



CEQA Guidance & Tools

CEQA Guide

The **Guide to Air Quality Assessment in Sacramento County** (CEQA Guide) provides methods to analyze air quality impacts from plans and projects, including screening criteria, thresholds of significance, calculation methods, and mitigation measures to assist lead agencies in complying with the [California Environmental Quality Act \(https://opr.ca.gov/ceqa/\)](https://opr.ca.gov/ceqa/) (CEQA). The CEQA Guide is available to download by individual chapters.

Title and Table of Contents (</LandUseTransportation/Documents/TitleTOCFINAL2-2021.pdf>)

Chapter 1: Introduction (</LandUseTransportation/Documents/Ch1IntroAq4-25-2020.pdf>) (April 2020)

Chapter 1: Link to current [Air Monitoring Stations Map \(/Air-Quality-Health/Air-Monitoring\)](/Air-Quality-Health/Air-Monitoring)

Chapter 2: Environmental Review (</LandUseTransportation/Documents/Ch2EnvRevThresholds4-25-2020.pdf>) (April 2020)

Chapter 2 Appendix: [Thresholds of Significance Table \(/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf\)](/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf) (April 2020)

Chapter 3: Construction (</LandUseTransportation/Documents/Ch3Construction4-30-2020.pdf>) (April 2020)

Chapter 3 Appendix: [Basic Construction Emission Control Practices \(Best Management Practices\) \(/LandUseTransportation/Documents/Ch3BasicEmissionControlPracticesBMPSFinal7-2019.pdf\)](/LandUseTransportation/Documents/Ch3BasicEmissionControlPracticesBMPSFinal7-2019.pdf) (July 2019)

Chapter 3 Appendix: [Enhanced On-Site Exhaust Controls \(/LandUseTransportation/Documents/Ch3On-SiteEnhancedExhaustMitigationFinal4-2019.pdf\)](/LandUseTransportation/Documents/Ch3On-SiteEnhancedExhaustMitigationFinal4-2019.pdf) (April 2019)

Chapter 3 Appendix: [Enhanced Fugitive PM Dust Control Practices](#)

[\(/LandUseTransportation/Documents/Ch3EnhancedFugitiveDustControlFINAL12-2009.pdf\)](/LandUseTransportation/Documents/Ch3EnhancedFugitiveDustControlFINAL12-2009.pdf)

(December 2009)

Chapter 3 Appendix: [Dispersion Modeling of Construction-Generated PM10 Emissions](#)

[\(/LandUseTransportation/Documents/Ch3PMDispersionModelingGuidanceFINAL7-2013.pdf\)](/LandUseTransportation/Documents/Ch3PMDispersionModelingGuidanceFINAL7-2013.pdf)

(July 2013)

Chapter 3 Appendix: [Off-Site Construction Mitigation Fees](#)

[\(/LandUseTransportation/Documents/Ch3Off-SiteMitigationFeesFinal4-2019.pdf\)](/LandUseTransportation/Documents/Ch3Off-SiteMitigationFeesFinal4-2019.pdf) (April 2019)

Chapter 4: Operational [\(/LandUseTransportation/Documents/Ch4OperationalFinal10-2020.pdf\)](/LandUseTransportation/Documents/Ch4OperationalFinal10-2020.pdf)

(October 2020)

Chapter 4 Appendix: [Operational Screening Table](#)

[\(/LandUseTransportation/Documents/Ch4+Ch6OperationalScreening4-2018.pdf\)](/LandUseTransportation/Documents/Ch4+Ch6OperationalScreening4-2018.pdf) (April 2018)

Chapter 4 Appendix: [PM Best Management Practices](#)

[\(/LandUseTransportation/Documents/ch4OperationalBMPS-PMFinal10-2020.pdf\)](/LandUseTransportation/Documents/ch4OperationalBMPS-PMFinal10-2020.pdf) (October

2020)

Chapter 4 Appendix: [CO Dispersion Modeling](#)

[\(/LandUseTransportation/Documents/ch4COModelingGuidanceFINAL6-2014.pdf\)](/LandUseTransportation/Documents/ch4COModelingGuidanceFINAL6-2014.pdf) (June 2014)

Sac Metro Air District guidance documents supporting Chapter 4 analyses include:

- [Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District](#) (October 2020)
- [Recommended Guidance for Land Use Emission Reductions](#) (webpage link)

Chapter 5: Toxic Air Contaminants [\(/LandUseTransportation/Documents/Ch5TAC4-2020.pdf\)](/LandUseTransportation/Documents/Ch5TAC4-2020.pdf) (April

2020)

Chapter 6: Greenhouse Gases [\(/LandUseTransportation/Documents/Ch6GHG2-26-2021.pdf\)](/LandUseTransportation/Documents/Ch6GHG2-26-2021.pdf)

(February 2021)

Chapter 6 Appendix: [GHG Operational Screening Table](#)

[\(/LandUseTransportation/Documents/Ch4+Ch6OperationalScreening4-2018.pdf\)](/LandUseTransportation/Documents/Ch4+Ch6OperationalScreening4-2018.pdf) (April 2018)

Chapter 6 Appendix: [GHG BMP Applicability](#)

[\(/LandUseTransportation/Documents/Ch6GHGBMPApplicabilityFlowChart9-23-2020.pdf\)](/LandUseTransportation/Documents/Ch6GHGBMPApplicabilityFlowChart9-23-2020.pdf)

(September 2020)

Chapter 6 Appendix: [Construction GHG Reductions](#)

[\(/LandUseTransportation/Documents/Ch6ConstructionMitMeasuresFINAL5-2016.pdf\)](/LandUseTransportation/Documents/Ch6ConstructionMitMeasuresFINAL5-2016.pdf) (May

2016)

Sac Metro Air District's [Greenhouse Gas Thresholds for Sacramento County \(/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf\)](#) justification document supports Chapter 6 analyses.

- Sac Metro Air District issued a [clarifying memo](#) on locating in a low VMT area and VMT related GHG reductions that can be applied to non-VMT related emissions. (November 2021)
- **NEW** - Sac Metro Air District issued a [clarifying memo](#) on use of the current CalGreen Code for implementing BMP 2. (July 2022)

Chapter 7: Odors ([/LandUseTransportation/Documents/Ch7Odors%20FINAL6-2016.pdf](#)) (June 2016)

Chapter 7 Appendix: [Odor Screening Table](#)

([/LandUseTransportation/Documents/Ch7ScreeningDistancesFINAL12-2009.pdf](#)) (December 2009)

Chapter 7 Appendix: [Odor Reductions](#)

([/LandUseTransportation/Documents/Ch7ReductionMeasuresFINAL6-2014.pdf](#)) (June 2014)

Chapter 8: Cumulative ([/LandUseTransportation/Documents/Ch8Cumulative5-7-2020.pdf](#)) (May 2020)

Chapter 9: Program Level Analysis ([/LandUseTransportation/Documents/Ch9ProgramLevel4-30-2020.pdf](#)) (April 2020)

Revision History ([/LandUseTransportation/Documents/RevisionHistory.pdf](#))

Tools & Additional Guidance

Sac Metro Air District recommends these tools and guidance documents to assist in air quality impact analysis. Additionally, thresholds of significance resolutions and justification documents are included.

Tools: Models, Calculators & Data Files

CalEEMod

[California Emissions Estimator Model \(http://www.caleemod.com/\)](http://www.caleemod.com/) including User's Guide (Sac Metro Air District recommends using CalEEMod Version 2020.4.0 for projects being released for public review after July 1, 2021).

- Sac Metro Air District CalEEMod Version 2020.4.0 [User's Tips \(/LandUseTransportation/Documents/UserTipsSMAQMDFinal2-2019.pdf\)](#) (February 2019)

CalEEMod Version 2022.1.1.3 is available for use, but not yet required. Sac Metro Air District is developing new draft guidance to use with CalEEMod Version 2022.1.1.3 that will be released soon.

Road Construction Emissions Model

[Roadway Construction Emissions Model](#)

[\(/LandUseTransportation/Documents/RoadConstructionEmissionsModelVer9_0_0_locked.zip\)](#)

(version 9.0, May 2018). This is a .zip file. Please save it and then open it to extract the .xlsm file.

IMPORTANT NOTE: U.S. EPA approved EMFAC2017 on August 15, 2019. Version 9.0 includes emissions factors from EMFAC2017.

The link to the Department of Conservation soil map website in the Data Entry tab of Version 9.0 is broken. [Here's the updated link. \(https://maps.conservation.ca.gov/cgs/gmc/\)](https://maps.conservation.ca.gov/cgs/gmc/)

[Version 9.0.1](#)

[\(/LandUseTransportation/Documents/RoadConstructionEmissionsModelVer9_0_1_locked_Final.zip\)](#) (.zip file, August 2022) includes the updated link. No other changes to the model were made.

Version 8.1.0 included emissions factors from EMFAC2014 and was available for analysis of projects requiring federal involvement during the time period EMFAC2017 was being reviewed by U.S. EPA. Consult the Sac Metro Air District staff regarding the appropriate use of version 8.1.0 ([version 8.1.0 \(/LandUseTransportation/Documents/RoadConstructionEmissionsModelVer8_1_0_locked_05262016.xls\)](#)).

Harborcraft, Dredge and Barge Emission Factor Calculator

[Harborcraft, Dredge and Barge Emission Factor Calculator](#)

[\(/LandUseTransportation/Documents/SMAQMD_HC_Calculator_30Jun2017_v1_0.xlsx\)](#) for obtaining emission factors from marine equipment for planning and construction analysis (July 2017)

AERMOD Meteorological Data Files

Sac Metro Air District provides two sets of AERMOD meteorological data files (2014-2018) (These are .zip files. Please save the files and then open them to extract the PFL and SFC files):

- [International Airport \(/LandUseTransportation/Documents/SMF%2014-18.zip\)](#)
- [Executive Airport \(/LandUseTransportation/Documents/Exec%2014-18.zip\)](#)

Guidance: Protocols, Recommendations & Other Documents

Recommended Mitigation Measures

Link to Sac Metro Air District's recommended [mitigation \(/Residents/CEQA-Land-Use-Planning/Mitigation\)](#) measures for construction and operational emissions, including the *Recommended Guidance for Land Use Emission Reductions* (AQMP guidance).

Cool pavement strategies

[\(/LandUseTransportation/Documents/SMAQMDRecommendedCoolPavementStrategies.pdf\)](#) to reduce [Urban Heat Island \(/Air-Quality-Health/Climate-Change/Urban-Heat-Island\)](#) impacts (December 2020).

Friant Guidance

The [Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District \(/LandUseTransportation/Documents/SMAQMDFriantRanchFinalOct2020.pdf\)](#) (October 2020) provides screening health information for projects at or below regional CEQA thresholds of significance emissions levels and selected strategic areas above thresholds of significance emissions levels. Modeling guidance for large projects located outside strategic areas is also included.

- [Instructions for Screening Tools](#) (December 2020)
- [Latitude/Longitude Look Up](#) (January 31, 2020, .zip file, includes Google Earth kmz file)
- [Minor Project Health Screening Tool](#) (June 2020, .xlsx file)
- [Strategic Area Project Health Screening Tool](#) (September 2020, .xlsx file)

Friant Guidance Archive files:

- [Interim Recommended Guidance](#) (April 2019)
- [Draft Friant Guidance](#) (January 2020)
- [Response to Comments on Draft](#) (May 2020)
- [Revised Draft Friant Guidance](#) (June 2020)

Mobile Sources Air Toxics Protocol

[Mobile Sources Air Toxics Protocol \(/Businesses/CEQA-Land-Use-Planning/Mobile-Sources-Air-Toxics-Protocol\)](#) for assessing potential cancer risk to receptors located near major roadways and railways (September 2020) including supporting document on landscape barriers:

- [Landscaping Guidance for Improving Air Quality Near Roadways \(/LandUseTransportation/Documents/LandscapingGuidanceforImprovingAirQualityNearRoadwaysMay2020V2.pdf\)](#) (May 2020)

Existing Sources of Odors and Toxic Air Contaminants

[Recommendations for Siting New Projects Near Existing Sources that Emit Odors and Toxic Air Contaminants \(/LandUseTransportation/Documents/ExistingOdorsToxicsRecommendationsFinal7-24-19.pdf\)](#) (July 2019) for addressing potential public health impacts for projects that may expose receptors to existing sources of odors and toxic emissions.

Other Helpful Resources

General [Rules Statement \(/LandUseTransportation/Documents/RulesAttachment10-2020Final.pdf\)](#) for Development Projects (October 2020)

State CEQA Guidelines [Appendix G \(http://califaep.org/docs/2019-Appendix_G_Checklist.pdf\)](http://califaep.org/docs/2019-Appendix_G_Checklist.pdf) (June 2019, courtesy of AEP)

Sacramento Area Council of Government (SACOG) [Regional Plans \(https://www.sacog.org/regional-plans\)](https://www.sacog.org/regional-plans)

Folsom Landfill Clean Closure Work Plan

[\(/LandUseTransportation/Documents/FolsomLandfillCleanClosurePlanFINAL.pdf\)](#) (May 2008) - example air monitoring plan, Appendix E

CAPCOA Roadway Review Guidance

In August 2018 the California Air Pollution Control Officers Association (CAPCOA) published [Air Quality Analysis in CEQA Roadway Review \(/LandUseTransportation/Documents/CAPCOAAirQualityAnalysisCEQARoadwayProjectReview.pdf\)](#) to address frequently questioned topics in air quality analysis, including greenhouse gases, for roadway projects reviewed under CEQA. The guidance is intended for use by lead agencies in preparing air quality analysis and by air districts in reviewing and commenting on roadway project CEQA documents. Please note that this is not comprehensive guidance on air quality analysis for CEQA review of roadway projects. It only responds to common questions and current misconceptions. Air districts often have guidance on a full range of topics in CEQA air quality analysis, which is appropriate for overall air quality analysis in their geographic area. **Please consult any of the Sac Metro Air District staff listed below to determine the appropriate methodology for project specific CEQA analysis.**

Adopted Thresholds of Significance Resolutions and Documentation

Notice of Thresholds Adoption

(/LandUseTransportation/Documents/ceqa_thresholds_notice%202002.pdf) March 2002

- [Foundation for a Threshold: Justification for Air Quality Thresholds of Significance in the Sacramento Federal Nonattainment Area](/LandUseTransportation/Documents/CEQAThresholdJustificationOperationalFinal.pdf) (</LandUseTransportation/Documents/CEQAThresholdJustificationOperationalFinal.pdf>) , August 15, 2001
- [Justification for Construction Air Quality Thresholds](/LandUseTransportation/Documents/CEQAThresholdJustificationConstFinal.pdf) (</LandUseTransportation/Documents/CEQAThresholdJustificationConstFinal.pdf>) , February 1, 2002

Resolution (</LandUseTransportation/Documents/GHGTOSAdoptionBoardResolutionSigned10-23-14.pdf>) adopted October 2014 for Greenhouse Gases

- [Justification for Greenhouse Gas Emissions Thresholds of Significance](/LandUseTransportation/Documents/GHGThresholdsJustificationSept2014.pdf) (</LandUseTransportation/Documents/GHGThresholdsJustificationSept2014.pdf>) , September 2014
- [Notice of Change in Greenhouse Gases Analysis Recommendations](/LandUseTransportation/Documents/NoticeChangeGHGAnalysisMitigation1-21-16.pdf) (</LandUseTransportation/Documents/NoticeChangeGHGAnalysisMitigation1-21-16.pdf>) , January 2016

Resolution (</LandUseTransportation/Documents/PMThresholdsSignedResolution5-28-2015.pdf>) adopted May 2015 for Particulate Matter

- [California Environmental Quality Act Guidelines Update Proposed Particulate Matter CEQA Thresholds of Significance](/LandUseTransportation/Documents/ParticulateMatterThresholdsUpdateMay2015AgendaItemAttachment.pdf) (</LandUseTransportation/Documents/ParticulateMatterThresholdsUpdateMay2015AgendaItemAttachment.pdf>) , March 19, 2015

Resolution (</LandUseTransportation/Documents/2020-009GreenhouseGasThresholdsUpdateBoardResolution4-23-2020.pdf>) adopted April 2020 for Updated Operational Land Development Greenhouse Gases

- [Greenhouse Gas Thresholds for Sacramento County](/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf) (</LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf>) , released March 4, 2020, adopted April 23, 2020, and report finalized June 1, 2020, with minor changes (removed DRAFT, updated needed website links,

reported the City of Galt adopted a climate action plan on March 4, 2020, and corrected use of the term offset when referencing mitigate)

Contact for More Information

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CEQA & Land Use Planning

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Spare The Air

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