



# South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

October 22, 2019

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## **Negative Declaration (ND) for the State Route 55 Improvement 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 ND.

### South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to increase freeway capacity on a 7.3-mile segment of State Route 55 (SR-55) between the interchange of Interstate 5 (I-5) and SR-55 [Post Mile (PM) 10.4] to the interchange of SR-55 and SR-91 (PM R17.9) (Proposed Project). Specifically, the build alternative of the Proposed Project includes the following<sup>1</sup>:

- One northbound general purpose lane between I-5 and State Route 22 (SR-22)
- One southbound general purpose lane between I-5 and SR-22
- Additional capacity on the southbound SR-55 Katella Avenue off- and on-ramps
- The southbound SR-55 Lincoln Avenue off-ramp relocated approximately 1,300 feet to the south

Based on a review of Figure 2.13 in the ND<sup>2</sup> and aerial photographs, South Coast AQMD staff found that sensitive receptors such as residential uses, medical facilities, and education uses are located in close proximity to the Proposed Project. The Proposed Project is expected to be constructed over a 24-month period<sup>3</sup>.

### South Coast AQMD Staff's Summary of 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 analysis or a mobile source Health Risk Assessment (HRA). Although the Lead Agency quantified the Proposed Project's operational emissions for different scenarios, these emissions were not compared to South Coast AQMD air quality CEQA significance thresholds for operation. Detailed comments are included in the attachment. The attachment also includes South Coast AQMD staff's recommendations on mitigation measures to further reduce the Proposed Project's construction air quality impacts and health risks to sensitive receptors.

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<sup>1</sup> ND, Page 1-25.

<sup>2</sup> ND, Pages 2.13-9 through 12.

<sup>3</sup> ND, Page 1-38.

Closing

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the ND for adoption together with any comments received during the public review process. Please provide the South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final ND. 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. Further, if the Lead Agency makes a finding that additional recommended mitigation measures are not feasible, the Lead Agency should describe the specific reasons for rejecting or substituting these mitigation measures in the Final ND (CEQA Guidelines Section 15074.1).

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 me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov) if you have any questions.

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS

ORC191001-01

Control Number

## ATTACHMENT

### South Coast AQMD'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. 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 AQMD, South Coast AQMD's air quality CEQA thresholds of significance for construction and operation<sup>4</sup> are used to determine the level of significance of 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 day<sup>5</sup> but did not compare those emissions to South Coast AQMD's air quality CEQA regional significance thresholds to determine the level of significance for the Proposed Project's construction and operational air quality impacts<sup>6</sup>. 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 evaluate the level of impacts before and after mitigation measures. Therefore, South Coast AQMD staff recommends that the Lead Agency compare the build alternative's construction emissions to South Coast AQMD's regional air quality CEQA significance thresholds in the Final ND to determine the level of significance.

### Localized Construction Air Quality Impact Analysis

2. 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. 3 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).

Based a review of Figure 2.13 in the ND<sup>7</sup> and aerial photographs, South Coast AQMD staff found that sensitive receptors are located in close 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. However, the Lead Agency did not quantify the Proposed Project's localized construction emissions in the ND. Therefore, South Coast AQMD staff recommends that the Lead Agency quantify the Proposed Project's localized construction emissions and disclose the localized air quality impacts in the Final ND to ensure that any nearby sensitive receptors are not adversely affected by the construction activities that are occurring in close proximity over a 24-month

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<sup>4</sup> South Coast Air Quality Management District. 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>.

<sup>5</sup> ND. Table 2.13-6; Page 2.13-19. Table 2.13-7; Page 2.13-22.

<sup>6</sup> *Ibid*.

<sup>7</sup> ND. Pages 2.13-9 through 12.

period. South Coast AQMD guidance for performing a localized air quality analysis is available on South Coast AQMD website<sup>8</sup>.

#### Mobile Source Health Risk Assessment Analysis

3. As stated above, sensitive receptors are located in close proximity to the Proposed Project. In general, a transportation project that adds freeway capacity 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. In the event that the build alternative is approved, its implementation is likely to bring traffic lanes closer to the existing sensitive receptors who 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)<sup>9</sup>. Therefore, South Coast AQMD staff recommends that the Lead Agency conduct a mobile source health risk assessment (HRA)<sup>10</sup> in the Final ND to disclose the potential health risks to residents from vehicles including DPM-emitting diesel-fueled vehicles that will use the Proposed Project.

#### Recommended Air Quality Mitigation Measures

4. 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 incorporating the following mitigation measures in the Final ND to further reduce construction emissions and health impacts to sensitive receptors.
  - a) Require the use of zero emission (ZE) or near-zero emission (NZE) heavy-duty trucks during operation, such as trucks with natural gas engines that meet the California Air Resources Board's (CARB) adopted optional NOx 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 operation commit to using 2010 model year<sup>11</sup> 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 NOx 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 ND, where appropriate.

To monitor and ensure ZE, NZE, or 2010 model year trucks are used at the Proposed Project, the Lead Agency should require that operators maintain records of all trucks associated with the Proposed Project's operation, 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 operation meets the minimum 2010 model year engine emission standards. Alternatively, the

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<sup>8</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>9</sup>In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. In the technical advisory, CARB stated that "street, highway, and freeway ramp intersections have been found to be pollution hot spots". (Page 20). The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

<sup>10</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>.

<sup>11</sup>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>.

Lead Agency should require periodic reporting and provision of written records by operators, and conduct regular inspections of the records to the maximum extent feasible and practicable.

- b) To further reduce NO<sub>x</sub> and particulate emissions during construction and minimize their impacts on nearby residents, South Coast AQMD staff recommends that the Lead Agency require the use of off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (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 emissions<sup>12</sup>. A list of CARB verified DPFs are available on the CARB website<sup>13</sup>.

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 or Tier 3 emission standards, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting construction phases occurring simultaneously.

- c) Minimize idling of all construction vehicles to five minutes or less. This is consistent with the CARB's idling policy<sup>14</sup>.

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<sup>12</sup>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](https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf).

<sup>13</sup>*Ibid.* Page 18.

<sup>14</sup>CARB. June 2009. *Written Idling Policy Guidelines*. Accessed at: <https://www.arb.ca.gov/msprog/ordiesel/guidance/writtenidlingguide.pdf>.