



South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

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Mitigated Negative Declaration (MND) for the State Route 133 Operational Improvements Project

The South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final MND.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to build a one-mile auxiliary lane on State Route 133 (SR-133) between the SR-133 and Interstate 405 (I-405) connector [Post Mile (PM) 8.3] and Irvine Center Drive (PM 9.3) (Proposed Project). Construction of the Proposed Project is expected to take no more than three years¹. Based on a review of Figure 1-1: *Project Location Map*, in the MND² and aerial photographs, South Coast AQMD staff found that sensitive receptors such as residential uses are located adjacent to the Proposed Project.

Summary of South Coast AQMD Staff's Comments on the Air Quality Analysis

In the Air Quality Analysis Section, the Lead Agency quantified the Proposed Project's construction emissions. However, the Lead Agency did not conduct a localized construction air quality impact analysis or a mobile source Health Risk Assessment (HRA) analysis. Additionally, the Lead Agency did not compare the Proposed Project's emissions from the build alternative to South Coast AQMD's air quality CEQA significance thresholds to determine the level of significance for the Proposed Project's air quality impacts. Detailed comments are included in the attachment. The attachment also includes a list of recommended mitigation measures that the Lead Agency should include in the Final MND to further reduce the Proposed Project's construction air quality impacts on nearby residents.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the additional recommended mitigation measures are not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting them in the Final MND (CEQA Guidelines Sections 15070 and 15074.1).

¹ MND. Page 1-38.

² *Ibid.* Page 1-3.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Margaret Isied, Assistant Air Quality Specialist, at misied@aqmd.gov or (909) 396-2543, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS:MI

ORC200107-02

Control Number

ATTACHMENT

1. Air Quality CEQA Thresholds of Significance

While CEQA permits a Lead Agency to apply appropriate thresholds to determine the level of significance, the Lead Agency may not apply thresholds in a manner that precludes consideration of substantial evidence demonstrating that there may be a significant effect on the environment. Evaluation of air quality impacts, unlike some other impact areas, easily lends itself to quantification. Not only does quantification make it easier for the public and decision-makers to understand the breadth and depth of the potential air quality impacts, but it also facilitates the identification of mitigation measures required to reduce any significant adverse air quality impacts. South Coast AQMD's CEQA thresholds of significance for air quality provide a clear quantitative benchmark to determine the significance of a project's air quality impacts. Therefore, for most projects within the South Coast Air Basin, South Coast AQMD's air quality CEQA thresholds of significance for construction and operation³ are used to determine the level of significance for a project's air quality impacts.

The Lead Agency quantified the maximum construction and operational emissions for the Proposed Project's build alternative in pounds per day⁴ but did not compare those emissions to South Coast AQMD's regional air quality CEQA significance thresholds to determine the level of significance for the Proposed Project's construction and operational air quality impacts⁵. Using South Coast AQMD's CEQA significance thresholds would clearly identify whether the build alternative would result in significant air quality impacts under CEQA, disclose the magnitude of the impacts, facilitate the identification of feasible mitigation measures and Project alternatives, and evaluate the level of impacts before and after mitigation measures. Therefore, South Coast AQMD staff recommends that the Lead Agency compare the emissions to South Coast AQMD's regional air quality CEQA significance thresholds in the Final MND to determine the level of significance for the Proposed Project's air quality impacts.

2. Localized Construction Air Quality Impact Analysis

Based on a review of Figure 1-1: *Project Location Map*, in the MND⁶ and aerial photographs, South Coast AQMD staff found that existing residential uses are located approximately 260 feet south of the Proposed Project. However, the Lead Agency did not analyze the Proposed Project's localized air quality impacts in the MND. Therefore, South Coast AQMD staff recommends that the Lead Agency quantify the Proposed Project's localized emissions from construction activities and disclose them in the Final MND to ensure that any nearby sensitive receptors are not adversely affected by emissions from construction activities that are occurring in close proximity. South Coast AQMD's guidance for performing a localized air quality impact analysis is available on South Coast AQMD website⁷.

3. Mobile Source Health Risk Assessment Analysis

As stated above, sensitive receptors are located in close proximity to the Proposed Project. In general, a transportation project that adds a lane increases freeway capacity and generates or attracts new or additional vehicular trips, which leads to increases in criteria pollutants and air toxics emissions. It can also lead to more dispersed land use development, which in turn leads to additional vehicle miles traveled and increases in criteria pollutants and air toxics emissions. The California Air Resources

³South Coast AQMD. March 2015. *South Coast AQMD Air Quality Significance Thresholds*. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

⁴MND. Revised Air Quality Report. Table 4.1; Page 45. Table 4.2; Page 47.

⁵*Ibid.*

⁶MND. Page 1-3.

⁷South Coast AQMD. *Localized Significance Thresholds*. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

Board (CARB) has identified diesel particulate matter (DPM) as a toxic air contaminant based on its carcinogenic effects⁸. Therefore, South Coast AQMD staff recommends that the Lead Agency conduct a mobile source health risk assessment analysis⁹ in the Final MND to disclose the potential health risks to residents from vehicles including DPM-emitting diesel-fueled vehicles that will use the Proposed Project.

4. Recommended Air Quality Mitigation Measures

CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse impacts. South Coast AQMD staff recommends the following mitigation measures be incorporated in the Final MND to further reduce the Proposed Project's emissions, particularly from NO_x and particulate matter, during the construction phase, and minimize construction air quality impacts on nearby sensitive receptors.

- a) Require the use of zero emissions (ZE) or near-zero emissions (NZE) heavy-duty, on-road vehicles during construction, such as trucks with natural gas engines that meet the CARB adopted optional NO_x emission standard of 0.02 grams per brake horsepower-hour (g/bhp-hr). At a minimum, require that operators of heavy-duty trucks visiting the Proposed Project during construction commit to using 2010 model year¹⁰ or newer engines that meet CARB's 2010 engine emission standards of 0.01 g/bhp-hr for particulate matter (PM) and 0.20 g/bhp-hr of NO_x emissions or newer, cleaner trucks. Include analyses to evaluate and identify sufficient power available for ZE trucks and supportive infrastructure in the Energy and Utilities and Service Systems Sections of the Final MND, where appropriate.

To monitor and ensure ZE, NZE, or 2010 model year trucks are used at the Proposed Project during construction, the Lead Agency should require that operators maintain records of all trucks associated with the Proposed Project's construction activities, and make these records available to the Lead Agency upon request. The records will serve as evidence to prove that each truck called to the Proposed Project during construction meets the minimum 2010 model year engine emission standards. Alternatively, the Lead Agency should require periodic reporting and provision of written records by truck operators, and conduct regular inspections of the records to the maximum extent feasible and practicable.

- b) Require the use of off-road, diesel-powered construction equipment that meets or exceeds the CARB and U.S. Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards for equipment rated at 50 horsepower or greater during construction of the Proposed Project. Such equipment will be outfitted with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filter (DPFs). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions¹¹. A list of CARB verified DPFs are available on the CARB website¹².

⁸ CARB. August 27, 1998. Resolution 98-35. Accessed at: <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>.

⁹ South Coast AQMD. "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis." Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

¹⁰ CARB adopted the statewide On-Road Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulations is available here: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

¹¹ CARB. November 16-17, 2004. *Diesel Off-Road Equipment Measure – Workshop*. Page 17. Accessed at: https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

¹² *Ibid*. Page 18.

To ensure that Tier 4 Final construction equipment or better would be used during the Proposed Project's construction, South Coast AQMD staff recommends that the Lead Agency include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit's certified tier specification or model year specification and CARB or South Coast AQMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. Additionally, the Lead Agency should require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance.

In the event that construction equipment cannot meet the Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim emission standards, reduction in the number and/or horsepower rating of construction equipment, and/or limiting construction phases occurring simultaneously.

- c) Maintain vehicle and equipment maintenance records for the construction portion of the Proposed Project. All construction vehicles must be maintained in compliance with the manufacturer's recommended maintenance schedule. All maintenance records shall remain on-site for a period of at least two years from completion of construction.
- d) Encourage construction contractors to apply for South Coast AQMD "SOON" funds. The "SOON" program provides funds to applicable fleets for the purchase of commercially-available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. More information on this program can be found at South Coast AQMD's website: <http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines>.
- e) Minimize idling of all construction off-road diesel vehicles to five minutes or less. This is consistent with the CARB's idling policy¹³.

¹³CARB. June 2009. *Written Idling Policy Guidelines*. Accessed at: <https://www.arb.ca.gov/msprog/ordiesel/guidance/writtenidlingguide.pdf>.