



South Coast  
Air Quality Management District

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Mr. Russell Williams, Acting Office Chief  
Environmental Planning Oversight  
Caltrans District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

**Draft Mitigated Negative Declaration (Draft MND) for the Proposed Interstate  
10/Riverside Avenue Interchange Improvement Project**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The air quality analysis is incomplete. The lead agency has not properly quantified emissions from the construction and operation of the project. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Mitigated Negative Declaration (Final MND).

SCAQMD staff believes that the Draft MND is fundamentally inadequate because air quality impacts from the proposed project have not been quantified, thus, precluding meaningful review of potentially significant adverse air quality impacts by the public. As a result, the SCAQMD requests that the lead agency quantify air quality impacts from the proposed project, identify additional mitigation measures as necessary, and recirculate the document pursuant to CEQA Guideline §15073.5. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Steve Smith, Ph.D.  
Program Supervisor  
Planning, Rule Development & Area Sources

Attachment

SS:GM

SBC071102-02  
Control Number

### **Construction Emissions**

1. In the project description on pages 18-21 in the Draft Initial Study/Mitigated Negative Declaration's (Draft IS/MND), the lead agency proposes modifications to traffic lanes, ramps, replacement of the I-10/Riverside Avenue bridge structure and other activities but does not quantify the project's construction air quality impacts. Because this information has not been included in the Draft MND, the lead agency has therefore not demonstrated that the proposed project will not generate significant adverse construction air quality impacts that may trigger further analysis pursuant to the California Environmental Quality Act.

To calculate the proposed project's emission impacts, the lead agency can utilize the current URBEMIS 2007 land use emissions model, which can be accessed at <http://www.aqmd.gov/ceqa/models.html> or follow the calculation methodologies in Chapter 9 and the Appendix to Chapter 9 in the South Coast AQMD's CEQA Air Quality Handbook. Should the lead agency conclude after its analyses that construction or operational air quality impacts exceed the SCAQMD daily significance thresholds, staff has compiled mitigation measures (see comment #4) to be implemented if the air quality impacts are determined to be significant. Mitigation measure suggestions can be found at [http://www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html)

### **PM2.5 Significance Thresholds**

2. In response to adoption of PM2.5 ambient air quality standards by U.S. EPA and CARB, SCAQMD staff has developed a methodology for calculating PM2.5 emissions when preparing air quality analyses for California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents. To determine if PM2.5 air quality impacts are significant, SCAQMD staff has also developed recommended regional and localized significance thresholds. When preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a PM2.5 significance analysis by following the guidance found at [http://www.aqmd.gov/ceqa/handbook/PM2\\_5/PM2\\_5.html](http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html). Further, SCAQMD staff has compiled mitigation measures to be implemented if the PM2.5 impacts or other pollutant air quality impacts are determined to be significant. Mitigation measure suggestions can be found at [http://www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html)

### **Localized Significance Thresholds**

3. As noted on page 3 of the Initial Study/Draft MND, the proposed project borders residential development to the northeast and northwest. If these residences are located within one-quarter mile of the proposed project, the SCAQMD requests that the lead agency evaluate localized air quality impacts to ensure that any nearby sensitive receptors are not adversely affected by the construction activities that are occurring in close proximity. SCAQMD guidance for performing a localized air

quality analysis can be found at the following web address:  
<http://www.aqmd.gov/ceqa/handbook/LST/LST.html> .

#### **Air Toxic Analysis/Health Risk Assessment**

4. On page 22 of the Air Quality Analysis document of the Draft MND, the lead agency discusses utilizing the Mobile Source Toxics (MSAT) Tool and acknowledges that on-road sources emit the following air toxics: diesel PM, benzene, 1,3-butadiene, acetaldehyde, acrolein, and formaldehyde. Further, on pages 22 through 25 of the Air Quality Analysis document, the lead agency cites the following reasons for not performing a mobile source health risk assessment: (1) dispersion models (CALINE3 and CAL3QHC) are more accurate for predicting maximum concentrations during specific instances when time and geographic location of the project impact are known; (2) the methods of communicating MSAT health impacts are under development and not available for this study; (3) lack of monitoring data, etc. SCAQMD staff urges the lead agency to include a health risk assessment (HRA) that includes air dispersion modeling, quantified, health risk, and a significance determination in the recirculated MND. Below is a discussion to assist the lead agency in developing a HRA for the proposed project.

*Dispersion Model.* While CALINE3 and CAL3QHC are the current EPA regulatory models for estimating maximum CO concentrations at roadways, there are other tools that can be used to estimate health risk along roadways and projects that contain roadway and non-roadway sources like the proposed project. While acute non-carcinogenic health risk is based on maximum concentrations, as stated in the air quality analysis, it is not true for carcinogenic and chronic non-carcinogenic health risk. Carcinogenic risk is estimated based on annual average concentrations over 70 years for residential and sensitive receptors and 40 years for worker receptors. Chronic non-carcinogenic risk is also estimated based on annual average concentrations. CAL3QHCR can be used to estimate carcinogenic health risk for roadways.

AERMOD and ISCST3 can be used to estimate carcinogenic health risk for both roadway and non-roadway sources. AERMOD is the current EPA approved model for general air dispersion modeling. Since CAL3QHCR and AERMOD are the current EPA approved models, FHWA may request that either be used for air dispersion modeling. For CEQA modeling, SCAQMD staff recommends use of any of these models (AERMOD, ISCST3, or CAL3QHCR) or HARP, which uses ISCST3.

*Health Risk Assessment (HRA).* There are several guidance documents available for air dispersion modeling and HRAs: SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis ([http://www.aqmd.gov/ceqa/handbook/mobile\\_toxic/mobile\\_toxic.html](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html)), both Ports of Los Angeles and Long Beach have SCAQMD approved HRA protocols, ARB has

dispersion guidance in Appendix 7 of the Diesel Risk Reduction Plan (<http://www.arb.ca.gov/diesel/documents/rrpapp.htm>), and HARP can be downloaded from the ARB website at <http://www.arb.ca.gov/toxics/harp/harp.htm>.

If the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* is used, the health risk estimates should be completed according to OEHHA's cancer potency methodology instead of the unit risk factor methodology. The lead agency should contact FHWA and SCAQMD staff for additional assistance with developing an air dispersion and risk assessment protocol.

### **Mobile Source Air Toxics**

5. On page 22 and 23 of the Air Quality Analysis document, the lead agency discusses whether or not emission factors from MOBILE6.2 or EMFAC2002 should be used as part of a MSAT analysis. MOBILE6.2 emission factors should not be used in California as they do not reflect emissions from on-road mobile source fleets in California. Only EMFAC emission factors for on-road mobile sources should be used in California. Further, EMFAC2007, not EMFAC2002, is the most currently approved model for use in California.