



South Coast Air Quality Management District

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Review of the Notice of Preparation for a Draft Environmental Impact Report (Draft EIR) for the Interstate 710 (I-710) Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. As Caltrans is aware The California Air Resources Board (CARB) identified particulate matter (PM) from diesel-fueled engines as a toxic air contaminant (TAC) in 1998, following an exhaustive 10-year scientific assessment process. In addition, as part of the identification process, the Office of Environmental Health Hazard Assessment (OEHHA) evaluated the potential for diesel exhaust to affect human health. OEHHA found that exposure to diesel PM resulted in an increased risk of cancer and an increase in chronic non-cancer health effects including a greater incidence of cough, labored breathing, chest tightness, wheezing, bronchitis, and asthma.

There are a number of studies that show a correlation of adverse health impacts of diesel PM and proximity to roadways. CARB recommends avoiding development of urban roads with 100,000 vehicles/day, that are within 500 feet of sensitive land uses due to increased cancer risk from diesel PM¹. The health effects from diesel PM can and must be quantified in the Draft EIR. There are a variety of air dispersion models available, including but not limited to CAL3QHCR and AERMOD to conduct air dispersion modeling of mobile source emissions. Additional information on these models can be obtained at: www.epa.gov/scram001/dispersion_prefrec.htm.

The I-710 Project will likely result in increased transportation of freight and goods to and from the Port of Long Beach generating additional vehicular trips, especially, from heavy-duty diesel fueled vehicles. The SCAQMD staff urges the Lead Agency to perform a health risk assessment (HRA) that includes air dispersion modeling, quantified health risk, and a significance determination in the Draft EIR from implementation of the proposed project. There are several guidance documents available for air dispersion

¹ California Air Resources Board. April 2005. "Air Quality and Land Use Handbook: A Community Health Perspective." Accessed at <http://www.arb.ca.gov/ch/landuse.htm>

modeling and HRAs. Below is a discussion to assist the Lead Agency in developing a HRA for the proposed project.

HRA Guidance

The SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis and be found at: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.htm. Also, both Ports of Los Angeles and Long Beach have SCAQMD approved HRA protocols, ARB has air dispersion guidance in Appendix 7 of the Diesel Risk Reduction Plan, which, can be found at: <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. The SCAQMD's recommended threshold for cancer risk should not exceed 10 in one million at any receptor location, when compared to the pre-project risk.

Dispersion Modeling

CALINE3 and CAL3QHCR are the current EPA regulatory models for estimating maximum CO concentrations at roadways. 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 roadway risks.

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, either may 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.

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Additionally, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.aqmd.gov/ceqa/models.htm.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air

quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources, area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM_{2.5} emissions from construction and operational activities and processes. In connection with developing PM_{2.5} calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the Lead Agency quantify PM_{2.5} emissions and compare the results to the recommended PM_{2.5} significance thresholds. Guidance for calculating PM_{2.5} emissions and PM_{2.5} significance thresholds can be found at the following internet address:

http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.htm.

In addition to analyzing regional air quality impacts the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/ceqa/handbook/LST/LST.htm>.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA Guidelines §15126.4 requires the Draft EIR to describe which could minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. A list of mitigation measures can be found on the SCAQMD's CEQA webpages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.htm

Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/aqguide/aqguide.htm>.

Contact

Pursuant to CEQA Guidelines §15086 the SCAQMD requests that the Lead Agency send a copy of the Draft EIR upon its completion. The above comments are recommendations for analyzing potential air quality impacts from the proposed project that should be included in the Draft EIR. The SCAQMD staff is available for consultation with the Lead Agency to address any questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,

Susan Nakamura
Planning and Rules Manager
Planning, Rule Development & Area Sources

Attachment

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