



# South Coast Air Quality Management District

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SENT VIA E-MAIL:

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## **Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the Proposed I-105 Express Lanes Project (SCH No.: 2018031037)**

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 EIR/EA.

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

The Lead Agency proposes to convert the existing 17.6 miles of high occupancy vehicle (HOV) lane to express toll lanes along Interstate 105 (I-105) between the interchange of I-105 and Interstate 405 in the City of Los Angeles and the interchange of I-105 and Studebaker Road in the City of Norwalk (Proposed Project). The Lead Agency proposes three alternatives to implement the Proposed Project as follows.

- Alternative 1 is the No-Build Alternative and does not include any improvements to the existing configurations for I-105.
- Alternative 2 is the Build Alternative 1 and will convert the existing HOV lane to one express lane in each direction. Roadway widening up to eight feet would be required in some locations to accommodate three new merge lane locations and an additional 12-foot weave lane at ingress/egress locations.
- Alternative 3 is the Build Alternative 2, which will convert the existing HOV lane to one express lane in each direction and construct a new 11-foot express lane in each direction. Roadway widening up to 25 feet would be needed to accommodate the second express lane configuration, five new merge lane locations, five new/extended auxiliary lanes, and an additional 12-foot weave lane at ingress/egress locations.

Construction of the Proposed Project is expected last approximately four years<sup>1</sup>. Based on a review of Figure 2-25, *Sensitive Receptors*, in the Draft EIR/EA<sup>2</sup> and aerial photographs, South Coast AQMD staff found that sensitive receptors such as residential uses, schools, daycare centers, and elderly care facilities are located in close proximity to the Proposed Project.

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

In the Draft EIR/EA, the Lead Agency conducted the regional air quality conformity analysis and the project-level, hot-spot analyses for CO, PM<sub>2.5</sub>, and PM<sub>10</sub>. The Lead Agency concluded that the Proposed Project meets the regional conformity requirements; is not required to conduct a detailed quantitative CO hot-spot analysis; and is not a project of air quality concern for particulate matter<sup>3</sup>. However, although construction activities are expected to last four years and would likely take place in

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<sup>1</sup> Draft EIR/EA. Page 313.

<sup>2</sup> *Ibid.* Pages 223-232.

<sup>3</sup> *Ibid.* Page 344.

close proximity to nearby sensitive receptors, the Lead Agency did not quantify the Proposed Project's regional or localized construction emissions in the Draft EIR/EA. Additionally, Alternative 3, if selected as the preferred build alternative for the Proposed Project, will include operation of a new 12-foot express lane in each direction, which could bring traffic and diesel particulate matter emissions closer to nearby sensitive receptors. However, the Lead Agency did not conduct a mobile source Health Risk Assessment (HRA) in the Draft EIR/EA. Therefore, South Coast AQMD staff recommends the regional and localized air quality impacts analysis and HRA be included in the Final EIR/EA as substantial evidence to support that the Proposed Project would not result in significant air quality impacts or expose nearby sensitive receptors to substantial pollutant concentrations. Detailed comments are included in the attachment. The attachment also includes a list of air quality mitigation measures to reduce construction emissions that the Lead Agency should include in the Final EIR/EA.

### Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR/EA. In addition, issues raised in the comments should be addressed in detail 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 will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, if the Lead Agency makes the findings that the recommended new mitigation measure is not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting it in the Final EIR/EA (CEQA Guidelines Section 15091).

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 questions or wish to discuss the comments.

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS

LAC200604-01

Control Number

**ATTACHMENT****1. Regional Air Quality Impact Analysis during Construction**

In the Draft EIR/EA, the Lead Agency did not quantify the Proposed Project's construction emissions because construction activities will not last for more than five years<sup>4</sup>. South Coast AQMD staff disagrees. The Proposed Project will be constructed over a four-year period in which diesel-powered construction equipment will be used (e.g., crawler tractors, excavators, graders, rollers, rubber tired loaders, scrapers, rough terrain forklifts, and paving equipment)<sup>5</sup>. The Lead Agency also anticipates the use of on-road gasoline vehicles by construction workers as well as on-road diesel-powered, heavy-duty trucks for material deliveries and debris hauling<sup>6</sup>. The use of off-road and on-road construction equipment will result in construction emissions and should be quantified and disclosed in the Air Quality Analysis in the Final EIR/EA as substantial evidence to support that the Proposed Project will not result in significant regional air quality impacts. The regional construction emissions should be compared to South Coast AQMD's recommended regional air quality CEQA significance thresholds to determine the level of significance for the Proposed Project's air quality impacts under CEQA (see Comment No. 2).

**2. South Coast AQMD's Recommended Regional Air Quality CEQA Thresholds of Significance**

CEQA thresholds of significance assist a Lead Agency in determining whether a project may cause significant environmental impacts. 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. Lead agencies can develop and publish their own significance thresholds or use significance thresholds recommended by other public agencies or experts (CEQA Guidelines Sections 15064 and 15064.7(c)). 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 operation<sup>7</sup> are used to determine the level of significance for a project's air quality impacts.

As stated in Comment No. 1, the Lead Agency did not quantify the maximum construction emissions for the Proposed Project. The Lead Agency should quantify those emissions and compare them to South Coast AQMD's regional air quality CEQA significance thresholds in the Final EIR/EA to determine the level of significance for the Proposed Project's construction air quality impacts<sup>8</sup>. Using South Coast AQMD's CEQA significance thresholds would clearly identify whether the Proposed Project would result in significant air quality impacts under CEQA, disclose the magnitude of the impacts, facilitate the identification of feasible mitigation measures and alternatives, and evaluate the level of impacts before and after mitigation measures.

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<sup>4</sup> Draft EIR/EA. Page 243.

<sup>5</sup> *Ibid.* Page 313.

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

<sup>7</sup> South 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>.

<sup>8</sup> *Ibid.*

### 3. Localized Air Quality Impact Analysis during Construction

Based on a review of Figure 2-25: *Sensitive Receptors*, in the Draft EIR/EA<sup>9</sup> and aerial photographs, South Coast AQMD staff found that existing schools, daycare centers, and elderly care facilities are located within 500 feet of the Proposed Project. However, the Lead Agency did not analyze the Proposed Project's localized air quality impacts from the use of diesel-powered construction equipment in the Draft EIR/EA. Localized air quality impacts from construction activities can cause direct physical changes to the environment by resulting in incremental increases in emissions in and around the Proposed Project's construction zones, which should be considered in evaluating the significance of the environmental effects of a project (CEQA Guidelines Section 15064). 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 EIR/EA to serve as substantial evidence that any nearby sensitive receptors are not adversely affected by emissions from construction activities that are occurring in close proximity during a four-year construction period. South Coast AQMD's guidance for performing a localized air quality impact analysis is available on South Coast AQMD website<sup>10</sup>.

### 4. Mobile Source Health Risk Assessment

As stated above, 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. One of the Build Alternatives (Alternative 3), if selected as the preferred alternative for the Proposed Project, will include a new 11-foot express lane in each direction along the 17.6-mile segment of I-105. With the addition of a new express lane, it is reasonably foreseeable that vehicular traffic and diesel particulate matter (DPM) emissions will be brought closer to nearby sensitive receptors and result in greater exposures to those receptors. The California Air Resources Board (CARB) has identified DPM as a toxic air contaminant based on its carcinogenic effects. Therefore, South Coast AQMD staff recommends that the Lead Agency conduct a mobile source HRA<sup>11</sup> and compare cancer risk to South Coast AQMD's CEQA significance threshold of 10 in one million<sup>12</sup> to determine the level of significance for the Proposed Project's health risk in the Final EIR/EA. The HRA can serve as substantial evidence to support that the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

### 5. Additional 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 additional mitigation measures be incorporated in the Final EIR/EA to further reduce construction emissions and health risks to sensitive receptors.

- a) Require the use of zero-emissions (ZE) or near-zero emissions (NZE) heavy-duty trucks during operation, such as trucks with natural gas engines that meet CARB's 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

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<sup>9</sup> *Ibid.* Pages 223-232.

<sup>10</sup> South Coast AQMD. *Localized Significance Thresholds*. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

<sup>11</sup> 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>.

<sup>12</sup> South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

using 2010 model year<sup>13</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 EIR/EA, 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 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) Require construction equipment such as concrete/industrial saws, pumps, aerial lifts, material hoist, air compressors, forklifts, excavator, wheel loader, and soil compactors be electric or alternative-fueled (i.e., non-diesel). Information on companies and electric powered equipment that can and should be used during construction is available at: <https://www.forconstructionpros.com/construction-technology/article/21107531/electrified-construction-equipment-gaining-momentum>.
- c) 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 emissions<sup>14</sup>. A list of CARB verified DPFs are available on the CARB website<sup>15</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

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<sup>13</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>.

<sup>14</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>15</sup> *Ibid*. Page 18.

technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or Tier 3 emission standards and reduction in the number and/or horsepower rating of construction equipment.

- d) Maintain equipment maintenance records for the construction portion of the Proposed Project. All construction equipment must be tuned and maintained in compliance with the manufacturer's recommended maintenance schedule and specifications. All maintenance records for each equipment and their construction contractor(s) should be made available for inspection and remain on-site for a period of at least two years from completion of construction.
- e) Encourage construction contractors to apply for South Coast AQMD "SOON" funds<sup>16</sup>. 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.
- f) Minimize or limit idling of all construction equipment to five minutes or less. This is consistent with the CARB's idling policy<sup>17</sup>.

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<sup>16</sup> South Coast AQMD. Available at: <http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines>.

<sup>17</sup> CARB. June 2009. *Written Idling Policy Guidelines*. Accessed at: <https://www.arb.ca.gov/msprog/ordiesel/guidance/writtenidlingguide.pdf>.