



# 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 Interstate 5 Improvement Project from Interstate 405 to State Route 55**

The South Coast Air Quality Management District (SCAQMD) 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.

### SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to add one general-purpose lane in each direction on Interstate 5 (I-5) between Interstate 405 (I-405) and State Route 55 (SR-55) from Post Mile (PM) 21.3 to 30.3 through the cities of Irvine and Tustin (Proposed Project). Based on a review of the Site Plans for Build Alternatives 2A and 2B in the MND and aerial photographs, SCAQMD staff found that sensitive receptors such as residential uses are located in proximity to the Proposed Project. The Proposed Project is expected to be constructed over a two-year period commencing in July 2028 and completing in June 2030<sup>1</sup>, and “overlapping activities would occur through the project corridor<sup>2</sup>.”

### SCAQMD Staff's Comments

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 air quality analysis or mobile source health risk assessment analysis. Detailed comments are included in the attachment. The attachment also includes SCAQMD staff's recommendation to use Tier 4 or better construction equipment and Model Year 2010 or newer construction vehicles to further reduce NOx and particulate matter emissions and their impacts on nearby sensitive receptors during construction.

### Closing

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 the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, response 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 or useful to decision makers and to the public who are interested in the Proposed Project.

SCAQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov) if you have any questions.

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<sup>1</sup> MND. Page 46.

<sup>2</sup> *Ibid.*

Brian Liu

May 29, 2018

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS

ORC180509-02

Control Number

## ATTACHMENT

### SCAQMD's Air Quality CEQA Thresholds of Significance

1. 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. SCAQMD'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 SCAQMD, SCAQMD's air quality CEQA thresholds of significance for construction and operation<sup>3</sup> are used to determine the level of significance of a project's air quality impacts.

The Lead Agency quantified the maximum construction emissions for the Proposed Project's Build Alternatives 2A and 2B in pounds per day<sup>4</sup> but did not compare those emissions to SCAQMD's air quality CEQA regional significance thresholds to determine the level of significance<sup>5</sup>. Using SCAQMD's CEQA significance thresholds would clearly identify whether the Build Alternatives would result in significant air quality impacts under CEQA, disclose the magnitude of the impacts, facilitate the identification of feasible mitigation measures, and evaluate the level of impacts before and after mitigation measures. Therefore, SCAQMD staff recommends that the Lead Agency compare the Build Alternatives' construction emissions in Table 5 to SCAQMD's regional air quality CEQA significance thresholds in the Final MND to determine the level of significance.

### Air Quality Impact Analysis for Overlapping Construction Activities

2. Since the Proposed Project's "construction schedule indicates that overlapping activities would occur throughout the project corridor,<sup>6</sup>" and to avoid underestimating the air quality impacts from overlapping construction activities, it is recommended that the Lead Agency identify overlapping construction phases, quantify the emissions, compare them to SCAQMD air quality CEQA significance thresholds, and determine the significance of impacts in the Final MND.

### Localized Air Quality Impact Analysis during Construction

3. Air quality impacts from both construction (including demolition, if any) and operation activities should be calculated. For operational air quality impacts, please see Comment No. 4 below. 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).

As stated above, sensitive receptors are located in proximity to the Proposed Project. Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. They include schools, parks and playgrounds, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. To demonstrate that any nearby sensitive receptors are not adversely affected by the two-year construction activities that are occurring in close proximity, it is recommended that the Lead Agency quantify the Proposed Project's localized construction emissions

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

<sup>4</sup> MND. Table 5. Page 46

<sup>5</sup> *Ibid.*

<sup>6</sup> MND. Page 46.

and disclose the localized air quality impacts in the Final MND. SCAQMD guidance for performing a localized air quality analysis is available on SCAQMD website<sup>7</sup>.

#### Operational Air Quality Impact Analysis

4. The Lead Agency quantified the Proposed Project's construction emissions but did not conduct operational emissions impact analysis. The Lead Agency referred to the analysis in Sections 5.2 through 5.7 of the MND to justify that the Proposed Project would not produce substantial operational air quality impacts<sup>8</sup>. In general, a transportation project that adds more lanes generates or attracts new or additional vehicular trips, which leads to increases in criteria pollutants and air toxics emissions during operation. It can also lead to more dispersed land use development over time, which in turn leads to additional vehicle travel and increases in criteria pollutants and air toxics emissions. Therefore, SCAQMD staff recommends that the Lead Agency use its best efforts to quantify and disclose any potential adverse air quality impacts from incremental increases in vehicle miles traveled generated by one additional lane in each direction in 2030 (Opening Year) and 2050 (Horizon Year) in the Final MND.

#### Mobile Source Health Risk Assessment

5. As stated above, sensitive receptors such as residential dwelling units are located in proximity to the Proposed Project. In the event that one of the build alternatives is approved, its implementation is likely to bring traffic lanes closer to the adjacent sensitive receptors. Because of the close proximity to the Proposed Project, existing and future residents would be exposed to diesel particulate matter (DPM), which is a toxic air contaminant and is also determined to be carcinogenic by the California Air Resources Board (CARB). Therefore, SCAQMD staff recommends that the Lead Agency conduct a mobile source health risk assessment (HRA)<sup>9</sup> 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.

#### Additional Recommended Air Quality Mitigation Measures

6. 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. To further reduce construction emissions from NOx, PM10, and PM2.5 and health impacts to sensitive receptors, SCAQMD staff recommends the Lead Agency incorporate the following mitigation measures to the existing Mitigation Measure AQ5 in the Final MND.
  - a) Require the use of 2010 model year diesel haul trucks that conform to 2010 U.S. EPA truck standards or newer diesel haul trucks (e.g., material delivery trucks and soil import/export) during construction, and if the Lead Agency determines that 2010 model year or newer diesel haul trucks are not feasible, the Lead Agency shall use trucks that meet EPA 2007 model year NOx emissions requirements, at a minimum. Include this requirement in applicable bid documents. Successful contractor(s) must demonstrate the ability to supply the compliant diesel haul trucks for use prior to any ground disturbing and construction activities. Additionally, the Lead Agency should require periodic reporting and provision of written documentation by contractors, and conduct regular inspections to the maximum extent feasible to ensure compliance.

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

<sup>8</sup> MND, Page 73.

<sup>9</sup> South Coast Air Quality Management District. "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>.

- b) Requires all off-road diesel-powered construction equipment meets or exceed the CARB and USEPA Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during Project construction. Such equipment will be outfitted with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least 85 percent reduction in in particulate matter emissions<sup>10</sup>. A list of CARB verified DPFs are available on the CARB website<sup>11</sup>. To ensure that Tier 4 construction equipment or better will be used during the Project construction, SCAQMD staff recommends that the Lead Agency include this requirement in applicable bid documents. 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 SCAQMD 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 documentation by contractors to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance.
- c) Minimize idling of all construction vehicles and equipment to five minutes or less. This is consistent with the CARB's idling policy<sup>12</sup>.

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<sup>10</sup> California Air Resources Board. 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](https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf).

<sup>11</sup> *Ibid.* Page 18.

<sup>12</sup> California Air Resources Board. June 2009. *Written Idling Policy Guidelines*. Accessed at: <https://www.arb.ca.gov/msprog/ordiesel/guidance/writtenidlingguide.pdf>.