



South Coast Air Quality Management District

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SENT VIA E-MAIL:

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Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the California High-Speed Rail Project – Palmdale to Burbank Project Section August 2022 (Proposed Project) (SCH No.: 2014071074)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The California High-Speed Rail System Authority (Authority) is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments include recommended revisions to CEQA regional construction air quality analysis, health risk assessment (HRA), ambient air quality, impact avoidance and minimization features (IAMFs), additional air quality mitigation measures, and information about South Coast AQMD permits that the Lead Agency should include in the Final EIR/EIS.

South Coast AQMD Staff's Summary of Project Information in the Draft EIR/EIS

Based on the Draft EIR/EIS, the Authority proposes to develop the High-Speed Rail (HSR) system, which is an important transportation strategy. The HSR provides service for intercity travel in California on electrically powered, high-speed railroad tracks of more than 800 miles.¹ The Proposed Project is one of the project sections in the HSR system and spans approximately 31-38 miles between the city of Palmdale and Burbank, including a station in the city of Burbank near the Hollywood Burbank Airport.² The Proposed Project evaluates six Build Alternatives in the Draft EIR/EIS.³ Construction of the Proposed Project will occur over nine years from 2020-2029.⁴ It is anticipated that operations will begin in 2029.

South Coast AQMD Staff's Comments on the Draft EIR

CEQA Regional Construction Air Quality Analysis

In the Draft EIR/EIS, the Authority discusses that all six Build Alternatives would involve the use, storage, transport, and disposal of hazardous materials and wastes, such as wasted materials and contaminated soil or groundwater.⁵ Additionally, excavation and tunneling would generate

¹ Draft EIR/EIS. Summary Section. Page S-1.

² *Ibid.*

³ *Ibid.* Summary Section. Page S-2.

⁴ *Ibid.* Section 3.3. Page 3.3-28.

⁵ *Ibid.* Section 3.10. Page 3.10-21.

different quantities of potentially hazardous spoil materials, such that Refined SR14 and SR14A have 9.2 million cubic yards (mcy), E1 and E1A have 3.0 mcy, and E2 and E2A have 3.8 mcy of hazardous spoil.⁶ However, the Authority does not explain how this amount was developed in the Draft EIR/EIS. Furthermore, the Authority identifies the number of high-priority Potential Environmental Concerns (PEC) sites with known and/or suspected contamination during construction.⁷ The maximum number of high-priority PEC sites is 26 among all six Build Alternatives.⁸ It is unclear if the removal of hazardous spoil materials for those 26 sites is in addition to or included in the above million cubic yards of hazardous spoil materials and should be clarified in the Final EIR/EIS. The Authority identifies potential disposal sites for spoil materials within 25 miles one-way for the Palmdale to Burbank Section, which are Vulcan Mine, Boulevard Mine, and CalMat Mine in the Air Quality and Global Climate Change Technical Report.⁹ It is assumed that spoils would be hauled by trucks with an 18-cubic yard capacity.¹⁰ However, the number of hauling trucks during these activities and how the associated hauling trucks' emissions were calculated are not discussed in detail.

In the Public Utilities and Energy Section of the Draft EIR/EIS, the Authority also identifies five off-site disposal landfill facilities for solid waste collections: Antelope Valley Recycling and Disposal Facility in the City of Palmdale, Sunshine Canyon Landfill in the community of Sylmar, Burbank Landfill in the City of Burbank, Lancaster Landfill in the Los Angeles County, and Mojave Rosamond Landfill in the Kern County,¹¹ which are less than 20 miles away from the Proposed Project site (one-way) for most of the off-site landfills. As mentioned, the Proposed Project will require the removal of spoil materials. Depending on the type of spoil materials, those might not be accepted at any of the listed off-site disposal landfills. It may need to be disposed of at a permitted hazardous disposal facility outside Los Angeles County with a one-way trip length that is likely longer than 20 miles, which is the default trip length in the CalEEMod. Therefore, South Coast AQMD staff recommends that the Authority identifies the permitted hazardous disposal facility that the Proposed Project will use to dispose of hazardous materials, the number of hauling truck trips during the activities, re-calculate the Proposed Project's construction emissions from haul truck trips based on the appropriate one-way trip length and disclose it in the Final EIR/EIS. If the revision is not included in the Final EIR/EIS, the Authority should provide reasons supported by substantial evidence in the record to explain why it is not included.

Recommended Revisions to the Health Risk Assessment (HRA)

HRA Analysis Results

In the Draft EIR/EIS, the Authority discusses cancer and noncancer maximum health risk from the Proposed Project's construction, with the detailed analysis and results provided in the Air Quality and Global Climate Change Technical Report.¹² The HRA analyzes six discrete cases chosen for the worst-case scenario along the Build Alternatives alignments.¹³ However, South Coast AQMD

⁶ *Ibid.* Section 3.10. Page 3.10-22.

⁷ *Ibid.* Section 3.10. Page 3.10-32.

⁸ *Ibid.* Section 3.10. Page 3.10-32.

⁹ Air Quality and Global Climate Change Technical Report. Page 2-41,42.

¹⁰ Air Quality and Global Climate Change Technical Report. Page 2-42.

¹¹ *Draft EIR/EIS.* Section 3.6. Page 3.6-56.

¹² *Ibid.* Section 3.3 Page 3.3-106.

¹³ *Ibid.*

found that the cancer risks stated in the Draft EIR/EIS results differ from the Air Quality Technical Report. According to the Draft EIR/EIS, the maximum cancer risk is 9 in a million, as shown in Table 3.3-31 in the Draft EIR/EIS.¹⁴ The Authority concludes that the Proposed Project construction would not exceed applicable thresholds for cancer risk¹⁵ compared to the South Coast AQMD Air Quality CEQA Significance Thresholds¹⁶ for toxic air contaminants and therefore does not require any mitigation. In contrast, Table 13 in the Air Quality and Global Climate Change Technical Report shows the maximum cancer risk associated with the Proposed Project's construction is 41 in a million,¹⁷ which exceeds the South Coast AQMD Air Quality CEQA Significance Thresholds for toxic air contaminants. Therefore, South Coast AQMD staff recommends that the Authority review and revise the HRA analysis in the Draft EIR/EIS and the Air Quality and Global Climate Change Technical Report with consistent results and include them in the Final EIR/EIS. In the event that the cancer risks exceed the South Coast AQMD Air Quality CEQA Significance Thresholds for toxic air contaminants, the Authority should include additional air quality mitigation measures in the Air Quality Section of the Final EIR/EIS to commit to evaluating the potential impacts to reduce the cancer risk prior to any construction activities. If the additional air quality mitigation measures are not included in the Final EIR/EIS, the Authority should provide reasons supported by substantial evidence in the record to explain why the additional air quality mitigation measures are not necessary.

Additional HRA Analysis

From the time when the Draft EIR/EIS was prepared till the current review day in November 2022, it is possible that new sensitive land uses were sited in proximity to the Proposed Project. These could be projects, including residential units, schools, etc. As a result, the number of sensitive receptors used in the analysis for the Proposed Project Build Alternatives alignments and the estimated maximum cancer risks from all the receptors could be underestimated. Based on the HRA technical files, the HRA analysis was prepared in October 2020 and possibly did not include sensitive receptors from the approved and foreseeable projects between late 2020 and the present. Although the Authority lists planned, submitted, in progress, and approved projects based on the City (e.g., City of Burbank) in Appendix 3.19-A: Cumulative Project List,¹⁸ South Coast AQMD staff recommends that the Authority checks with the planning divisions of the City and County (e.g., City of Burbank,¹⁹ City of Palmdale,²⁰ etc.) to determine if any recently approved or foreseeable future projects that might have sensitive receptors located nearby the Proposed Project, and if so, re-evaluate the HRA analysis with the additional potential sensitive receptors along the Proposed Project, determine the cancer risks, and include the information in the Final EIR/EIS. Moreover, the Authority should also have these currently approved and foreseeable future projects, which have not been discussed in the Cumulative Analysis Section, under the cumulative impacts analysis, pursuant to the CEQA Guidelines Section 15130.²¹ If the revision is not included in the

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ South Coast AQMD Air Quality Significance Thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

¹⁷ *Ibid.* Air Quality Technical Report (Authority 2020), Page C-31.

¹⁸ *Ibid.* Appendix 3.19-A: Cumulative Project List.

¹⁹ City of Burbank. Access at: <https://www.burbankca.gov/web/community-development/active-projects>.

²⁰ City of Palmdale. Access at: <https://cityofpalmdale.org/277/Environmental-Documents>.

²¹ 2022 CEQA Statute & Guidelines. Access at: https://www.califaep.org/docs/2022_CEQA_Statute_and_Guidelines.pdf.

Final EIR/EIS, the Authority should provide reasons supported by substantial evidence in the record to explain why it is not included.

Recommended Revisions to the Ambient Air Quality

Under Air Quality Section in the Draft EIR/EIS, the Authority discusses the existing air quality conditions by monitoring data collected in the region, as shown in Table 3.3-8. The Authority summarizes the ambient monitoring results at three stations, Lancaster, Santa Clarita, and Reseda, for three years between 2017-2019.²² South Coast AQMD staff recommends that the Authority revise the section and use the most current updated data for the historical monitoring data, as provided via South Coast AQMD website,²³ and include the revision in the Final EIR/EIS. If not, the Authority should provide reasons supported by substantial evidence in the record to explain why those years were selected in the analysis.

Recommended Revisions to Existing Impact Avoidance and Minimization Features (IAMFs)

Based on an estimated construction timeframe, the Authority will require the use of off-road Tier 4 construction equipment and an average fleet mix of on-road haul trucks that meet or exceed the model year 2010 engine standard, according to the proposed Air Quality AQ-IAMF#4 and AQ-IAMF#5,²⁴ along with the Transportation TR-IAMF#7 that requires the use of construction truck routes away from sensitive receptors.²⁵ However, it is possible that the construction could be delayed beyond these timeframes. Therefore, to achieve additional emission reductions to the maximum extent feasible, South Coast AQMD staff recommends that the Authority strengthen the existing IAMFs in the Final EIR/EIS. According to the California Air Resources Board (CARB) Strategies for Reducing Emissions from Off-Road Construction Equipment, the implementation of off-road Tier 5 starting in 2027/2028 and the Governor's Executive order in September 2020 requires CARB to develop and propose a full transition to Zero Emissions (ZE) by 2035, wherever feasible.²⁶ The Authority should seek opportunities to require using zero-emissions (ZE) off-road construction equipment and ZE or near-zero emissions (NZE) material delivery and soil import/export haul trucks during construction. The Authority should also require truck routes to be clearly marked with trailblazer signs. Since the Proposed Project will result in significant and unavoidable construction air quality impacts, particularly for NO_x and CO, to further reduce construction emissions and their impacts on nearby sensitive receptors, South Coast AQMD staff recommends that the Authority strengthen the existing measures AQ-IAMF#4, AQ-IAMF#5, and TR-IAMF#7 in the Final EIR/EIS given the lengthy timeline of the project and advancements in cleaner equipment over time.

²² *Ibid.* Section 3.3. Page 3.3-44.

²³ South Coast AQMD Historical Air Quality Data. Access at: <http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year>.

²⁴ *Ibid.* Section 3.3. Page 3.3-21

²⁵ *Ibid.* Section 3.2. Page 3.2-14.

²⁶ Presentation can be found at:

<http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/combined-construction-carb-amp-aqmp-presentations-01-27-21.pdf>.

AQ-IAMF#4: Reduce Criteria Exhaust Emissions from Construction Equipment

South Coast AQMD staff's recommended revisions to AQ-IAMF#4 are in strikethrough and underlined as follows.

- All heavy-duty off-road construction diesel equipment used during the construction phase will meet Tier 4 Final engine or newer requirements, including ZE off-road construction equipment. 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 construction activities. A copy of each unit's certified tier or model year specification shall be available upon request at the time of mobilization of each applicable equipment unit. 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.

AQ-IAMF#5: Reduce Criteria Exhaust Emissions from On-Road Construction Equipment

South Coast AQMD staff's recommended revisions to AQ-IAMF#5 are in strikethrough and underlined as follows.

- Prior to the issuance of construction contracts, the Authority would incorporate the following material hauling truck fleet mix requirements into the contract specifications:

At a minimum, all on-road trucks used to haul construction materials, including fill, ballast, rail ties, and steel, would consist of an average fleet mix of equipment model year 2010 or newer haul trucks that meet California Air Resources Board's (CARB) 2010 engine emission standards of 0.01 g/bhp-hr for particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions. but no less than the average fleet mix for the current calendar year as set forth in the CARB's EMFAC 2014 database. [...]. Alternatively, require using ZE or NZE material delivery and soil import/export haul trucks during construction.

TR-IAMF#7: Construction Truck Routes

South Coast AQMD staff's recommended revisions to TR-IAMF#7 are in strikethrough and underlined as follows.

- The Contractor shall deliver all construction-related equipment and materials on the appropriate truck routes and shall prohibit heavy-construction vehicles from using alternative routes to get to the site. Truck routes would be established away from schools, daycare centers, and residences or along routes with the least impact if the Authority determines those areas are unavoidable. This measure shall be addressed in the CTP. The Authority should also require that truck routes are clearly marked with trailblazer signs so that trucks will not enter areas where sensitive receptors are present.

*Additional Recommended Air Quality Mitigation Measures*Construction-Related Air Quality Mitigations Measures

In the Draft EIR/EIS, the Authority proposes under Air Quality Mitigation Measures AQ-MM#1²⁷ to purchase emissions credits from South Coast AQMD to offset the Proposed Project's construction emissions. South Coast AQMD staff looks forward to further discussions with the Authority on the approach and mechanism to demonstrate that General Conformity requirements have been met. CEQA requires that the Lead Agency considers mitigation measures to minimize significant adverse impacts (CEQA Guidelines Section 15126.4) and that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. The Authority can and should require additional air quality mitigation measures to generate direct reductions of emissions from regional pollutants before purchasing offset emission credits. The Authority can and should incorporate emissions reductions outside the area of the Proposed Project by requiring the use of cleaner construction equipment and heavy-duty haul trucks that will be used for material delivery trucks and soil import/export. Specifically, the Authority can and should require the use of ZE or NZE trucks, such as trucks with natural gas engines that meet the CARB's adopted optional NOx emission standard of 0.02 grams per brake horsepower-hour (g/bhp-hr).

On November 17, 2022, CARB approved amendments to the In-Use Off-Road Diesel-Fueled Fleet Regulations²⁸ to further reduce emissions from the off-road sector. The off-road vehicles signed to the amendments are used in construction, industrial operations, and other industries. The amendment phases-in will start in 2024 and through the end of 2036, which includes changes to enhance enforceability and encourage the adoption of ZE technologies. It is recommended that the Authority review the amendments and other CARB regulations applicable to the Proposed Project and include the information in the Final EIR/EIS.

Technology is transforming the transportation sector at a rapid pace. ZE construction equipment and cleaner trucks, such as ZE or NZE trucks that meet the newly approved CARB standard or optional low NOx standard, will become increasingly more feasible and commercially available as technology advances. If using ZE or NZE construction equipment and heavy-duty haul trucks as a mitigation measure to reduce the Proposed Project's construction air quality impacts is not feasible today, they could become feasible in a reasonable period of time during the Proposed Project's nine-year construction period, which may be extended into the future (CEQA Guidelines Section 15364). Therefore, it is recommended that the Authority develop a process with performance standards to require and/or accelerate the deployment of the lowest emission technologies and the utilization of ZE or NZE construction equipment and heavy-duty haul trucks (CEQA Guidelines Section 15126.4(a)). The Authority can and should develop the performance standards as follows or any other comparable standards in the Final EIR/EIS.

- Develop a minimum amount of ZE or NZE construction equipment and heavy-duty haul trucks that the Proposed Project must use during each year of construction to ensure

²⁷ *Ibid.* Section 3.3 Page 3.3-130

²⁸ CARB Approves Amendment to the In-Use Off-Road Diesel-Fueled Fleets Regulations. Access at: <https://ww2.arb.ca.gov/news/carb-approves-amendments-road-regulation-further-reduce-emissions>.

adequate progress. Include this requirement in the Proposed Project's construction bid documents.

- Establish a construction contractor(s)/truck operator(s) selection policy that prefers construction contractor(s)/truck operator(s) who can supply ZE or NZE construction equipment and heavy-duty haul trucks. Include this policy in the Request for Proposal for selecting construction contractor(s)/truck operator(s).
- Develop a target-focused and performance-based process and timeline to review the feasibility of implementing the use of ZE or NZE construction equipment and heavy-duty haul trucks during construction. Include this process and timeline in the Construction Management Plan.
- Develop a project-specific process and criteria for periodically assessing progress in implementing the use of ZE or NZE construction equipment and heavy-duty haul trucks during construction. Include the assessment process and criteria in the Construction Management Plan.

Implementation of the Proposed Project contributes to Basin-wide NO_x emissions. Requiring the use of ZE or NZE construction equipment and heavy-duty haul trucks supports South Coast AQMD's efforts to attain state and federal air quality standards as outlined in the 2016 Air Quality Management Plan (AQMP), specifically an additional 45 percent reduction in NO_x emissions in 2023 and an additional 55 percent NO_x reduction beyond 2031 levels for ozone attainment.^{29,30} Requiring the use of ZE or NZE construction equipment and heavy-duty haul trucks also fulfills the Lead Agency's legal obligation to mitigate the Proposed Project's significant construction air quality impacts and complies with CEQA's requirements for mitigation measures.

Operation-Related Air Quality Mitigation Measures

Require at least six percent of the Proposed Project's 3,000 surface parking spaces at the Burbank Airport Station³¹ to provide electric vehicle (EV) charging stations, or at a minimum, require the Proposed Project to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles to plug-in. The Authority should quantify emissions from generating additional electricity for the EV charging stations and combine them with emissions from energy consumption for the electrified trains to analyze the Proposed Project's operational air quality impacts in the Final EIR/EIS. The Authority should also evaluate and identify sufficient power available for passenger vehicles and supportive infrastructures (e.g., EV charging stations) in Section 3.6, Public Utilities and Energy, of the Final EIR/EIS, where appropriate.

- Consider implementing Smart Parking systems to reduce vehicle idling time in parking facilities.

²⁹ South Coast AQMD. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at:

<http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

³⁰ Appendix I: *Health Effects* of the 2016 AQMP. Access at:

<https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-i.pdf>.

³¹ *Ibid.* Summary Section. Page S-27.

- Collaborate with local and regional agencies and transportation providers to develop incentive programs or other methods to increase ridership.

South Coast AQMD Permits and Responsible Agency

In the Draft EIR/EIS, the Authority will require the use of concrete batch plants, conduct gas monitoring and collection, and abandon active oil and gas wells within 200 feet of the proposed rail tracks. The Final EIR/EIS should discuss how the Proposed Project will comply with South Coast AQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil³² and Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments.³³ The Authority should consult with South Coast AQMD’s Engineering and Permitting staff to determine if any permits from South Coast AQMD will be required. If permits from South Coast AQMD are required, the Authority should identify South Coast AQMD as a Responsible Agency in the Final EIR/EIS. Please contact South Coast AQMD’s Engineering and Permitting staff at (909) 396-3385 for questions on permits. For more general information on permits, please visit South Coast AQMD’s webpage at: <http://www.aqmd.gov/home/permits>.

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. In addition, when the Lead Agency’s position is at variance with recommendations raised in the comments, the 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 and 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.

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 Danica Nguyen, Air Quality Specialist, at dnguyen1@aqmd.gov should you have any questions.

Sincerely,

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³² South Coast AQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil.

Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf>.

³³ South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments.

Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf>.