897</b>	<b>0.6897</b>	<b>0.0493</b>	<b>0.0493</b>	--	--	--	--	<b>0.0604</b>
<b>15 - Floodway Control and Diversion Structure</b>											
14	Mobilization and Demobilization	--	--	--	--	--	--	--	0.6158	--	0.0006
15	Construction Site Dewatering (Temporary Co	--	--	--	--	--	--	--	--	--	0.0008
16	Construction Site Dewatering (Pumping)	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	0.0369	--	--	0.0022
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	0.0005
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	0.0003
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	0.0026
20	Headworks Structure	--	--	--	--	--	--	--	--	--	0.0030
21	Headworks Channel Transition	--	--	--	--	--	--	--	--	--	0.0010
22	Hinged Bottom Gates	--	--	--	0.0739	0.0739	0.0739	0.0739	--	--	0.0009
	<b>15 - Floodway Control and Div</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.0369</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.1108</b>	<b>0.6158</b>	--	<b>0.0118</b>
<b>08 - Roads, Railroads, and Bridges</b>											
23	Mobilization and Demobilization	0.0616	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	--	--	--	--	--	--	--	0.0003
25	Pedestrian Bridge Concrete Abutments and	--	--	--	--	--	--	--	--	--	0.0001
26	Pedestrian Bridge Span Installation	--	--	--	--	--	--	--	--	--	0.0003
	<b>08 - Roads, Railro</b>	<b>0.0616</b>	--	--	--	--	--	--	--	--	<b>0.0008</b>
<b>19 - Buildings, Grounds, and Utilities</b>											
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building and Earthwork Pad Constructi	--	--	--	--	--	--	--	--	--	0.0018
29	Concrete Duct Bank	--	--	--	--	--	--	--	--	--	0.0001
	<b>19 - Buildings, Grou</b>	--	--	--	--	--	--	--	--	--	<b>0.0021</b>
<b>20 -Permanent Operating Equipment</b>											
30	Mobilization and Demobilization	--	0.0246	--	--	--	--	--	0.0246	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
32	CMU Building Mechanical Equipment	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
33	Electrical Control Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
34	Electrical Power Equipment CMU Building	--	--	0.0493	0.0493	0.0493	0.0493	0.0493	--	--	0.0007
35	Communication Equipment	--	--	--	--	--	0.0493	0.0493	--	--	0.0003
	<b>20 -Permanent Ope</b>	--	<b>0.0246</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.1970</b>	<b>0.2463</b>	<b>0.2463</b>	<b>0.0246</b>	--	<b>0.0033</b>
<b>GRAND TOTAL</b>		<b>2.1306</b>	<b>0.7512</b>	<b>0.9237</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.3572</b>	<b>0.7389</b>	<b>0.0616</b>	<b>0.0793</b>

**Table L1-250. GHG Emissions from Construction Worker Commuting (Alternative 4)**

#	Activity	Estimated Duration, Days	CO2 Emission Factor, (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>				
1	Mobilization and Demobilization	2	301.29	0.18
2	Fremont Weir Concrete Demo	12	301.29	2.17
3	Levee O&M Road Regrading (6" AB)	3	301.29	0.43
4	Temporary Electrical Power	1	301.29	0.05
<b>02 - Relocations Total</b>				<b>2.84</b>
<b>09 - Channels and Canals</b>				
5	Mobilization and Demobilization	2	301.29	1.92
6	Clearing and Grubbing	23	301.29	7.48
7	Excavation (Wet Conditions)	45	301.29	32.54
8	Excavation/Grading (Dry Conditions)	56	301.29	24.30
9	Earthen Backfill	28	301.29	2.02
10	Riprap - Class 2	50	301.29	50.62
11	Riprap - Class 3	4	301.29	2.02
12	RSP Bedding Material	55	301.29	55.68
13	Erosion Control Seeding	10	301.29	0.72
<b>09 - Channels and Canals Total</b>				<b>177.30</b>
<b>15 - Floodway Control and Diversion Structures</b>				
14	Mobilization and Demobilization	2	301.29	1.81
15	Construction Site Dewatering (Temporary Co	18	301.29	2.28
16	Construction Site Dewatering (Pumping)	120	301.29	6.51
17	Excavation (Wet Conditions)	4	301.29	1.45
18	Sheet Pile Wall	7	301.29	0.89
19	Headworks Structure Concrete Piles	32	301.29	7.52
20	Headworks Structure	18	301.29	8.79
21	Headworks Channel Transition	10	301.29	2.89
22	Hinged Bottom Gates	24	301.29	2.60
<b>15 - Floodway Control and Diversion Structures Total</b>				<b>34.73</b>
<b>08 - Roads, Railroads, and Bridges</b>				
23	Mobilization and Demobilization	2	301.29	0.18
24	Pedestrian Bridge Concrete Piles	4	301.29	0.94
25	Pedestrian Bridge Concrete Abutments and	1	301.29	0.16
26	Pedestrian Bridge Span Installation	8	301.29	1.01
<b>08 - Roads, Railroads, and Bridges Total</b>				<b>2.30</b>
<b>19 - Buildings, Grounds, and Utilities</b>				
27	Mobilization and Demobilization	2	301.29	0.33
28	CMU Building and Earthwork Pad Constructi	30	301.29	5.42
29	Concrete Duct Bank	2	301.29	0.33
<b>19 - Buildings, Grounds, and Utilities Total</b>				<b>6.07</b>
<b>20 -Permanent Operating Equipment</b>				
30	Mobilization and Demobilization	2	301.29	0.07
31	Mechanical Hydraulic Cylinders & Housing	30	301.29	2.17
32	CMU Building Mechanical Equipment	30	301.29	2.17
33	Electrical Control Equipment CMU Building	30	301.29	2.17
34	Electrical Power Equipment CMU Building	30	301.29	2.17
35	Communication Equipment	12	301.29	0.87
<b>20 -Permanent Operating Equipment Total</b>				<b>9.62</b>
<b>GRAND TOTAL</b>				<b>232.85</b>

## Haul Truck Exhaust Emissions Summary

**Table L1-251. Maximum Daily Haul Truck Emissions (Alternative 4)**

Phase	ROG lbs/day	NOx lbs/day	CO lbs/day	SO2 lbs/day	PM10 lbs/day	PM2.5 lbs/day
02 - Relocations	0.48	13.99	2.95	0.06	1.65	0.50
09 - Channels and Canals	7.89	230.15	48.52	0.99	27.08	8.25
15 - Floodway Control and Diversion Structures	0.32	9.30	1.96	0.04	1.09	0.33
08 - Roads, Railroads, and Bridges	0.09	2.72	0.57	0.01	0.32	0.10
19 - Buildings, Grounds, and Utilities	0.11	3.26	0.69	0.01	0.38	0.12
20 -Permanent Operating Equipment	0.02	0.49	0.10	0.00	0.06	0.02
<b>Peak Day Construction Exhaust Emissions Total</b>	<b>8.21</b>	<b>239.45</b>	<b>50.48</b>	<b>1.04</b>	<b>28.18</b>	<b>8.58</b>

Notes:

Construction total will not add to the sum of each phase because not all tasks overlap on the same day.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

**Table L1-252. Annual Haul Truck Emissions (Alternative 4)**

Phase	ROG tpy	NOx tpy	CO tpy	SO2 tpy	PM10 tpy	PM2.5 tpy	CO2e MT/yr
02 - Relocations	0.00	0.03	0.01	0.00	0.00	0.00	11.13
09 - Channels and Canals	0.17	5.09	1.07	0.02	0.60	0.18	2,103.72
15 - Floodway Control and Diversion Structures	0.00	0.12	0.03	0.00	0.01	0.00	51.59
08 - Roads, Railroads, and Bridges	0.00	0.00	0.00	0.00	0.00	0.00	1.24
19 - Buildings, Grounds, and Utilities	0.00	0.01	0.00	0.00	0.00	0.00	2.09
20 -Permanent Operating Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.20
<b>Annual Construction Exhaust Emissions Total</b>	<b>0.18</b>	<b>5.25</b>	<b>1.11</b>	<b>0.02</b>	<b>0.62</b>	<b>0.19</b>	<b>2,169.97</b>

Notes:

Total may not add exactly because of rounding.

PM10 and PM2.5 emissions include exhaust, tire wear, brake wear, and paved road dust.

Table L1-253. ROG Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.1207	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	470	CY	60	22	12	0.1207	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1207	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.1207	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	88	ACR	880	22	23	0.1207	--	0.22	0.22	0.22	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.1207	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	3,600	TN	334	66	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	3.23	3.23	
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>0.30</b>	<b>0.22</b>	<b>0.22</b>	--	--	--	--	--	--	--	--	--	<b>3.23</b>	<b>3.23</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.1207	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1207	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1207	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1207	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1207	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1207	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,080	CY	616	35	18	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	0.32	
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.13</b>	--	--	--	--	--	--	--	--	--	--	<b>0.32</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.1207	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	0.1207	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	120	CY	24	35	2	0.1207	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	0.1207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>0.39</b>	<b>0.25</b>	<b>0.39</b>	<b>--</b>	<b>0.11</b>	<b>--</b>	<b>0.06</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.23</b>	<b>3.55</b>	

Table L1-253. ROG Emissions from Haul T

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	0.48	--	--	0.0007
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	0.48	0.03	--	<b>0.0009</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0026
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	--	--	--	--	--	0.0797	
11	Riprap - Class 3	--	--	--	--	--	1.47	--	--	--	--	--	--	--	--	--	0.0029
12	RSP Bedding Material	3.23	3.23	3.23	3.23	3.23	3.23	3.23	--	--	--	--	--	--	--	--	0.0889
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>6.42</b>	<b>6.42</b>	<b>6.42</b>	<b>6.42</b>	<b>6.42</b>	<b>7.89</b>	<b>6.72</b>	<b>3.19</b>	<b>3.19</b>	--	--	--	--	--	--	<b>0.1744</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.32	--	--	--	--	0.32	--	--	--	--	--	--	--	--	--	0.0029
21	Headworks Channel Transition	--	0.26	0.26	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>0.32</b>	<b>0.26</b>	<b>0.26</b>	--	--	<b>0.32</b>	--	--	--	--	--	--	0.13	--	--	<b>0.0043</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.06</b>	--	<b>0.09</b>	--	--	<b>0.06</b>	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0002</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	0.02	--	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.02</b>	--	--	--	--	0.02	--	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>6.74</b>	<b>6.73</b>	<b>6.68</b>	<b>6.52</b>	<b>6.42</b>	<b>8.21</b>	<b>6.77</b>	<b>3.21</b>	<b>3.19</b>	--	--	--	0.63	0.03	--	<b>0.1799</b>

Table L1-254. NOx Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximur														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	3.5212	0.82	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	470	CY	60	22	12	3.5212	--	0.85	0.85	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	100	LF	n/a	n/a	1	3.5212	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.82</b>	<b>0.85</b>	<b>0.85</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	3.5212	8.64	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	88	ACR	880	22	23	3.5212	--	6.53	6.53	6.53	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
9	Earthen Backfill	27,510	CY	n/a	n/a	28	3.5212	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	
10	Riprap - Class 2	98,070	TN	9,082	66	50	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	3,600	TN	334	66	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	109,330	TN	10,124	66	55	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	94.31	94.31	
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>8.64</b>	<b>6.53</b>	<b>6.53</b>	--	--	--	--	--	--	--	--	--	<b>94.31</b>	<b>94.31</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	3.5212	--	--	3.91	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	3.5212	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	3.5212	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	3.5212	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	3.5212	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	3.5212	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,080	CY	616	35	18	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	9.30	
21	Headworks Channel Transition	1,370	CY	274	35	10	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>3.91</b>	--	--	--	--	--	--	--	--	--	--	<b>9.30</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	3.5212	1.79	--	--	--	--	--	1.79	--	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	3.5212	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	120	CY	24	35	2	3.5212	--	--	--	--	3.26	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.26</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	3.5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>11.25</b>	<b>7.39</b>	<b>11.30</b>	<b>--</b>	<b>3.26</b>	<b>--</b>	<b>1.79</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>94.31</b>	<b>103.61</b>	

Table L1-254. NOx Emissions from Haul Tr

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	0.0008
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0051
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	13.99	--	0.0210
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	13.99	0.82	<b>0.0269</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	8.64	--	--	--	--	--	--	--	0.0086
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0751
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	93.06	93.06	93.06	93.06	93.06	93.06	93.06	93.06	93.06	--	--	--	--	--	2.3265	
11	Riprap - Class 3	--	--	--	--	--	--	42.78	--	--	--	--	--	--	--	--	0.0856
12	RSP Bedding Material	94.31	94.31	94.31	94.31	94.31	94.31	94.31	94.31	--	--	--	--	--	--	2.5935	
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		187.37	187.37	187.37	187.37	187.37	230.15	196.01	93.06	93.06	--	--	--	--	--	--	<b>5.0893</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	3.91	--	0.0039
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	9.30	--	--	--	--	--	9.30	--	--	--	--	--	--	--	--	0.0837
21	Headworks Channel Transition	--	7.44	7.44	--	--	--	--	--	--	--	--	--	--	--	--	0.0372
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a
		9.30	7.44	7.44	--	--	9.30	--	--	--	--	--	--	--	3.91	--	<b>0.1248</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	1.63	--	--	--	--	1.63	--	--	--	--	--	--	--	--	0.0016
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	2.72	--	--	--	--	--	--	--	--	--	--	--	0.0014
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	1.63	--	2.72	--	--	1.63	--	--	--	--	--	--	--	--	<b>0.0030</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0018
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0033
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0051</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.49	--	--	--	--	--	0.49	--	0.0005
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.49	--	--	--	--	--	0.49	--	<b>0.0005</b>
<b>GRAND TOTAL</b>		196.67	196.44	194.81	190.09	187.37	239.45	197.64	93.55	93.06	--	--	--	--	18.40	0.82	<b>5.2496</b>



Table L1-255. CO Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum															
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul			
<b>02 - Relocations</b>																							
1	Mobilization and Demobilization	-	-	10	21	2	0.7423	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--		
2	Fremont Weir Demo	470	CY	60	22	12	0.7423	--	0.18	0.18	--	--	--	--	--	--	--	--	--	--	--		
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.7423	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>02 - Relocations Total</b>								<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals</b>																							
5	Mobilization and Demobilization	-	-	106	21	2	0.7423	1.82	--	--	--	--	--	--	--	--	--	--	--	--	--		
6	Clearing and Grubbing	88	ACR	880	22	23	0.7423	--	1.38	1.38	1.38	--	--	--	--	--	--	--	--	--	--		
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.7423	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.7423	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a		
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.7423	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--		
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
11	Riprap - Class 3	3,600	TN	334	66	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	19.88	19.88		
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals Total</b>								<b>1.82</b>	<b>1.38</b>	<b>1.38</b>	--	--	--	--	--	--	--	--	--	--	<b>19.88</b>	<b>19.88</b>	
<b>15 - Floodway Control and Diversion Structures</b>																							
14	Mobilization and Demobilization	-	-	48	21	2	0.7423	--	--	0.82	--	--	--	--	--	--	--	--	--	--	--		
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.7423	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.7423	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.7423	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--		
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.7423	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--		
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.7423	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
20	Headworks Structure	3,080	CY	616	35	18	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	1.96		
21	Headworks Channel Transition	1,370	CY	274	35	10	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.82</b>	--	--	--	--	--	--	--	--	--	--	--	<b>1.96</b>	
<b>08 - Roads, Railroads, and Bridges</b>																							
23	Mobilization and Demobilization	-	-	20	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																							
27	Mobilization and Demobilization	-	-	22	21	2	0.7423	0.38	--	--	--	--	--	0.38	--	--	--	--	--	--	--		
28	CMU Building	1	EA	n/a	n/a	30	0.7423	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--		
29	Concrete Duct Banc	120	CY	24	35	2	0.7423	--	--	--	--	0.69	--	--	--	--	--	--	--	--	--		
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.38</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.69</b>	<b>--</b>	<b>0.38</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																							
30	Mobilization and Demobilization	-	-	6	21	2	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
35	Communication Equipment	-	-	n/a	n/a	12	0.7423	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>2.37</b>	<b>1.56</b>	<b>2.38</b>	<b>--</b>	<b>0.69</b>	<b>--</b>	<b>0.38</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>19.88</b>	<b>21.84</b>	

Table L1-255. CO Emissions from Haul Tru

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.0002
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0011
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	--	0.0044
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	2.95	0.17	<b>0.0057</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	1.82	--	--	--	--	--	--	--	0.0018
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0158
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	19.62	19.62	19.62	19.62	19.62	19.62	19.62	19.62	19.62	--	--	--	--	--	0.4905	
11	Riprap - Class 3	--	--	--	--	--	9.02	--	--	--	--	--	--	--	--	--	0.0180
12	RSP Bedding Material	19.88	19.88	19.88	19.88	19.88	19.88	19.88	--	--	--	--	--	--	--	--	0.5468
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>48.52</b>	<b>41.32</b>	<b>19.62</b>	<b>19.62</b>	--	--	--	--	--	--	<b>1.0730</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82	--	0.0008
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	1.96	--	--	--	--	1.96	--	--	--	--	--	--	--	--	--	0.0176
21	Headworks Channel Transition	--	1.57	1.57	--	--	--	--	--	--	--	--	--	--	--	--	0.0078
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>1.96</b>	<b>1.57</b>	<b>1.57</b>	--	--	<b>1.96</b>	--	--	--	--	--	--	--	<b>0.82</b>	--	<b>0.0263</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.34	--	--	--	--	0.34	--	--	--	--	--	--	--	--	0.0003
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	0.0003
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.34</b>	--	<b>0.57</b>	--	--	<b>0.34</b>	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0007
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0011</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.10	--	--	--	--	--	0.10	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.10</b>	--	--	--	--	--	<b>0.10</b>	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>41.46</b>	<b>41.42</b>	<b>41.07</b>	<b>40.07</b>	<b>39.50</b>	<b>50.48</b>	<b>41.67</b>	<b>19.72</b>	<b>19.62</b>	--	--	--	--	<b>3.88</b>	<b>0.17</b>	<b>1.1067</b>

Table L1-256. SOx Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.0152	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	470	CY	60	22	12	0.0152	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.0152	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.0152	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	88	ACR	880	22	23	0.0152	--	0.03	0.03	0.03	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.0152	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	3,600	TN	334	66	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	0.41	0.41	
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	<b>0.41</b>	<b>0.41</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.0152	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.0152	--	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.0152	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.0152	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.0152	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.0152	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,080	CY	616	35	18	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	0.04	
21	Headworks Channel Transition	1,370	CY	274	35	10	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.02</b>	--	--	--	--	--	--	--	--	--	--	<b>0.04</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.0152	0.01	--	--	--	--	--	0.01	--	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	0.0152	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	120	CY	24	35	2	0.0152	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	0.0152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>0.05</b>	<b>0.03</b>	<b>0.05</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.41</b>	<b>0.45</b>	

Table L1-256. SOx Emissions from Haul Tr

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06	--	0.0001
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.06</b>	<b>0.00</b>	<b>0.0001</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	0.04	--	--	--	--	--	--	--	--	0.0000
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	--	--	--	--	--	0.0101	
11	Riprap - Class 3	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	0.0004
12	RSP Bedding Material	0.41	0.41	0.41	0.41	0.41	0.41	0.41	--	--	--	--	--	--	--	--	0.0112
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.99</b>	<b>0.85</b>	<b>0.40</b>	<b>0.40</b>	--	--	--	--	--	--	<b>0.0220</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02	--	0.0000
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.04	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	0.0004
21	Headworks Channel Transition	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	--	--	<b>0.04</b>	--	--	--	--	--	--	--	<b>0.02</b>	--	<b>0.0005</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.01	--	--	--	--	0.01	--	--	--	--	--	--	--	--	0.0000
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	<b>0.01</b>	--	<b>0.01</b>	--	--	<b>0.01</b>	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0000
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0000</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.00	--	--	--	--	--	0.00	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	<b>0.00</b>	--	--	--	--	--	<b>0.00</b>	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>0.85</b>	<b>0.85</b>	<b>0.84</b>	<b>0.82</b>	<b>0.81</b>	<b>1.04</b>	<b>0.85</b>	<b>0.40</b>	<b>0.40</b>	--	--	--	--	<b>0.08</b>	<b>0.00</b>	<b>0.0227</b>

Table L1-257. PM10 Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum																
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul				
<b>02 - Relocations</b>																								
1	Mobilization and Demobilization	-	-	10	21	2	0.4144	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--			
2	Fremont Weir Demo	470	CY	60	22	12	0.4144	--	0.10	0.10	--	--	--	--	--	--	--	--	--	--	--			
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.4144	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>02 - Relocations Total</b>								<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	--	--	--	--	--	--	--	--	--	--	--	--		
<b>09 - Channels and Canals</b>																								
5	Mobilization and Demobilization	-	-	106	21	2	0.4144	1.02	--	--	--	--	--	--	--	--	--	--	--	--	--			
6	Clearing and Grubbing	88	ACR	880	22	23	0.4144	--	0.77	0.77	0.77	--	--	--	--	--	--	--	--	--	--			
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.4144	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a			
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.4144	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a			
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.4144	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--			
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
11	Riprap - Class 3	3,600	TN	334	66	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	11.10	11.10			
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>09 - Channels and Canals Total</b>								<b>1.02</b>	<b>0.77</b>	<b>0.77</b>	--	--	--	--	--	--	--	--	--	--	<b>11.10</b>	<b>11.10</b>		
<b>15 - Floodway Control and Diversion Structures</b>																								
14	Mobilization and Demobilization	-	-	48	21	2	0.4144	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--			
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.4144	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--			
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.4144	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.4144	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--			
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.4144	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--			
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.4144	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
20	Headworks Structure	3,080	CY	616	35	18	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	1.09			
21	Headworks Channel Transition	1,370	CY	274	35	10	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--	--	<b>1.09</b>		
<b>08 - Roads, Railroads, and Bridges</b>																								
23	Mobilization and Demobilization	-	-	20	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>19 - Buildings, Grounds, and Utilities</b>																								
27	Mobilization and Demobilization	-	-	22	21	2	0.4144	0.21	--	--	--	--	--	0.21	--	--	--	--	--	--	--			
28	CMU Building	1	EA	n/a	n/a	30	0.4144	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--			
29	Concrete Duct Banc	120	CY	24	35	2	0.4144	--	--	--	--	0.38	--	--	--	--	--	--	--	--	--			
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.21</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.38</b>	<b>--</b>	<b>0.21</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>20 -Permanent Operating Equipment</b>																								
30	Mobilization and Demobilization	-	-	6	21	2	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
35	Communication Equipment	-	-	n/a	n/a	12	0.4144	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>GRAND TOTAL</b>								<b>1.32</b>	<b>0.87</b>	<b>1.33</b>	<b>--</b>	<b>0.38</b>	<b>--</b>	<b>0.21</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>11.10</b>	<b>12.19</b>		

Table L1-257. PM10 Emissions from Haul 1

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	0.0001
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0006
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	--	0.0025
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	1.65	0.10	<b>0.0032</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	--	1.02	--	--	--	--	--	--	--	0.0010
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0088
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	--	--	--	--	--	0.2738	
11	Riprap - Class 3	--	--	--	--	--	--	5.03	--	--	--	--	--	--	--	--	0.0101
12	RSP Bedding Material	11.10	11.10	11.10	11.10	11.10	11.10	11.10	--	--	--	--	--	--	--	--	0.3052
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	n/a
		22.05	22.05	22.05	22.05	22.05	27.08	23.07	10.95	10.95	--	--	--	--	--	--	<b>0.5989</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	0.0005
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	1.09	--	--	--	--	--	1.09	--	--	--	--	--	--	--	--	0.0098
21	Headworks Channel Transition	--	0.88	0.88	--	--	--	--	--	--	--	--	--	--	--	--	0.0044
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	n/a
		1.09	0.88	0.88	--	--	1.09	--	--	--	--	--	--	--	0.46	--	<b>0.0147</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.19	--	--	--	--	0.19	--	--	--	--	--	--	--	--	0.0002
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	0.0002
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	0.19	--	0.32	--	--	0.19	--	--	--	--	--	--	--	--	<b>0.0004</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0006</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.06	--	--	--	--	--	0.06	--	0.0001
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.06	--	--	--	--	--	0.06	--	<b>0.0001</b>
<b>GRAND TOTAL</b>		<b>23.14</b>	<b>23.12</b>	<b>22.93</b>	<b>22.37</b>	<b>22.05</b>	<b>28.18</b>	<b>23.26</b>	<b>11.01</b>	<b>10.95</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.16</b>	<b>0.10</b>	<b>0.6178</b>

Table L1-258. PM2.5 Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	Emission Factor (g/mi)	Maximum														
								15-Apr	22-Apr	29-Apr	6-May	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul		
<b>02 - Relocations</b>																						
1	Mobilization and Demobilization	-	-	10	21	2	0.1262	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	
2	Fremont Weir Demo	470	CY	60	22	12	0.1262	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	Temporary Electrical Power	100	LF	n/a	n/a	1	0.1262	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>02 - Relocations Total</b>								<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>09 - Channels and Canals</b>																						
5	Mobilization and Demobilization	-	-	106	21	2	0.1262	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	
6	Clearing and Grubbing	88	ACR	880	22	23	0.1262	--	0.23	0.23	0.23	--	--	--	--	--	--	--	--	--	--	
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	0.1262	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	0.1262	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
9	Earthen Backfill	27,510	CY	n/a	n/a	28	0.1262	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	
10	Riprap - Class 2	98,070	TN	9,082	66	50	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11	Riprap - Class 3	3,600	TN	334	66	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12	RSP Bedding Material	109,330	TN	10,124	66	55	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	3.38	3.38	
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>09 - Channels and Canals Total</b>								<b>0.31</b>	<b>0.23</b>	<b>0.23</b>	--	--	--	--	--	--	--	--	--	<b>3.38</b>	<b>3.38</b>	
<b>15 - Floodway Control and Diversion Structures</b>																						
14	Mobilization and Demobilization	-	-	48	21	2	0.1262	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--	
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	0.1262	--	--	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
16	Construction Site Dewatering (Pumping)	-	-	n/a	n/a	120	0.1262	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	0.1262	--	--	--	--	--	n/a	--	--	--	--	--	--	--	--	
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	0.1262	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	--	
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	0.1262	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
20	Headworks Structure	3,080	CY	616	35	18	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33	
21	Headworks Channel Transition	1,370	CY	274	35	10	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>15 - Floodway Control and Diversion Structures Total</b>								<b>--</b>	<b>--</b>	<b>0.14</b>	--	--	--	--	--	--	--	--	--	--	<b>0.33</b>	
<b>08 - Roads, Railroads, and Bridges</b>																						
23	Mobilization and Demobilization	-	-	20	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>08 - Roads, Railroads, and Bridges Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	--	--	--	--	--	--	--	--	--	--	--	--
<b>19 - Buildings, Grounds, and Utilities</b>																						
27	Mobilization and Demobilization	-	-	22	21	2	0.1262	0.06	--	--	--	--	--	0.06	--	--	--	--	--	--	--	
28	CMU Building	1	EA	n/a	n/a	30	0.1262	--	n/a	n/a	n/a	n/a	--	--	--	--	--	--	--	--	--	
29	Concrete Duct Banc	120	CY	24	35	2	0.1262	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	
<b>19 - Buildings, Grounds, and Utilities Total</b>								<b>0.06</b>	<b>--</b>	<b>--</b>	--	<b>0.12</b>	--	<b>0.06</b>	--	--	--	--	--	--	--	--
<b>20 -Permanent Operating Equipment</b>																						
30	Mobilization and Demobilization	-	-	6	21	2	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
33	Electrical Control Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Electrical Power Equipment CMU Building	-	-	n/a	n/a	30	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
35	Communication Equipment	-	-	n/a	n/a	12	0.1262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>20 -Permanent Operating Equipment Total</b>								<b>--</b>	<b>--</b>	<b>--</b>	--	<b>--</b>	--	<b>--</b>	--	--	--	--	--	--	--	
<b>GRAND TOTAL</b>								<b>0.40</b>	<b>0.26</b>	<b>0.40</b>	--	<b>0.12</b>	--	<b>0.06</b>	--	--	--	--	--	<b>3.38</b>	<b>3.71</b>	

Table L1-258. PM2.5 Emissions from Haul

#	Activity	Daily Emissions, lbs/day															Annual Emissions, tpy
		15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	
<b>02 - Relocations</b>																	
1	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.03	0.0000
2	Fremont Weir Demo	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0002
3	Levee O&M Road Regrading (6" AB)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	0.0008
4	Temporary Electrical Power	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
		--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	0.03	<b>0.0010</b>
<b>09 - Channels and Canals</b>																	
5	Mobilization and Demobilization	--	--	--	--	--	--	0.31	--	--	--	--	--	--	--	--	0.0003
6	Clearing and Grubbing	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0027
7	Excavation (Wet Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
8	Excavation/Grading (Dry Conditions)	n/a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
9	Earthen Backfill	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
10	Riprap - Class 2	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	--	--	--	--	--	0.0834	
11	Riprap - Class 3	--	--	--	--	--	1.53	--	--	--	--	--	--	--	--	--	0.0031
12	RSP Bedding Material	3.38	3.38	3.38	3.38	3.38	3.38	3.38	--	--	--	--	--	--	--	--	0.0929
13	Erosion Control Seeding	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	--	--	n/a
		6.71	6.71	6.71	6.71	6.71	8.25	7.02	3.33	3.33	--	--	--	--	--	--	<b>0.1824</b>
<b>15 - Floodway Control and Diversion Structures</b>																	
14	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14	--	0.0001
15	Construction Site Dewatering (Temporary Cc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
16	Construction Site Dewatering (Pumping)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
17	Excavation (Wet Conditions)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
18	Sheet Pile Wall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
19	Headworks Structure Concrete Piles	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
20	Headworks Structure	0.33	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	0.0030
21	Headworks Channel Transition	--	0.27	0.27	--	--	--	--	--	--	--	--	--	--	--	--	0.0013
22	Hinged Bottom Gates	--	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	--	--	--	n/a
		0.33	0.27	0.27	--	--	0.33	--	--	--	--	--	--	--	0.14	--	<b>0.0045</b>
<b>08 - Roads, Railroads, and Bridges</b>																	
23	Mobilization and Demobilization	--	0.06	--	--	--	--	0.06	--	--	--	--	--	--	--	--	0.0001
24	Pedestrian Bridge Concrete Piles	--	--	n/a	--	--	--	--	--	--	--	--	--	--	--	--	n/a
25	Pedestrian Bridge Concrete Abutments and	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--	0.0000
26	Pedestrian Bridge Span Installation	--	--	--	n/a	n/a	--	--	--	--	--	--	--	--	--	--	n/a
		--	0.06	--	0.10	--	--	0.06	--	--	--	--	--	--	--	--	<b>0.0001</b>
<b>19 - Buildings, Grounds, and Utilities</b>																	
27	Mobilization and Demobilization	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
28	CMU Building	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	n/a
29	Concrete Duct Banc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0002</b>
<b>20 -Permanent Operating Equipment</b>																	
30	Mobilization and Demobilization	--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	0.0000
31	Mechanical Hydraulic Cylinders & Housing	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
32	CMU Building Mechanical Equipment	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
33	Electrical Control Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
34	Electrical Power Equipment CMU Building	--	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	--	--	--	n/a
35	Communication Equipment	--	--	--	--	--	--	--	--	--	--	n/a	n/a	--	--	--	n/a
		--	--	--	--	--	--	--	0.02	--	--	--	--	--	0.02	--	<b>0.0000</b>
<b>GRAND TOTAL</b>		<b>7.05</b>	<b>7.04</b>	<b>6.98</b>	<b>6.81</b>	<b>6.71</b>	<b>8.58</b>	<b>7.08</b>	<b>3.35</b>	<b>3.33</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>0.66</b>	<b>0.03</b>	<b>0.1881</b>



Table L1-259. GHG Emissions from Haul Trucks (Alternative 4)

#	Activity	Quantity	Unit	Total Truck Trips	Trip Distance (mi)	Estimated Duration, Days	CO2 Emission Factor (g/mi)	Annual Emissions, MTCO2e/yr
<b>02 - Relocations</b>								
1	Mobilization and Demobilization	-	-	10	21	2	1,604.39	0.34
2	Fremont Weir Demo	470	CY	60	22	12	1,604.39	2.12
3	Levee O&M Road Regrading (6" AB)	89,000	SF	208	26	3	1,604.39	8.68
4	Temporary Electrical Power	100	LF	n/a	n/a	1	1,604.39	n/a
							<b>02 - Relocations Total</b>	<b>11.13</b>
<b>09 - Channels and Canals</b>								
5	Mobilization and Demobilization	-	-	106	21	2	1,604.39	3.57
6	Clearing and Grubbing	88	ACR	880	22	23	1,604.39	31.06
7	Excavation (Wet Conditions)	161,750	CY	n/a	n/a	45	1,604.39	n/a
8	Excavation/Grading (Dry Conditions)	581,540	CY	n/a	n/a	56	1,604.39	n/a
9	Earthen Backfill	27,510	CY	n/a	n/a	28	1,604.39	n/a
10	Riprap - Class 2	98,070	TN	9,082	66	50	1,604.39	961.69
11	Riprap - Class 3	3,600	TN	334	66	4	1,604.39	35.37
12	RSP Bedding Material	109,330	TN	10,124	66	55	1,604.39	1,072.03
13	Erosion Control Seeding	18	ACR	n/a	n/a	10	1,604.39	n/a
							<b>09 - Channels and Canals Total</b>	<b>2,103.72</b>
<b>15 - Floodway Control and Diversion Structures</b>								
14	Mobilization and Demobilization	-	-	48	21	2	1,604.39	1.62
15	Construction Site Dewatering (Temporary Co	21,000	SF	n/a	n/a	18	1,604.39	n/a
16	Construction Site Dewatering(Pumping)	-	-	n/a	n/a	120	1,604.39	n/a
17	Excavation (Wet Conditions)	6,460	CY	n/a	n/a	4	1,604.39	n/a
18	Sheet Pile Wall	7,940	SF	n/a	n/a	7	1,604.39	n/a
19	Headworks Structure Concrete Piles	5,600	LF	n/a	n/a	32	1,604.39	n/a
20	Headworks Structure	3,080	CY	616	35	18	1,604.39	34.59
21	Headworks Channel Transition	1,370	CY	274	35	10	1,604.39	15.39
22	Hinged Bottom Gates	3	EA	n/a	n/a	24	1,604.39	n/a
							<b>15 - Floodway Control and Diversion Structures Total</b>	<b>51.59</b>
<b>08 - Roads, Railroads, and Bridges</b>								
23	Mobilization and Demobilization	-	-	20	21	2	1,604.39	0.67
24	Pedestrian Bridge Concrete Piles	640	LF	n/a	n/a	4	1,604.39	n/a
25	Pedestrian Bridge Concrete Abutments and	48	CY	10	35	1	1,604.39	0.56
26	Pedestrian Bridge Span Installation	2,930	SF	n/a	n/a	8	1,604.39	n/a
							<b>08 - Roads, Railroads, and Bridges Total</b>	<b>1.24</b>
<b>19 - Buildings, Grounds, and Utilities</b>								
27	Mobilization and Demobilization	-	-	22	21	2	1,604.39	0.74
28	CMU Building	1	EA	n/a	n/a	30	1,604.39	n/a
29	Concrete Duct Banc	120	CY	24	35	2	1,604.39	1.35
				48			<b>9 - Buildings, Grounds, and Utilities Total</b>	<b>2.09</b>
<b>20 -Permanent Operating Equipment</b>								
30	Mobilization and Demobilization	-	-	6	21	2	1,604.39	0.20
31	Mechanical Hydraulic Cylinders & Housing	-	-	n/a	n/a	30	1,604.39	n/a
32	CMU Building Mechanical Equipment	-	-	n/a	n/a	30	1,604.39	n/a
33	Electrical Control Equipment CMUBuilding	-	-	n/a	n/a	30	1,604.39	n/a
34	Electrical Power Equipment CMUBuilding	-	-	n/a	n/a	30	1,604.39	n/a
35	Communication Equipment	-	-	n/a	n/a	12	1,604.39	n/a
							<b>20 -Permanent Operating Equipment Total</b>	<b>0.20</b>
<b>GRAND TOTAL</b>								<b>2,169.97</b>