South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

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Ms. Leslie Manderscheid
Environmental Planning
Department of Transportation
3337 Michelson Drive, Suite 380
Irvine, CA 92612

Review of the Notice of Intent to Adopt a Negative Declaration for the State Route (SR-57) Northbound Widening Between Katella Ave. and Lincoln Blvd. Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff appreciates the fact that the lead agency allowed additional time in which to submit comments. The following comments are meant as guidance for the lead agency and should be incorporated into either a Revised Draft of Final Initial Study/Negative Declaration (Initial Study/Negative Declaration) as appropriate.

SCAQMD staff is disturbed by the fact that the lead agencies failed to quantify criteria pollutant emissions during construction and operation, air toxics during operation, or greenhouse gas emissions. Without quantifying air quality impacts from the project, the lead agency is unable to support its conclusion that air quality impacts are not significant. Given that the project potentially includes a substantial amount of construction activities for the build alternatives and that the build alternatives are proposed, in part to accommodate future growth, a fair argument can be made that the proposed project will generate significant adverse air quality impacts. Therefore, SCAQMD staff requests that the lead agencies quantify potentially significant adverse construction and operation air quality impacts revise the CEQA document as appropriate and recirculate the CEQA document for public review and comment. Staff is available to work with the lead agency to address these issues and any other 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,

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

Attachment

SN:DG

OCC090325-06
Control Number

Air Quality Analysis and Mitigation Measures:

1. The lead agencies did not quantify potentially significant adverse construction or operational air quality impacts from the proposed project. The lead agencies state that air quality impacts are not significant because the proposed project is consistent with the State Implementation Plan and the AQMP. Consistency is only one measure of air quality impacts. To adequately evaluate air quality impacts, it is necessary to quantify construction and operation emissions and compare them to applicable significance thresholds. Since the lead agencies have failed to quantify air quality impacts they have not demonstrated that air quality impacts from the proposed project are insignificant.

   SCAQMD staff requests that the lead agency revise the Initial Study/Negative Declaration to identify all potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Specifically, SCAQMD staff recommends the lead agencies calculate air quality impacts from both construction (including demolition, if any) and operations. 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 used for striping traffic lanes or any associated structures, off-road 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 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 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 be able to use the URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.aqmd.gov/ceqa/models.htm.

2. As part of the analysis recommended in comment #1 above, SCAQMD staff also recommends analyzing PM2.5 emissions. The SCAQMD has developed a methodology for calculating PM2.5 emissions from construction and operational activities and processes. In connection with developing PM2.5 calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify PM2.5 emissions and compare the results to the recommended PM2.5 significance thresholds. Guidance for calculating PM2.5 emissions and PM2.5 significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.htm.

3. In addition to analyzing regional air quality impacts (see comments #1 and #2) 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 revising 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.

Health Risk Assessment

4. As Caltrans is aware CARB identified 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 PM[1]. The health effects from diesel PM can and must be quantified in the Initial Study/Negative Declaration. 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 SR-57 Project will likely result in increased transport of freight and goods; overall increased traffic volumes generating additional vehicular trips, especially, from heavy-duty diesel fueled vehicles; and with the installation of additional lanes, mobile source emissions occurring closer to sensitive receptors along the affected freeway segment SCAQMD staff urges the lead agency to perform a mobile source health risk assessment (HRA) that includes air dispersion modeling, quantified health risk, and a significance determination in the Initial Study/Negative Declaration from implementation of the proposed project. There are several guidance documents available for air dispersion modeling and HRAs. Below is a discussion to assist the lead agency in developing a HRA for the proposed project.

[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

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.

5. On pages 2.11-9 and 2.11-10 of the Initial Study/Negative Declaration the lead agencies infer air quality related trips do not contribute to significant adverse air quality impacts because, "Alternative 1 would result in an increase in trips of an average of 1.5 percent and Alternatives 2 and 3 would result in an average of 3.6 percent (refer to table 2.18)." Although the percentage increase in the number of trips is small, the actual number of trips is relatively large, 32,910 trips for Alternative 1 and 38,740 trips for Alternatives 2 and 3. Air quality impacts from these trip increases need to be quantified.

6. On page 2.15-12 of the Initial Study/Negative Declaration, the lead agencies state, "… it is CalTrans determination that in the absence of regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too

speculative to make a determination of the project's direct impact and its contribution on the cumulative scale to climate change," SCAQMD staff strongly disagrees with this statement. The Office of Planning and Research in its Technical Advisory (2008) specifically recommends analyzing GHG impacts from a project and making a determination of significance. Similarly, the California Attorney General's Office has entered into a number of lawsuits and settlements with lead agencies because they failed to analyze greenhouse gas emissions, failed to make a determination of significance (absence of a significance threshold does not relieve the lead agency of the obligation to make a significance determination) and/or providing sufficient greenhouse gas mitigation measures. Therefore, SCAQMD staff requests that the revised analysis include a quantitative analysis of greenhouse gases, a determination of significance, and, if necessary, feasible mitigation measures.

Mitigation Measures

7. In the event that the lead agency's revised Initial Study/Negative Declaration requested in comment #1 demonstrates that any criteria pollutant emissions from the regional and/or localized construction emissions analysis create significant adverse impacts the SCAQMD recommends that the lead agency require mitigation pursuant to CEQA Guidelines §15370, 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 webpage 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.