

Appendix 20C3 Modeled Emissions

This appendix was added after publication of the RDEIR/SDEIS. Because it is a new appendix, it does not include a vertical line in the margin to identify changes from the RDEIR/SDEIS.

Appendix 20C3 Modeled Emissions

Modeled emissions information is provided in Tables 20C3-1 through 20C3-22.

Table 20C3-2. Maximum Daily (Short-Term) Emission Rates for Modeling—Per Onsite Volume Source

Project Component	Type	# Srcs	Daily Operation Hrs	MAX YEAR - (g/s/src)								
				NOX	CO	PM10 Ex	PM10 D	PM10 T	PM2.5 Ex	PM2.5 D	PM2.5 T	SOX
GG_DAM	Onsite	3931	12	1.55314E-03	4.17761E-03	1.83344E-05	6.73618E-03	6.75451E-03	1.82670E-05	6.77410E-04	6.95677E-04	9.63887E-06
SITES_DAM	Onsite	3026	10	2.93496E-03	8.19650E-03	3.28305E-05	1.23389E-02	1.23717E-02	3.27177E-05	1.23851E-03	1.27123E-03	4.73112E-05
FUNKS_TRR1	Onsite	3218	8	7.61992E-04	1.57317E-03	2.56144E-05	1.68307E-04	1.93921E-04	2.38223E-05	3.40996E-05	5.79219E-05	3.85537E-06
TRR_PLANT	Onsite	636	8	3.89914E-03	4.54907E-03	1.20239E-04	8.57118E-03	8.69142E-03	1.11292E-04	1.68534E-03	1.79664E-03	1.24671E-05
TRR_EAST	Onsite	636	8	6.83826E-04	9.85278E-04	2.25313E-05	1.58160E-03	1.60413E-03	2.08722E-05	3.04440E-04	3.25313E-04	2.58748E-06
DUNNIGAN	Onsite	834	8	1.01149E-03	2.22572E-03	3.59852E-05	1.06961E-04	1.42947E-04	3.34812E-05	1.21297E-05	4.56110E-05	5.59613E-06
DUNNIGAN_ALT1	Onsite	391	8	1.38838E-03	2.75841E-03	4.71700E-05	2.28148E-04	2.75318E-04	4.38369E-05	2.58726E-05	6.97095E-05	6.85941E-06
HUFFMASTER	Onsite	176	12	1.61607E-03	5.88630E-03	2.23024E-05	1.15484E-02	1.15707E-02	2.22052E-05	1.16017E-03	1.18237E-03	1.55244E-05
HUFFMASTER_ALT1	Onsite	128	12	2.15519E-03	7.21167E-03	2.73748E-05	1.51123E-02	1.51397E-02	2.72522E-05	1.51834E-03	1.54560E-03	1.94833E-05
TRR_BATCH	Onsite	11	12	0.00000E+00	0.00000E+00	0.00000E+00	3.69874E-02	0.00000E+00	0.00000E+00	5.49656E-03	0.00000E+00	0.00000E+00
FUNKS_CLSM_1	Onsite	27	12	0.00000E+00	0.00000E+00	0.00000E+00	7.93103E-03	0.00000E+00	0.00000E+00	1.17860E-03	0.00000E+00	0.00000E+00
FUNKS ASPHALT	Onsite	6	12	0.00000E+00	0.00000E+00	0.00000E+00	1.31712E-02	1.31712E-02	0.00000E+00	7.10302E-03	7.10302E-03	0.00000E+00
FUNKS_BATCH	Onsite	24	12	0.00000E+00	0.00000E+00	0.00000E+00	6.67996E-04	0.00000E+00	0.00000E+00	9.93288E-05	0.00000E+00	0.00000E+00
GG_DAM_BATCH	Onsite	35	12	0.00000E+00	0.00000E+00	0.00000E+00	1.82734E-03	0.00000E+00	0.00000E+00	2.71970E-04	0.00000E+00	0.00000E+00
SITES_DAM_BATCH	Onsite	28	12	0.00000E+00	0.00000E+00	0.00000E+00	2.28418E-03	0.00000E+00	0.00000E+00	3.39962E-04	0.00000E+00	0.00000E+00
FUNKS ASPHALT	Onsite	1	12	7.96936E-01	1.92033E+00	0.00000E+00	7.90271E-02	7.90271E-02	0.00000E+00	4.26181E-02	4.26181E-02	1.59387E-01
GG_ROCK_QUARRY	Onsite	1596	12	9.37523E-05	9.22513E-04	0.00000E+00	4.78939E-05	4.78939E-05	0.00000E+00	2.76311E-06	2.76311E-06	4.61834E-05
DUNNIGAN_CLSM	Onsite	16	8	0.00000E+00	0.00000E+00	0.00000E+00	2.13301E-02	0.00000E+00	0.00000E+00	3.16979E-03	0.00000E+00	0.00000E+00
DUNNIGAN_CLSM_ALT1	Onsite	16	8	0.00000E+00	0.00000E+00	0.00000E+00	8.53205E-03	0.00000E+00	0.00000E+00	1.26792E-03	0.00000E+00	0.00000E+00
GCID_HEADGATE	Onsite	8	8	8.99815E-04	1.40827E-03	3.07170E-05	8.40100E-05	1.14727E-04	2.84758E-05	1.69560E-05	4.54318E-05	3.04406E-06
GCID_WW	Onsite	75	8	8.78937E-04	1.65248E-03	3.39000E-05	3.62249E-05	7.01249E-05	3.14392E-05	1.21120E-05	4.35512E-05	3.64650E-06
GCID_A	Onsite	11	8	1.11979E-03	2.16520E-03	4.19918E-05	6.83418E-05	1.10334E-04	3.89744E-05	2.35716E-05	6.25460E-05	5.09829E-06
GCID_E	Onsite	9	8	2.83920E-04	2.75660E-04	1.03032E-05	7.19261E-04	7.29564E-04	9.51620E-06	1.65049E-04	1.74565E-04	7.72325E-07
GCID_F-K	Onsite	27	8	9.46399E-05	9.18865E-05	3.43441E-06	2.39754E-04	2.43188E-04	3.17207E-06	5.50163E-05	5.81884E-05	2.57442E-07

Note: CO = carbon monoxide; D = dust; Ex = exhaust; g/s/src = grams per second per source; Hrs = hours; NOx = nitrogen oxide; PM2.5 = particulate matter 2.5 microns in diameter or less; PM10 = particulate matter 10 microns in diameter or less; SOx = sulfur oxides; Srcs = sources modeled; T = total.

Table 20C3-3. Maximum Daily (Short-Term) Emission Rates for Modeling—Per Offsite Mobile Volume Source

Project Component	Type	Vol Srcs	Daily Operation Hrs	Model SRCGROUP	Modeling Length (m)	Trip Dist (mi)	Trip Dist (m)	% Emissions in Modeling Domain	MAX YEAR - (g/s/vol)				
									NOX	CO	PM10 T	PM2.5 T	SOX
DUNNIGAN	Hauling	281	8	TR	4115.5	25	40233.6	10.23%	1.32390E-04	2.25132E-05	1.50298E-04	1.80749E-05	6.28247E-07
DUNNIGAN	Worker	281	8	PV	4115.5	25	40233.6	10.23%	7.14444E-06	1.10644E-04	6.39147E-04	7.35258E-05	4.35428E-07
DUNNIGAN_ALT1	Hauling	281	8	TR	4115.5	25	40233.6	10.23%	7.42623E-05	1.25861E-05	1.38467E-04	1.55344E-05	3.57742E-07
DUNNIGAN_ALT1	Worker	281	8	PV	4115.5	25	40233.6	10.23%	5.00238E-06	7.57562E-05	4.15180E-04	4.77672E-05	2.92321E-07
RED_BLUFF	Hauling	483	12	TR	7201.8	500	804672	0.89%	3.03828E-08	4.12118E-09	7.65445E-09	1.53672E-09	1.50638E-10
RED_BLUFF	Worker	483	12	PV	7201.8	500	804672	0.89%	7.85830E-09	1.27132E-07	7.41534E-07	8.53042E-08	5.05181E-10
GCID_HEADGATE	Hauling	730	8	TR	4908.6	20	32186.88	15.25%	1.89518E-07	3.05004E-08	4.49180E-07	4.92864E-08	8.47967E-10
GCID_HEADGATE	Worker	730	8	PV	4908.6	20	32186.88	15.25%	2.84286E-07	3.98902E-06	1.88113E-05	2.16485E-06	1.42129E-08
GCID_WW	Hauling	259	8	TR	2783.2	20	32186.88	8.65%	4.73433E-06	8.19087E-07	1.10860E-05	1.21152E-06	2.18601E-08
GCID_WW	Worker	259	8	PV	2783.2	20	32186.88	8.65%	1.13581E-06	1.59374E-05	7.51569E-05	8.64925E-06	5.67849E-08
GCID_A	Hauling	213	8	TR	2318	20	32186.88	7.20%	1.29764E-06	2.27151E-07	3.03233E-06	3.31153E-07	6.02299E-09
GCID_A	Worker	213	8	PV	2318	20	32186.88	7.20%	2.30051E-07	3.22802E-06	1.52226E-05	1.75185E-06	1.15014E-08
GCID_E	Hauling	178	8	TR	2093.9	20	32186.88	6.51%	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
GCID_E	Worker	178	8	PV	2093.9	20	32186.88	6.51%	8.28905E-08	1.16310E-06	5.48490E-06	6.31217E-07	4.14412E-09
GCID_F-K	Hauling	119	8	TR	1464.5	20	32186.88	4.55%	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
GCID_F-K	Worker	119	8	PV	1464.5	20	32186.88	4.55%	8.67184E-08	1.21681E-06	5.73819E-06	6.60367E-07	4.33550E-09

Note: CO = carbon monoxide; Dist = distance; g/s/vol = grams per second per volume source; Hrs = hours; m = meter; mi = mile; NOx = nitrogen oxide; PM2.5 = particulate matter 2.5 microns in diameter or less; PM10 = particulate matter 10 microns in diameter or less; SOx = sulfur oxides; SRCGROUP = source group; Srcs = sources modeled; T = total; Vol = volume sources.

Table 20C3-4a. Maximum Daily (Short-Term) Emission Rates for Modeling Workers—Per Offsite Mobile Volume Source (Common Roads)

Model ID	Description	No. of Vol	NOx - Short-Term (g/s/vol)				CO - Short-Term (g/s/vol)				PM10 T - Short-Term (g/s/vol)			
			South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir
PV01	Onramp I-5 Northbound	30	3.25035E-06	1.92148E-06	0.00000E+00	3.38142E-05	4.80088E-05	2.83809E-05	0.00000E+00	5.31049E-04	2.28619E-05	1.35151E-05	0.00000E+00	8.19663E-04
PV02	Offramp I-5 Northbound	35	3.20911E-06	1.89710E-06	0.00000E+00	3.33851E-05	4.73996E-05	2.80208E-05	0.00000E+00	5.24310E-04	2.25719E-05	1.33436E-05	0.00000E+00	8.09262E-04
PV03	Onramp I-5 Southbound	29	3.26117E-06	1.92787E-06	0.00000E+00	3.39267E-05	4.81685E-05	2.84753E-05	0.00000E+00	5.32815E-04	2.29380E-05	1.35600E-05	0.00000E+00	8.22390E-04
PV04	Offramp I-5 Southbound	32	3.20353E-06	1.89380E-06	0.00000E+00	3.33271E-05	4.73173E-05	2.79721E-05	0.00000E+00	5.23399E-04	2.25326E-05	1.33204E-05	0.00000E+00	8.07856E-04
PV05	Delevan Rd Between I-5 ramps	25	3.29615E-06	1.94855E-06	0.00000E+00	3.42906E-05	4.86852E-05	2.87808E-05	0.00000E+00	5.38531E-04	2.31840E-05	1.37055E-05	0.00000E+00	8.31211E-04
PV06	Delevan Rd West of I-5 for 2,000 ft	47	3.25131E-06	1.92204E-06	0.00000E+00	3.38241E-05	4.80229E-05	2.83892E-05	0.00000E+00	5.31204E-04	2.28686E-05	1.35190E-05	0.00000E+00	8.19903E-04
PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	3.23436E-06	1.91203E-06	0.00000E+00	3.49702E-05	4.77726E-05	2.82413E-05	0.00000E+00	5.47967E-04	2.27495E-05	1.34486E-05	0.00000E+00	8.24931E-04
PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	2.98395E-06	1.76399E-06	0.00000E+00	3.13516E-05	4.40739E-05	2.60547E-05	0.00000E+00	4.90398E-04	2.09881E-05	1.24073E-05	0.00000E+00	6.69139E-04
PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	3.34169E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.23741E-04	0.00000E+00	0.00000E+00	0.00000E+00	7.22136E-04
PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	3.46760E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.43473E-04	0.00000E+00	0.00000E+00	0.00000E+00	7.49343E-04
PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	1.24307E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.95657E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.03179E-04
PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	2.74488E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.29044E-04	0.00000E+00	0.00000E+00	0.00000E+00	7.76643E-04
PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	6.25153E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.03060E-04	0.00000E+00	0.00000E+00	0.00000E+00	6.17239E-04
PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	1.27567E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.96164E-04	0.00000E+00	0.00000E+00	0.00000E+00	9.94739E-05
PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	1.01387E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.57451E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.10045E-05
PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	1.01072E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.56962E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.07526E-05
PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	7.97092E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.22648E-04	0.00000E+00	0.00000E+00	0.00000E+00	6.22157E-05
PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	3.30069E-06	0.00000E+00	0.00000E+00	0.00000E+00	4.87523E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.32160E-05
PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	3.82362E-06	2.26037E-06	0.00000E+00	0.00000E+00	5.64762E-05	3.33865E-05	0.00000E+00	0.00000E+00	2.68941E-05	1.58987E-05	0.00000E+00	0.00000E+00
PV20	Huffmaster Rd End of Alt 1	128	3.85703E-06	2.28012E-06	0.00000E+00	0.00000E+00	5.69697E-05	3.36782E-05	0.00000E+00	0.00000E+00	2.71291E-05	1.60377E-05	0.00000E+00	0.00000E+00
PV21	Huffmaster Rd Begin Alt 2	48	3.87369E-06	0.00000E+00	0.00000E+00	0.00000E+00	5.72157E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.72463E-05	0.00000E+00	0.00000E+00	0.00000E+00
PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	1.34012E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.12279E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.12298E-04	0.00000E+00
PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	1.22141E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.94816E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.04037E-04	0.00000E+00
PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	1.71322E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.72825E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.45369E-04	0.00000E+00
PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	3.19809E-06	1.89058E-06	0.00000E+00	0.00000E+00	4.72368E-05	2.79245E-05	0.00000E+00	0.00000E+00	2.24943E-05	1.32978E-05	0.00000E+00	0.00000E+00

Note: Alt = alternative; CO = carbon monoxide; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; NOx = nitrogen oxide; PM10 = particulate matter 10 microns in diameter or less; Rd = road; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-4b. Maximum Daily (Short-Term) Emission Rates for Modeling Workers—Per Offsite Mobile Volume Source (Common Roads)

Model ID	Description	No. of Vol	PM2.5 T - Short-Term (g/s/vol)				SO2 - Short-Term (g/s/vol)			
			South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir
PV01	Onramp I-5 Northbound	30	6.13852E-06	3.62885E-06	0.00000E+00	1.28413E-04	1.78735E-07	1.05661E-07	0.00000E+00	2.06800E-06
PV02	Offramp I-5 Northbound	35	6.06063E-06	3.58280E-06	0.00000E+00	7.49313E-05	1.76467E-07	1.04320E-07	0.00000E+00	2.04176E-06
PV03	Onramp I-5 Southbound	29	6.15894E-06	3.64092E-06	0.00000E+00	7.61468E-05	1.79330E-07	1.06012E-07	0.00000E+00	2.07488E-06
PV04	Offramp I-5 Southbound	32	6.05009E-06	3.57658E-06	0.00000E+00	7.48010E-05	1.76160E-07	1.04139E-07	0.00000E+00	2.03821E-06
PV05	Delevan Rd Between I-5 ramps	25	6.22500E-06	3.67997E-06	0.00000E+00	7.69635E-05	1.81253E-07	1.07150E-07	0.00000E+00	2.09714E-06
PV06	Delevan Rd West of I-5 for 2,000 ft	47	6.14032E-06	3.62991E-06	0.00000E+00	7.59165E-05	1.78787E-07	1.05692E-07	0.00000E+00	2.06861E-06
PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	6.10832E-06	3.61099E-06	0.00000E+00	7.56598E-05	1.77856E-07	1.05141E-07	0.00000E+00	2.13054E-06
PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	5.63539E-06	3.33142E-06	0.00000E+00	6.98019E-05	1.64085E-07	9.70007E-08	0.00000E+00	1.90450E-06
PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	7.59489E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.03684E-06
PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	7.88104E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.11358E-06
PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	4.71365E-05	0.00000E+00	0.00000E+00	0.00000E+00	7.63640E-07
PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	3.86000E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.66490E-06
PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	1.41916E-06	0.00000E+00	0.00000E+00	0.00000E+00	4.14176E-07
PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	2.28929E-05	0.00000E+00	0.00000E+00	0.00000E+00	7.52565E-07
PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	2.10232E-05	0.00000E+00	0.00000E+00	0.00000E+00	6.08313E-07
PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	2.09579E-05	0.00000E+00	0.00000E+00	0.00000E+00	6.06421E-07
PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	1.51887E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.70863E-07
PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	2.25643E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.81503E-07
PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	7.22118E-06	4.26887E-06	0.00000E+00	0.00000E+00	2.10259E-07	1.24297E-07	0.00000E+00	0.00000E+00
PV20	Huffmaster Rd End of Alt 1	128	7.28428E-06	4.30617E-06	0.00000E+00	0.00000E+00	2.12096E-07	1.25383E-07	0.00000E+00	0.00000E+00
PV21	Huffmaster Rd Begin Alt 2	48	7.31573E-06	0.00000E+00	0.00000E+00	0.00000E+00	2.13012E-07	0.00000E+00	0.00000E+00	0.00000E+00
PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	2.79064E-05	0.00000E+00	0.00000E+00	0.00000E+00	8.31624E-07	0.00000E+00
PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	2.79116E-05	0.00000E+00	0.00000E+00	0.00000E+00	7.66813E-07	0.00000E+00
PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	3.70098E-05	7.01780E-07	0.00000E+00	0.00000E+00	1.07274E-06	0.00000E+00
PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	6.03981E-06	3.57050E-06	0.00000E+00	0.00000E+00	1.75861E-07	1.03962E-07	0.00000E+00	0.00000E+00

Note: Alt = alternative; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; PM2.5 = particulate matter 2.5 microns in diameter or less; Rd = road; SO₂ = sulfur dioxide; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-5a. Maximum Daily (Short-Term) Emission Rates for Modeling Haul Trucks—Per Offsite Mobile Volume Source (Common Roads)

Model ID	Description	No. of Vol	NOx - Short-Term (g/s/vol)				CO - Short-Term (g/s/vol)				PM10 T - Short-Term (g/s/vol)			
			South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir
PV01	Onramp I-5 Northbound	30	0.00000E+00	0.00000E+00	0.00000E+00	5.41185E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.93036E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.24351E-04
PV02	Offramp I-5 Northbound	35	0.00000E+00	0.00000E+00	0.00000E+00	5.34318E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.81705E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.21504E-04
PV03	Onramp I-5 Southbound	29	0.00000E+00	0.00000E+00	0.00000E+00	5.42985E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.96007E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.25097E-04
PV04	Offramp I-5 Southbound	32	0.00000E+00	0.00000E+00	0.00000E+00	5.33389E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.80172E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.21119E-04
PV05	Delevan Rd Between I-5 ramps	25	0.00000E+00	0.00000E+00	0.00000E+00	5.48809E-04	0.00000E+00	0.00000E+00	0.00000E+00	9.05618E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.27512E-04
PV06	Delevan Rd West of I-5 for 2,000 ft	47	0.00000E+00	0.00000E+00	0.00000E+00	5.41343E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.93298E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.24417E-04
PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	0.00000E+00	0.00000E+00	0.00000E+00	5.38522E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.88642E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.23247E-04
PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	0.00000E+00	0.00000E+00	0.00000E+00	4.89282E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.06491E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.88861E-04
PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	5.30516E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.74459E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.04778E-04
PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	5.50505E-04	0.00000E+00	0.00000E+00	0.00000E+00	9.07406E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.12493E-04
PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	2.32311E-04	0.00000E+00	0.00000E+00	0.00000E+00	3.81283E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.73525E-05
PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	3.79707E-04	0.00000E+00	0.00000E+00	0.00000E+00	6.27819E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.20425E-04
PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	1.00335E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.70086E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.89387E-04
PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	1.75860E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.88171E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.07180E-05
PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	1.74868E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.86546E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.06012E-05
PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	1.74324E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.85655E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.05371E-05
PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	1.71641E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.81708E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.02092E-05
PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV20	Huffmaster Rd End of Alt 1	128	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV21	Huffmaster Rd Begin Alt 2	48	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	3.48174E-04	0.00000E+00	0.00000E+00	0.00000E+00	5.75640E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.08517E-05	0.00000E+00
PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	3.49882E-04	0.00000E+00	0.00000E+00	0.00000E+00	5.78463E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.10520E-05	0.00000E+00
PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	4.63931E-04	0.00000E+00	0.00000E+00	0.00000E+00	7.67022E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.44336E-05	0.00000E+00
PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

Note: Alt = alternative; CO = carbon monoxide; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; NOx = nitrogen oxide; PM10 = particulate matter 10 microns in diameter or less; Rd = road; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-5b. Maximum Daily (Short-Term) Emission Rates for Modeling Haul Trucks—Per Offsite Mobile Volume Source (Common Roads)

Model ID	Description	No. of Vol	PM2.5 T - Short-Term (g/s/vol)				SO2 - Short-Term (g/s/vol)			
			South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir
PV01	Onramp I-5 Northbound	30	0.00000E+00	0.00000E+00	0.00000E+00	3.50930E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.53594E-06
PV02	Offramp I-5 Northbound	35	0.00000E+00	0.00000E+00	0.00000E+00	4.47684E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.50376E-06
PV03	Onramp I-5 Southbound	29	0.00000E+00	0.00000E+00	0.00000E+00	4.54946E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.54437E-06
PV04	Offramp I-5 Southbound	32	0.00000E+00	0.00000E+00	0.00000E+00	4.46906E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.49941E-06
PV05	Delevan Rd Between I-5 ramps	25	0.00000E+00	0.00000E+00	0.00000E+00	4.59826E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.57167E-06
PV06	Delevan Rd West of I-5 for 2,000 ft	47	0.00000E+00	0.00000E+00	0.00000E+00	4.53570E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.53668E-06
PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	0.00000E+00	0.00000E+00	0.00000E+00	4.51206E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.52346E-06
PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	0.00000E+00	0.00000E+00	0.00000E+00	4.16272E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.29403E-06
PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	4.51354E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.48736E-06
PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	4.68360E-04	0.00000E+00	0.00000E+00	0.00000E+00	2.58107E-06
PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	3.22559E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.08929E-06
PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	1.75003E-04	0.00000E+00	0.00000E+00	0.00000E+00	1.78018E-06
PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	4.47702E-06	0.00000E+00	0.00000E+00	0.00000E+00	4.69619E-07
PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	1.06967E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.24964E-07
PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	1.06364E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.20312E-07
PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	1.06033E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.17761E-07
PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	1.03224E-04	0.00000E+00	0.00000E+00	0.00000E+00	8.04812E-07
PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV20	Huffmaster Rd End of Alt 1	128	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV21	Huffmaster Rd Begin Alt 2	48	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	1.22702E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.62661E-06	0.00000E+00
PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	1.23304E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.63459E-06	0.00000E+00
PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	1.63497E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.16741E-06	0.00000E+00
PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

Note: Alt = alternative; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; PM2.5 = particulate matter 2.5 microns in diameter or less; Rd = road; SO₂ = sulfur dioxide; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-6. Maximum Annual Emission Rates for Modeling—Per Onsite Volume Source

Project Component	Type	Vol Srcs	Daily Operation Hrs	Days Per Week	ONSITE (g/s/vol) - MAX								
					ROG	NOX	PM10	PM2.5	PM10 D	PM2.5 D	PM10T	PM2.5T	SO2
GG_DAM	Onsite	3931	12	5	1.48E-04	1.33218E-03	2.14698E-05	2.13554E-05	7.46221E-03	7.49108E-04	7.48368E-03	7.70463E-04	1.24654E-05
SITES_DAM	Onsite	3026	10	5	1.98E-04	1.62781E-03	2.78441E-05	2.76728E-05	1.10201E-02	1.10574E-03	1.10479E-02	1.13341E-03	3.48127E-05
FUNKS_TRR1	Onsite	3218	8	5	6.74E-05	5.68902E-04	1.87319E-05	1.74201E-05	1.70566E-04	3.35057E-05	1.88354E-04	5.00468E-05	2.79992E-06
TRR_PLANT WEST	Onsite	636	8	5	2.90E-04	3.56213E-03	1.09118E-04	1.00942E-04	8.55018E-03	1.68279E-03	8.65930E-03	1.78373E-03	1.06626E-05
TRR_PLANT EAST	Onsite	636	8	5	6.59E-05	6.84401E-04	2.26168E-05	2.09514E-05	1.62541E-03	3.11271E-04	1.64803E-03	3.32222E-04	2.59072E-06
DUNNIGAN_ALT1	Onsite	391	8	5	1.46E-04	1.17297E-03	3.92356E-05	3.65140E-05	1.34700E-04	1.56986E-05	1.73936E-04	5.22125E-05	6.19606E-06
DUNNIGAN	Onsite	834	8	5	1.16E-04	8.79322E-04	3.12952E-05	2.91180E-05	6.31508E-05	7.35988E-06	8.15454E-05	3.31378E-05	4.87739E-06
HUFFMASTER & South Rd	Onsite	176	12	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
HUFFMASTER	Onsite	128	12	5	2.33E-05	1.37634E-04	3.00409E-06	2.99100E-06	1.10926E-03	1.12837E-04	1.11227E-03	1.15828E-04	2.00912E-06
TRR_BATCH	Onsite	11	12	5	6.06E-05	3.56982E-04	7.79171E-06	7.75776E-06	2.87710E-03	2.92665E-04	2.88489E-03	3.00423E-04	5.21105E-06
FUNKS_CLSM_1	Onsite	27	12	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	4.69761E-03	6.98094E-04	4.69761E-03	6.98094E-04	0.00000E+00
FUNKS ASPHALT	Onsite	1	12	5	4.94E-02	5.61491E-02	-	-	-	-	-	-	1.12298E-02
FUNKS ASPHALT	Onsite	6	12	5	-	-	0.00000E+00	0.00000E+00	9.27992E-04	5.00452E-04	9.27992E-04	5.00452E-04	-
FUNKS_BATCH	Onsite	24	12	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.67996E-04	9.93288E-05	6.67996E-04	9.93288E-05	0.00000E+00
GG_DAM_BATCH	Onsite	35	12	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.82734E-03	2.71970E-04	1.82734E-03	2.71970E-04	0.00000E+00
SITES_DAM_BATCH	Onsite	28	12	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	2.28418E-03	3.39962E-04	2.28418E-03	3.39962E-04	0.00000E+00
GG_ROCK_QUARRY	Onsite	1596	12	5	0.00E+00	8.59809E-05	0.00000E+00	0.00000E+00	4.39239E-05	2.53407E-06	4.39239E-05	2.53407E-06	4.23551E-05
DUNNIGAN_CLSM ALT1	Onsite	16	8	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.43185E-03	9.55813E-04	2.63196E-04	3.91126E-05	0.00000E+00
DUNNIGAN_CLSM ALT2	Onsite	16	8	5	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.88690E-02	2.80404E-03	3.61994E-04	5.37946E-05	0.00000E+00
GCID_HEADGATE	Onsite	8	8	5	8.08E-05	7.79460E-04	2.52581E-05	2.34545E-05	8.43331E-05	1.70213E-05	1.09591E-04	4.04757E-05	3.05577E-06
GCID_WW	Onsite	75	8	5	7.38E-05	5.94362E-04	2.19798E-05	2.04251E-05	2.91620E-05	9.80168E-06	5.11417E-05	3.02268E-05	2.95712E-06
GCID_A	Onsite	11	8	5	1.22E-04	9.26466E-04	3.35189E-05	3.11807E-05	6.86046E-05	2.36623E-05	1.02124E-04	5.48430E-05	5.11790E-06
GCID_E	Onsite	9	8	5	2.04E-05	2.36065E-04	7.81144E-06	7.22382E-06	7.22027E-04	1.65684E-04	7.29839E-04	1.72908E-04	7.66035E-07
GCID_F-K	Onsite	27	8	5	6.81E-06	7.86884E-05	2.60381E-06	2.40794E-06	2.40676E-04	5.52279E-05	2.43280E-04	5.76358E-05	2.55345E-07

Note: D = dust; g/s/vol = grams per second per volume source; Hrs = hours; NO_x = nitrogen oxide; PM2.5 = particulate matter 2.5 microns in diameter or less; PM10 = particulate matter 10 microns in diameter or less; ROG = reactive organic gas; SO₂ = sulfur dioxide; T = total.

Table 20C3-7. Maximum Annual Emission Rates for Modeling—Per Offsite Mobile Volume Source

Project Component	Type	Vol Srcs	Daily Operation Hrs	Days Per Week	Model SRCGROUP	Modeling Length (m)	Trip Dist (mi)	Trip Dist (m)	% Emissions in Modeling Domain	Roads (g/s/vol) - MAX					
										ROG	NOX	CO	PM10T	PM2.5T	SO2
DUNNIGAN	Hauling	281	8	5	TR	4115.5	25	40233.6	10.23%	1.41E-06	1.16918E-04	1.98855E-05	1.32522E-04	1.59414E-05	5.49192E-07
DUNNIGAN	Worker	281	8	5	PV	4115.5	25	40233.6	10.23%	2.92E-06	5.74191E-06	9.28926E-05	5.41825E-04	6.23302E-05	3.69126E-07
DUNNIGAN_Alt1	Hauling	281	8	5	TR	4115.5	25	40233.6	10.23%	8.16E-07	6.80193E-05	1.15254E-05	1.26702E-04	1.42163E-05	3.27691E-07
DUNNIGAN_Alt1	Worker	281	8	5	PV	4115.5	25	40233.6	10.23%	2.14E-06	4.28097E-06	6.62982E-05	3.63345E-04	4.18036E-05	2.55825E-07
RED_BLUFF	Hauling	483	12	5	TR	7201.8	500	804672	0.89%	2.00E-10	2.05171E-08	2.79009E-09	5.20961E-09	1.04490E-09	1.02550E-10
RED_BLUFF	Worker	483	12	5	PV	7201.8	500	804672	0.89%	2.72E-09	5.34969E-09	8.65472E-08	5.04813E-07	5.80725E-08	3.43911E-10
GCID_HEADGATE	Hauling	730	8	5	TR	4908.6	20	32186.88	15.25%	2.11E-09	1.85991E-07	3.02307E-08	4.50877E-07	4.94467E-08	8.18780E-10
GCID_HEADGATE	Worker	730	8	5	PV	4908.6	20	32186.88	15.25%	1.02E-07	2.00105E-07	3.23731E-06	1.88826E-05	2.17220E-06	1.28640E-08
GCID_WW	Hauling	259	8	5	TR	2783.2	20	32186.88	8.65%	4.63E-08	3.77091E-06	6.58274E-07	9.00700E-06	9.83838E-07	1.70064E-08
GCID_WW	Worker	259	8	5	PV	2783.2	20	32186.88	8.65%	3.17E-07	6.19339E-07	1.01945E-05	6.09116E-05	7.00668E-06	4.09375E-08
GCID_A	Hauling	213	8	5	TR	2318	20	32186.88	7.20%	1.59E-08	1.27296E-06	2.25142E-07	3.04377E-06	3.32215E-07	5.82483E-09
GCID_A	Worker	213	8	5	PV	2318	20	32186.88	7.20%	8.25E-08	1.61930E-07	2.61971E-06	1.52803E-05	1.75780E-06	1.04099E-08
GCID_E	Hauling	178	8	5	TR	2093.9	20	32186.88	6.51%	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
GCID_E	Worker	178	8	5	PV	2093.9	20	32186.88	6.51%	2.97E-08	5.83457E-08	9.43917E-07	5.50569E-06	6.33360E-07	3.75083E-09
GCID_F-K	Hauling	119	8	5	TR	1464.5	20	32186.88	4.55%	0.00E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
GCID_F-K	Worker	119	8	5	PV	1464.5	20	32186.88	4.55%	3.11E-08	6.10401E-08	9.87507E-07	5.75994E-06	6.62609E-07	3.92404E-09

Note: CO = carbon monoxide; Dist = distance; g/s/vol = grams per second per volume source; Hrs = hours; m = meter; mi = mile; NOx = nitrogen oxide; PM2.5 = particulate matter 2.5 microns in diameter or less; PM10 = particulate matter 10 microns in diameter or less; ROG = reactive organic gas; SO₂ = sulfur dioxide; Srcs = sources; T = total; Vol. = volume.

Table 20C3-8a. Maximum Annual Emission Rates for Modeling Workers—Per Offsite Mobile Volume Source (Common Roads)

Road Segment Name	Description	No. of Vol	MAX YEAR (g/s/vol) - within Modeling Domain				MAX YEAR (g/s/vol) - within Modeling Domain				MAX YEAR (g/s/vol) - within Modeling Domain				
			NOX	NOX	NOX	NOX	CO	CO	CO	CO	PM10T	PM10T	PM10T	PM10T	
			South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	
TR01	PV01	Onramp I-5 Northbound	30	3.11244E-07	1.83260E-07	0.00000E+00	1.45379E-05	4.72846E-06	2.83810E-06	0.00000E+00	2.36489E-04	2.35181E-06	1.45161E-06	0.00000E+00	5.33894E-04
TR02	PV02	Offramp I-5 Northbound	35	3.07295E-07	1.80935E-07	0.00000E+00	1.43534E-05	4.66846E-06	2.80209E-06	0.00000E+00	2.33488E-04	2.32197E-06	1.43319E-06	0.00000E+00	5.27119E-04
TR03	PV03	Onramp I-5 Southbound	29	3.12279E-07	1.83870E-07	0.00000E+00	1.45862E-05	4.74419E-06	2.84754E-06	0.00000E+00	2.37276E-04	2.35963E-06	1.45644E-06	0.00000E+00	5.35670E-04
TR04	PV04	Offramp I-5 Southbound	32	3.06761E-07	1.80621E-07	0.00000E+00	1.43284E-05	4.66035E-06	2.79722E-06	0.00000E+00	2.33082E-04	2.31793E-06	1.43070E-06	0.00000E+00	5.26203E-04
TR05	PV05	Delevan Rd Between I-5 ramps	25	3.15629E-07	1.85842E-07	0.00000E+00	1.47427E-05	4.79508E-06	2.87809E-06	0.00000E+00	2.39821E-04	2.38494E-06	1.47206E-06	0.00000E+00	5.41416E-04
TR06	PV06	Delevan Rd West of I-5 for 2,000 ft	47	3.11335E-07	1.83314E-07	0.00000E+00	1.45421E-05	4.72985E-06	2.83893E-06	0.00000E+00	2.36558E-04	2.35250E-06	1.45204E-06	0.00000E+00	5.34050E-04
TR07	PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	3.09713E-07	1.82359E-07	0.00000E+00	1.45394E-05	4.70520E-06	2.82414E-06	0.00000E+00	2.36405E-04	2.34024E-06	1.44447E-06	0.00000E+00	5.31781E-04
TR08	PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	2.85733E-07	1.68240E-07	0.00000E+00	1.30569E-05	4.34090E-06	2.60548E-06	0.00000E+00	2.12329E-04	2.15905E-06	1.33263E-06	0.00000E+00	4.56939E-04
TR09	PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	1.42791E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.32163E-04	0.00000E+00	0.00000E+00	0.00000E+00	4.96479E-04
TR10	PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	1.48171E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.40910E-04	0.00000E+00	0.00000E+00	0.00000E+00	5.15184E-04
TR11	PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	1.38055E-06	0.00000E+00	0.00000E+00	0.00000E+00	2.32672E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.34052E-05
TR12	PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	1.62352E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.62807E-04	0.00000E+00	0.00000E+00	0.00000E+00	5.99031E-04
TR13	PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	4.96818E-06	0.00000E+00	0.00000E+00	0.00000E+00	8.30526E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.06925E-04
TR14	PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	6.94753E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.10937E-04	0.00000E+00	0.00000E+00	0.00000E+00	5.99197E-05
TR15	PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	6.19952E-06	0.00000E+00	0.00000E+00	0.00000E+00	9.93337E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.39671E-05
TR16	PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	6.18025E-06	0.00000E+00	0.00000E+00	0.00000E+00	9.90248E-05	0.00000E+00	0.00000E+00	0.00000E+00	5.37993E-05
TR17	PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	5.26050E-06	0.00000E+00	0.00000E+00	0.00000E+00	8.35719E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.49393E-05
TR18	PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	9.18911E-07	0.00000E+00	0.00000E+00	0.00000E+00	1.42309E-05	0.00000E+00	0.00000E+00	0.00000E+00	7.27873E-06
TR19	PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	3.66138E-07	2.15582E-07	0.00000E+00	0.00000E+00	5.56243E-06	3.33866E-06	0.00000E+00	0.00000E+00	2.76660E-06	1.70764E-06	0.00000E+00	0.00000E+00
TR20	PV20	Huffmaster Rd End of Alt 1	128	3.69338E-07	2.17466E-07	0.00000E+00	0.00000E+00	5.61103E-06	3.36783E-06	0.00000E+00	0.00000E+00	2.79077E-06	1.72256E-06	0.00000E+00	0.00000E+00
TR21	PV21	Huffmaster Rd Begin Alt 2	48	3.70933E-07	0.00000E+00	0.00000E+00	0.00000E+00	5.63526E-06	0.00000E+00	0.00000E+00	0.00000E+00	2.80282E-06	0.00000E+00	0.00000E+00	0.00000E+00
TR22	PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	2.82239E-06	0.00000E+00	0.00000E+00	0.00000E+00	4.61299E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.54736E-05	0.00000E+00
TR23	PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	2.76701E-06	0.00000E+00	0.00000E+00	0.00000E+00	4.53336E-05	0.00000E+00	0.00000E+00	0.00000E+00	2.51117E-05	0.00000E+00
TR24	PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	3.91376E-06	0.00000E+00	0.00000E+00	0.00000E+00	6.39021E-05	0.00000E+00	0.00000E+00	0.00000E+00	3.52363E-05	0.00000E+00
TR25	PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	3.06239E-07	1.80314E-07	0.00000E+00	0.00000E+00	4.65243E-06	2.79247E-06	0.00000E+00	0.00000E+00	2.31399E-06	1.42827E-06	0.00000E+00	0.00000E+00

Note: Alt = alternative; CO = carbon monoxide; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; NO_x = nitrogen oxide; PM10 = particulate matter 10 microns in diameter or less; Rd = road; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-8b. Maximum Annual Emission Rates for Modeling Workers—Per Offsite Mobile Volume Source (Common Roads)

Road Segment Name		Description	No. of Vol	MAX YEAR (g/s/vol) - within Modeling Domain				MAX YEAR (g/s/vol) - within Modeling Domain			
				PM2.5T	PM2.5T	PM2.5T	PM2.5T	SO2	SO2	SO2	SO2
				South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir	South Road & Huffmaster Road Realignment	Huffmaster Road Realignment	Saddle Dams	Dams/Reservoir
TR01	PV01	Onramp I-5 Northbound	30	6.31288E-07	3.89582E-07	0.00000E+00	7.50637E-05	1.79891E-08	1.09514E-08	0.00000E+00	9.44744E-07
TR02	PV02	Offramp I-5 Northbound	35	6.23278E-07	3.84639E-07	0.00000E+00	7.41113E-05	1.77609E-08	1.08124E-08	0.00000E+00	9.32757E-07
TR03	PV03	Onramp I-5 Southbound	29	6.33388E-07	3.90878E-07	0.00000E+00	7.53135E-05	1.80490E-08	1.09878E-08	0.00000E+00	9.47887E-07
TR04	PV04	Offramp I-5 Southbound	32	6.22195E-07	3.83970E-07	0.00000E+00	7.39825E-05	1.77300E-08	1.07936E-08	0.00000E+00	9.31136E-07
TR05	PV05	Delevan Rd Between I-5 ramps	25	6.40182E-07	3.95071E-07	0.00000E+00	7.61213E-05	1.82426E-08	1.11057E-08	0.00000E+00	9.58055E-07
TR06	PV06	Delevan Rd West of I-5 for 2,000 ft	47	6.31473E-07	3.89697E-07	0.00000E+00	7.50858E-05	1.79944E-08	1.09546E-08	0.00000E+00	9.45021E-07
TR07	PV07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	6.28182E-07	3.87666E-07	0.00000E+00	7.48324E-05	1.79006E-08	1.08975E-08	0.00000E+00	9.44114E-07
TR08	PV08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	5.79546E-07	3.57651E-07	0.00000E+00	6.51654E-05	1.65147E-08	1.00538E-08	0.00000E+00	8.48080E-07
TR09	PV09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	0.00000E+00	0.00000E+00	7.09337E-05	0.00000E+00	0.00000E+00	0.00000E+00	9.27183E-07
TR10	PV10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	0.00000E+00	0.00000E+00	7.36062E-05	0.00000E+00	0.00000E+00	0.00000E+00	9.62116E-07
TR11	PV11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	0.00000E+00	0.00000E+00	3.59363E-06	0.00000E+00	0.00000E+00	0.00000E+00	9.46443E-08
TR12	PV12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	0.00000E+00	0.00000E+00	8.38358E-05	0.00000E+00	0.00000E+00	0.00000E+00	1.04702E-06
TR13	PV13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	0.00000E+00	0.00000E+00	5.83079E-05	0.00000E+00	0.00000E+00	0.00000E+00	3.36473E-07
TR14	PV14	Lodoga Rd - Part 1	41	0.00000E+00	0.00000E+00	0.00000E+00	1.60736E-05	0.00000E+00	0.00000E+00	0.00000E+00	4.38795E-07
TR15	PV15	Lodoga Rd - Part 2	121	0.00000E+00	0.00000E+00	0.00000E+00	1.44761E-05	0.00000E+00	0.00000E+00	0.00000E+00	3.93962E-07
TR16	PV16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	0.00000E+00	0.00000E+00	1.44311E-05	0.00000E+00	0.00000E+00	0.00000E+00	3.92737E-07
TR17	PV17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	0.00000E+00	0.00000E+00	1.20558E-05	0.00000E+00	0.00000E+00	0.00000E+00	3.29974E-07
TR18	PV18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	1.95346E-06	0.00000E+00	0.00000E+00	0.00000E+00	5.49129E-08
TR19	PV19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	7.42629E-07	4.58294E-07	0.00000E+00	0.00000E+00	2.11619E-08	1.28829E-08	0.00000E+00	0.00000E+00
TR20	PV20	Huffmaster Rd End of Alt 1	128	7.49118E-07	4.62298E-07	0.00000E+00	0.00000E+00	2.13468E-08	1.29955E-08	0.00000E+00	0.00000E+00
TR21	PV21	Huffmaster Rd Begin Alt 2	48	7.52353E-07	0.00000E+00	0.00000E+00	0.00000E+00	2.14390E-08	0.00000E+00	0.00000E+00	0.00000E+00
TR22	PV22	2000 ft along Route 68 from Road D	52	0.00000E+00	0.00000E+00	6.83235E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.84435E-07	0.00000E+00
TR23	PV23	Road D South of Route 68 for 2,000 ft	50	0.00000E+00	0.00000E+00	6.73512E-06	0.00000E+00	0.00000E+00	0.00000E+00	1.81533E-07	0.00000E+00
TR24	PV24	Country Rd Route 69	87	0.00000E+00	0.00000E+00	9.45096E-06	0.00000E+00	0.00000E+00	0.00000E+00	2.55336E-07	0.00000E+00
TR25	PV25	Maxwell Sites Rd West of Mills Orchard Rd	36	6.21137E-07	3.83318E-07	0.00000E+00	0.00000E+00	1.76999E-08	1.07753E-08	0.00000E+00	0.00000E+00

Note: Alt = alternative; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; PM2.5 = particulate matter 2.5 microns in diameter or less; Rd = road; SO₂ = sulfur dioxide; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-9. Maximum Annual Emission Rates for Modeling Haul Trucks—Per Offsite Mobile Volume Source (Common Roads)

Model ID	Description	No. of Vol	MAX YEAR (g/s/vol) - within Modeling Domain		MAX YEAR (g/s/vol) - within Modeling Domain		MAX YEAR (g/s/vol) - within Modeling Domain		MAX YEAR (g/s/vol) - within Modeling Domain	
			NOX	NOX	PM10T	PM10T	PM2.5T	PM2.5T	SO2	SO2
			Saddle Dams	Dams/ Reservoir	Saddle Dams	Dams/ Reservoir	Saddle Dams	Dams/ Reservoir	Saddle Dams	Dams/ Reservoir
TR01	Onramp I-5 Northbound	30	0.00000E+00	3.49059E-04	0.00000E+00	1.44763E-04	0.00000E+00	1.25148E-06	0.00000E+00	1.63309E-06
TR02	Offramp I-5 Northbound	35	0.00000E+00	3.44630E-04	0.00000E+00	1.42926E-04	0.00000E+00	1.23560E-06	0.00000E+00	1.61237E-06
TR03	Onramp I-5 Southbound	29	0.00000E+00	3.50220E-04	0.00000E+00	1.45245E-04	0.00000E+00	1.25564E-06	0.00000E+00	1.63853E-06
TR04	Offramp I-5 Southbound	32	0.00000E+00	3.44031E-04	0.00000E+00	1.42678E-04	0.00000E+00	1.23345E-06	0.00000E+00	1.60957E-06
TR05	Delevan Rd Between I-5 ramps	25	0.00000E+00	3.53977E-04	0.00000E+00	1.46803E-04	0.00000E+00	1.26911E-06	0.00000E+00	1.65610E-06
TR06	Delevan Rd West of I-5 for 2,000 ft	47	0.00000E+00	3.49162E-04	0.00000E+00	1.44806E-04	0.00000E+00	1.25184E-06	0.00000E+00	1.63357E-06
TR07	McDermott Rd Extending 2,000 ft North from TRR Access Rd	47	0.00000E+00	3.47342E-04	0.00000E+00	1.44051E-04	0.00000E+00	1.24532E-06	0.00000E+00	1.62506E-06
TR08	McDermott Rd 2,000 ft South of TRR Plant Site and North of Equipment Rd	115	0.00000E+00	3.19102E-04	0.00000E+00	1.29709E-04	0.00000E+00	1.14890E-06	0.00000E+00	1.49307E-06
TR09	Maxwell Sites Rd West of Mills Orchard Rd for 4,000 ft	94	0.00000E+00	3.45995E-04	0.00000E+00	1.40641E-04	0.00000E+00	1.24573E-06	0.00000E+00	1.61891E-06
TR10	Maxwell Sites Rd East of Funks Access Rd Connecting with TR09	245	0.00000E+00	3.59031E-04	0.00000E+00	1.45940E-04	0.00000E+00	1.29266E-06	0.00000E+00	1.67990E-06
TR11	Maxwell Sites Rd West of Funks Access Rd and East of Sites Dam	97	0.00000E+00	8.04411E-05	0.00000E+00	9.56761E-06	0.00000E+00	8.06803E-07	0.00000E+00	3.76795E-07
TR12	Funks Access Rd North of Maxwell Sites Rd to 2,000 ft South of Funks	111	0.00000E+00	3.31869E-04	0.00000E+00	1.62312E-04	0.00000E+00	5.81909E-07	0.00000E+00	1.55232E-06
TR13	Funks Access Rd from Funks and 2,000 ft South	31	0.00000E+00	7.12815E-05	0.00000E+00	1.32626E-04	0.00000E+00	5.87465E-09	0.00000E+00	3.31571E-07
TR14	Lodoga Rd - Part 1	41	0.00000E+00	1.63887E-04	0.00000E+00	1.94945E-05	0.00000E+00	3.61272E-07	0.00000E+00	7.67731E-07
TR15	Lodoga Rd - Part 2	121	0.00000E+00	1.62963E-04	0.00000E+00	1.93846E-05	0.00000E+00	3.59235E-07	0.00000E+00	7.63402E-07
TR16	Access Rd from Lodoga Rd to GG Dam Onsite	177	0.00000E+00	1.62456E-04	0.00000E+00	1.93243E-05	0.00000E+00	3.58118E-07	0.00000E+00	7.61028E-07
TR17	Access Rd from GG Dam to GG Rock Processing/Quarry 2	267	0.00000E+00	1.62913E-04	0.00000E+00	1.93786E-05	0.00000E+00	3.59082E-07	0.00000E+00	7.63167E-07
TR18	Lodoga Bridge	245	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
TR19	Huffmaster Rd West of Maxwell Sites Rd for 2,000 ft	41	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
TR20	Huffmaster Rd End of Alt 1	128	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
TR21	Huffmaster Rd Begin Alt 2	48	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
TR22	2000 ft along Route 68 from Road D	52	6.30263E-05	0.00000E+00	7.47215E-06	0.00000E+00	2.23943E-06	0.00000E+00	2.94265E-07	0.00000E+00
TR23	Road D South of Route 68 for 2,000 ft	50	6.33354E-05	0.00000E+00	7.50879E-06	0.00000E+00	2.25041E-06	0.00000E+00	2.95707E-07	0.00000E+00
TR24	Country Rd Route 69	87	8.39805E-05	0.00000E+00	9.95640E-06	0.00000E+00	2.98397E-06	0.00000E+00	3.92098E-07	0.00000E+00
TR25	Maxwell Sites Rd West of Mills Orchard Rd	36	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

Note: Truck emissions are accounted for in onsite emissions for South Road and Huffmaster Road.

Alt = alternative; ft = feet; GG = Golden Gate; g/s/vol = grams per second per volume source; I- = Interstate; No. = number; NO_x = nitrogen oxide; PM2.5 = particulate matter 2.5 microns in diameter or less; PM10 = particulate matter 10 microns in diameter or less; Rd = road; SO₂ = sulfur dioxide; T = total; TRR = Terminal Regulating Reservoir; Vol = volume sources.

Table 20C3-10. Toxic Air Contaminant Emission Rates for Health Risk Assessment Modeling

Project Component	TAC	lb/yr	lb/hr	Project Component	TAC	lb/yr	lb/hr	Project Component	TAC	lb/yr	lb/hr
TRR Batch Plant	Arsenic	2.05E-01	6.56E-05	Golden Gate Dam Batch Plant	Arsenic	2.69E-02	8.64E-06	Dunnigan Pipelines Batch Plant (Alt 1)	Arsenic	4.58E-02	1.47E-05
	Beryllium	3.24E-02	1.04E-05		Beryllium	4.26E-03	1.36E-06		Beryllium	7.24E-03	2.32E-06
	Cadmium	1.13E-01	3.63E-05		Cadmium	1.49E-02	4.77E-06		Cadmium	2.53E-02	8.11E-06
	Lead	4.48E-01	1.43E-04		Lead	5.89E-02	1.89E-05		Lead	1.00E-01	3.21E-05
	Manganese	5.83E+00	1.87E-03		Manganese	7.67E-01	2.46E-04		Manganese	1.30E+00	4.18E-04
	Nickel	1.42E+00	4.56E-04		Nickel	1.87E-01	6.01E-05		Nickel	3.19E-01	1.02E-04
	Selenium	3.41E-02	1.09E-05		Selenium	4.49E-03	1.44E-06		Selenium	7.63E-03	2.44E-06
Funks CLSM	Arsenic	1.08E-01	3.46E-05	Sites Dam Batch Plant	Arsenic	2.69E-02	8.64E-06				
	Beryllium	1.70E-02	5.46E-06		Beryllium	4.26E-03	1.36E-06				
	Cadmium	5.95E-02	1.91E-05		Cadmium	1.49E-02	4.77E-06				
	Lead	2.36E-01	7.55E-05		Lead	5.89E-02	1.89E-05				
	Manganese	3.07E+00	9.84E-04		Manganese	7.67E-01	2.46E-04				
	Nickel	7.50E-01	2.40E-04		Nickel	1.87E-01	6.01E-05				
	Selenium	1.79E-02	5.75E-06		Selenium	4.49E-03	1.44E-06				
Funks Batch Plant	Arsenic	7.55E-03	2.42E-06	Dunnigan Pipelines Batch Plant (Alt 2)	Arsenic	1.15E-01	3.67E-05				
	Beryllium	1.19E-03	3.82E-07		Beryllium	1.81E-02	5.80E-06				
	Cadmium	2.18E-03	7.00E-07		Cadmium	6.33E-02	2.03E-05				
	Lead	1.65E-02	5.29E-06		Lead	2.50E-01	8.02E-05				
	Manganese	2.15E-01	6.89E-05		Manganese	3.26E+00	1.05E-03				
	Nickel	5.25E-02	1.68E-05		Nickel	7.96E-01	2.55E-04				
	Selenium	1.26E-03	4.03E-07		Selenium	1.91E-02	6.11E-06				

Note: Alt = alternative; CLSM = controlled low strength material; hr = hour; lb = pound; TAC = toxic air contaminant; TRR = Terminal Regulating Reservoir; yr = year.

Table 20C3-11. HARP Emission Input File—Dams and Reservoirs

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
T_BATCH	1	9901	DieselExhPM	0.00E+00	0.00E+00
F_CLSM	2	9901	DieselExhPM	0.00E+00	0.00E+00
F_ASPLT	3	9901	DieselExhPM	0.00E+00	0.00E+00
F_BATCH	4	9901	DieselExhPM	0.00E+00	0.00E+00
G_BATCH	5	9901	DieselExhPM	0.00E+00	0.00E+00
S_BATCH	6	9901	DieselExhPM	0.00E+00	0.00E+00
F_CONST	7	9901	DieselExhPM	9.25E+02	0.00E+00
GGCONST	8	9901	DieselExhPM	2.08E+03	0.00E+00
R_CONST	9	9901	DieselExhPM	0.00E+00	0.00E+00
S_CONST	10	9901	DieselExhPM	1.73E+03	0.00E+00
T_CONST	11	9901	DieselExhPM	1.06E+03	0.00E+00
PV01	12	9901	DieselExhPM	3.45E-01	0.00E+00
PV02	13	9901	DieselExhPM	3.98E-01	0.00E+00
PV03	14	9901	DieselExhPM	3.35E-01	0.00E+00
PV04	15	9901	DieselExhPM	3.63E-01	0.00E+00
PV05	16	9901	DieselExhPM	2.92E-01	0.00E+00
PV06	17	9901	DieselExhPM	5.41E-01	0.00E+00
PV07	18	9901	DieselExhPM	5.40E-01	0.00E+00
PV08	19	9901	DieselExhPM	1.19E+00	0.00E+00
PV09	20	9901	DieselExhPM	1.06E+00	0.00E+00
PV10	21	9901	DieselExhPM	2.87E+00	0.00E+00
PV11	22	9901	DieselExhPM	1.09E-01	0.00E+00
PV12	23	9901	DieselExhPM	1.42E+00	0.00E+00
PV13	24	9901	DieselExhPM	1.26E-01	0.00E+00
PV14	25	9901	DieselExhPM	2.21E-01	0.00E+00
PV15	26	9901	DieselExhPM	5.85E-01	0.00E+00
PV16	27	9901	DieselExhPM	8.53E-01	0.00E+00
PV17	28	9901	DieselExhPM	1.09E+00	0.00E+00
PV18	29	9901	DieselExhPM	1.68E-01	0.00E+00
TR01	30	9901	DieselExhPM	1.07E+00	0.00E+00
TR02	31	9901	DieselExhPM	1.23E+00	0.00E+00
TR03	32	9901	DieselExhPM	1.03E+00	0.00E+00
TR04	33	9901	DieselExhPM	1.12E+00	0.00E+00
TR05	34	9901	DieselExhPM	9.01E-01	0.00E+00
TR06	35	9901	DieselExhPM	1.67E+00	0.00E+00
TR07	36	9901	DieselExhPM	1.66E+00	0.00E+00
TR08	37	9901	DieselExhPM	3.74E+00	0.00E+00
TR09	38	9901	DieselExhPM	3.31E+00	0.00E+00
TR10	39	9901	DieselExhPM	8.96E+00	0.00E+00

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
TR11	40	9901	DieselExhPM	7.96E-01	0.00E+00
TR12	41	9901	DieselExhPM	3.75E+00	0.00E+00
TR13	42	9901	DieselExhPM	2.24E-01	0.00E+00
TR14	43	9901	DieselExhPM	6.85E-01	0.00E+00
TR15	44	9901	DieselExhPM	2.01E+00	0.00E+00
TR16	45	9901	DieselExhPM	2.93E+00	0.00E+00
TR17	46	9901	DieselExhPM	4.44E+00	0.00E+00
TR18	47	9901	DieselExhPM	0.00E+00	0.00E+00
T_BATCH	1	7440382	Arsenic	2.05E-01	6.56E-05
T_BATCH	1	7440417	Beryllium	3.24E-02	1.04E-05
T_BATCH	1	7440439	Cadmium	1.13E-01	3.63E-05
T_BATCH	1	7439921	Lead	4.48E-01	1.43E-04
T_BATCH	1	7439965	Manganese	5.83E+00	1.87E-03
T_BATCH	1	7440020	Nickel	1.42E+00	4.56E-04
T_BATCH	1	7782492	Selenium	3.41E-02	1.09E-05
F_CLSM	2	7440382	Arsenic	1.08E-01	3.46E-05
F_CLSM	2	7440417	Beryllium	1.70E-02	5.46E-06
F_CLSM	2	7440439	Cadmium	5.95E-02	1.91E-05
F_CLSM	2	7439921	Lead	2.36E-01	7.55E-05
F_CLSM	2	7439965	Manganese	3.07E+00	9.84E-04
F_CLSM	2	7440020	Nickel	7.50E-01	2.40E-04
F_CLSM	2	7782492	Selenium	1.79E-02	5.75E-06
F_BATCH	4	7440382	Arsenic	7.55E-03	2.42E-06
F_BATCH	4	7440417	Beryllium	1.19E-03	3.82E-07
F_BATCH	4	7440439	Cadmium	2.18E-03	7.00E-07
F_BATCH	4	7439921	Lead	1.65E-02	5.29E-06
F_BATCH	4	7439965	Manganese	2.15E-01	6.89E-05
F_BATCH	4	7440020	Nickel	5.25E-02	1.68E-05
F_BATCH	4	7782492	Selenium	1.26E-03	4.03E-07
G_BATCH	5	7440382	Arsenic	2.69E-02	8.64E-06
G_BATCH	5	7440417	Beryllium	4.26E-03	1.36E-06
G_BATCH	5	7440439	Cadmium	1.49E-02	4.77E-06
G_BATCH	5	7439921	Lead	5.89E-02	1.89E-05
G_BATCH	5	7439965	Manganese	7.67E-01	2.46E-04
G_BATCH	5	7440020	Nickel	1.87E-01	6.01E-05
G_BATCH	5	7782492	Selenium	4.49E-03	1.44E-06
S_BATCH	6	7440382	Arsenic	2.69E-02	8.64E-06
S_BATCH	6	7440417	Beryllium	4.26E-03	1.36E-06
S_BATCH	6	7440439	Cadmium	1.49E-02	4.77E-06
S_BATCH	6	7439921	Lead	5.89E-02	1.89E-05

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
S_BATCH	6	7439965	Manganese	7.67E-01	2.46E-04
S_BATCH	6	7440020	Nickel	1.87E-01	6.01E-05
S_BATCH	6	7782492	Selenium	4.49E-03	1.44E-06

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-12. HARP Emission Input File—GCID A

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONSTR	1	9901	DieselExhPM	5.66E+00	0.00E+00
PV	2	9901	DieselExhPM	1.82E-02	0.00E+00
TRUCKS	3	9901	DieselExhPM	1.76E-02	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-13. HARP Emission Input File—GCID E

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONSTR	1	9901	DieselExhPM	1.07E+00	0.00E+00
PV	2	9901	DieselExhPM	5.49E-03	0.00E+00
TRUCKS	3	9901	DieselExhPM	0.00E+00	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-14. HARP Emission Input File—GCID F–K

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONSTR	1	9901	DieselExhPM	1.07E+00	0.00E+00
PV	2	9901	DieselExhPM	3.84E-03	0.00E+00
TRUCKS	3	9901	DieselExhPM	0.00E+00	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-15. HARP Emission Input File—GCID Headgate

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONSTR	1	9901	DieselExhPM	3.10E+00	0.00E+00
PV	2	9901	DieselExhPM	7.72E-02	0.00E+00
TRUCKS	3	9901	DieselExhPM	8.41E-03	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-16. HARP Emission Input File—GCID Willow and Walker Siphons

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONSTR	1	9901	DieselExhPM	2.53E+01	0.00E+00
PV	2	9901	DieselExhPM	8.62E-02	0.00E+00
TRUCKS	3	9901	DieselExhPM	6.33E-02	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-17. HARP Emission Input File—Red Bluff

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
PV	1	9901	DieselExhPM	2.05E-03	0.00E+00
TRUCKS	2	9901	DieselExhPM	1.07E-03	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-18. HARP Emission Input File—Saddle Dams

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
PV	1	9901	DieselExhPM	7.62E-01	0.00E+00
TRUCKS	2	9901	DieselExhPM	2.41E+00	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-19. HARP Emission Input File—South Road and Huffmaster Road Realignment

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONST	1	9901	DieselExhPM	1.30E+01	0.00E+00
PV	2	9901	DieselExhPM	9.74E-01	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-20. HARP Emission Input File—Huffmaster Road Realignment (Alternative 1)

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONST	1	9901	DieselExhPM	2.46E+01	0.00E+00
PV	2	9901	DieselExhPM	5.91E-01	0.00E+00

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-21. HARP Emission Input File—Dunnigan Pipeline (Alternative 1)

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONST	1	9901	DieselExhPM	2.36E+02	0.00E+00
D_BATCH	2	9901	DieselExhPM	0.00E+00	0.00E+00
PV	3	9901	DieselExhPM	6.00E-01	0.00E+00
TRUCKS	4	9901	DieselExhPM	1.28E+00	0.00E+00
D_BATCH	2	7440382	Arsenic	4.58E-02	1.47E-05
D_BATCH	2	7440417	Beryllium	7.24E-03	2.32E-06
D_BATCH	2	7440439	Cadmium	2.53E-02	8.11E-06
D_BATCH	2	7439921	Lead	1.00E-01	3.21E-05
D_BATCH	2	7439965	Manganese	1.30E+00	4.18E-04
D_BATCH	2	7440020	Nickel	3.19E-01	1.02E-04
D_BATCH	2	7782492	Selenium	7.63E-03	2.44E-06

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Table 20C3-22. HARP Emission Input File—Dunnigan Pipeline (Alternative 2)

Source Name	Source Number	Pollutant ID Number	Pollutant Name	Average Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Hourly Concentration ($\mu\text{g}/\text{m}^3$)
CONST	1	9901	DieselExhPM	4.01E+02	0.00E+00
D_BATCH	2	9901	DieselExhPM	0.00E+00	0.00E+00
PV	3	9901	DieselExhPM	8.53E-01	0.00E+00
TRUCKS	4	9901	DieselExhPM	2.21E+00	0.00E+00
D_BATCH	2	7440382	Arsenic	1.15E-01	3.67E-05
D_BATCH	2	7440417	Beryllium	1.81E-02	5.80E-06
D_BATCH	2	7440439	Cadmium	6.33E-02	2.03E-05
D_BATCH	2	7439921	Lead	2.50E-01	8.02E-05
D_BATCH	2	7439965	Manganese	3.26E+00	1.05E-03
D_BATCH	2	7440020	Nickel	7.96E-01	2.55E-04
D_BATCH	2	7782492	Selenium	1.91E-02	6.11E-06

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.