



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:

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Burbank.LosAngeles@hsr.ca.gov

Mark.McLoughlin@hsr.ca.gov

Mark A. McLoughlin, Director

California High-Speed Rail Authority, Environmental Services

355 S Grand Avenue, Suite 2050

Los Angeles, CA 90071

Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the California High-Speed Rail Project – Burbank to Los Angeles Project Section (Proposed Project) (SCH No.: 2014071073)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The High-Speed Rail Authority (Authority) is the CEQA Lead Agency for the Proposed Project. The following comments include recommended revisions to the air quality analysis, air dispersion modeling, Impact Avoidance and Minimization Features (IAMFs), and mitigation measures that the Authority should include in the Final EIR/EIS.

Based on the Draft EIR/EIS, the High-Speed Rail (HSR) system is an important transportation strategy. It provides intercity travel in California on electrically powered, high-speed railroad tracks of more than 800 miles¹. The Proposed Project is one of 12 project sections in the HSR system and spans 14 miles between Hollywood Burbank Airport in the City of Burbank and Los Angeles Union Station in the City of Los Angeles. Construction of the Proposed Project will occur over a nine-year period from 2020-2028². It is anticipated that operations will begin in 2029³.

Based on a review of the Draft EIR/EIS and supporting technical documents, South Coast AQMD staff has seven main comments. A summary of these comments is provided as follows with additional details provided in the attachment.

1. **CEQA Air Quality Analysis for Regional Construction Impacts:** In the Draft EIR/EIS, the Authority used 10 miles (one-way) of truck trip length to quantify the Proposed Project's hauling emissions from exporting contaminated soil and construction materials. Since most of the off-site landfill disposal facilities identified in the Draft EIR/EIS are located more than 10 miles away (one-way), and it is likely that contaminated soil may need to be disposed at a permitted hazardous disposal facility that is located in a different county or state, using a one-way trip length of 10 miles likely underestimated the Proposed Project's hauling emissions, particularly NO_x emissions. Additionally, the Authority quantified the Proposed Project's construction emissions from removing 80,000 cubic yards of contaminated soil but did not explain how this amount was developed. The Authority identified that 47 properties within the

¹ Draft EIR/EIS. Summary. Page S-1.

² *Ibid.* Section 3.3 Air Quality. Page 3.3-38.

³ *Ibid.* Page 3.2-41.

Proposed Project's footprint have known or suspected contamination. It is not clear if removal of contaminated soil for those 47 properties was in addition to or included in 80,000 cubic yards and should be clarified in the Final EIR/EIS.

2. CEQA Air Quality Analysis for Regional Operational Impacts: In the Draft EIR/EIS, the Authority quantified emissions reductions from aircraft due to reduced air travel in Southern California and included those reductions to determine the level of significance for the Proposed Project's operational air quality impacts. Since the Proposed Project is one of three Southern California sections of the HSR system, it is not clear if the Proposed Project in itself will cause a reduced demand in air travel and decrease in aircraft emissions. Therefore, it is not appropriate to include emissions reductions for all of Southern California to analyze the Proposed Project's operational air quality impacts in the Draft EIR/EIS. The Authority should quantify the portion of aircraft emissions that will be reduced because of the Proposed Project in the Final EIR/EIS.
3. CEQA Air Quality Analysis for Localized Operational Impacts: In the Draft EIR, the Authority states that, due to the Proposed Project's design constraints, existing operational Metrolink Central Maintenance Facility (CMF) yard activities will be required to be relocated. However, the Draft EIR does not provide additional information or analysis of the environmental impacts associated with this direct impact of the Proposed Project. The Authority should provide more information on the proposed relocation site, the activities which would occur at this relocation site, the site's proximity to sensitive receptors (e.g. residents, schools, etc.) and analyze the localized air quality impacts from activities that will be relocated from the Metrolink CMF in the Final EIR/EIS.
4. Air Dispersion Modeling Parameters: The air dispersion modeling performed in the Draft EIR/EIS and technical supporting documents placed sensitive receptors locations along the fence line boundary, used the non-default regulatory option, and modeled emissions from construction equipment as an "Open Pit" source. The Authority should provide additional information to justify these modeling parameters in the Final EIR/EIS.
5. Recommended Revisions to Existing Impact Avoidance and Minimization Features: Based on an estimated construction timeframe of 2020 to 2028, 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 model year 2010 engine standard. 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 by requiring the use of 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 be clearly marked with trailblazer signs.
6. Additional Recommended Air Quality Mitigation Measures: In the Draft EIR/EIS, the Authority proposes 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

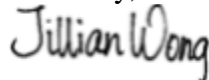
Conformity requirements have been met. In the Final EIR/EIS, the Authority can and should require additional mitigation measures to achieve direct reductions of construction emissions, especially for regional pollutants, before purchasing offset credits. It is important to note that emissions credits can be used to offset regional impacts, but not localized impacts. The Authority should develop performance standards to require the use of zero-emissions or near-zero emissions trucks during construction (e.g., material delivery trucks and soil import/export) in the Final EIR/EIS. Additional recommended mitigation measures during operation are also included in the attachment.

7. South Coast AQMD Rules and Permits: 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 Soil⁴ and Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments⁵. 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.

In conclusion, the Draft EIR/EIS likely underestimated the Proposed Project’s construction emissions and overestimated the Proposed Project’s air quality benefits by considering aircraft emissions occurring in Southern California. South Coast AQMD staff recommends that the Authority revise the air quality analysis in the Final EIR/EIS.

South Coast AQMD staff is available to work with the Authority to address any air quality questions that may arise from this comment letter. Please feel free to call me at (909) 396-3176 if you have questions or wish to discuss our comments.

Sincerely,



Jillian Wong, Ph.D.
Planning and Rules Manager
Planning, Rule Development & Area Sources

Attachment
SN/IM/VT/JW:LS/AM
LAC200526-01
Control Number

⁴ South Coast AQMD. Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf>.

⁵ South Coast AQMD. Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments. Accessed at: <https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf>.

ATTACHMENT**South Coast AQMD Staff's Summary of the Air Quality Analysis and Health Risk Assessment**

The Authority analyzed the Proposed Project's regional and localized construction air quality impacts after incorporating six construction air quality Impact Avoidance Minimization Features (IAMFs) as project requirements. The Proposed Project's mitigated regional nitrogen oxide (NO_x) and carbon monoxide (CO) emissions would be significant and unavoidable at 482.11 pounds/day (lbs/day) and 708.97 lbs/day, respectively⁶. The Authority performed air dispersion modeling to analyze the Proposed Project's localized construction air quality impacts and found that concentrations would not exceed the air quality standards, except for nitrogen dioxide (NO₂). The Proposed Project would result in a maximum 1-hour NO₂ concentration of 643 micrograms per cubic meter (μg/m³) during construction⁷, which exceeds the 1-hour National Ambient Air Quality Standard of 188 μg/m³ and the 1-hour California Ambient Air Quality Standard (CAAQS) of 339 ug/m³. The Proposed Project would also result in a maximum annual NO₂ concentration of 77.3 μg/m³ during construction⁸, which exceeds the annual CAAQS of 57 μg/m³. The Authority also conducted a Health Risk Assessment (HRA) for the Proposed Project's construction activities, which would result in a cancer inhalation risk of 2.6 in one million⁹, which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk¹⁰.

The Authority quantified the statewide and regional operational emissions for the medium (46.8 million) and high (56.8 million) ridership scenarios with a planning horizon of 2040¹¹. Both direct emissions from HSR station operations and fugitive dust from train operations and indirect emissions from regional vehicle travel, aircraft, and electricity generation were calculated in the Draft EIR/EIS¹². The Authority found that operation of the HSR system would result in a net regional decrease in emissions for all criteria pollutants because of reductions in regional vehicle and air travel¹³. Therefore, the HSR system would have a beneficial air quality impact under CEQA¹⁴.

South Coast AQMD staff's detailed comments on the CEQA air quality impacts analysis and air dispersion modeling are provided as follows.

⁶ Draft EIR/EIS. Section 3.3. Pages 3.3-49 to 54.

⁷ *Ibid.* Page 3.3-61 to 63.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk is based on the most current methodology recommended by the California Office of Environmental Health Hazard assessment.

¹¹ Draft EIR/EIS. Section 3.2 Air Quality. Page 3.3-28.

¹² *Ibid.* Section 3.3. Pages 3.3-62 to 71.

¹³ *Ibid.*

¹⁴ *Ibid.*

1. CEQA Air Quality Analysis for Regional Construction Impacts

Truck Trip Length

The Authority reduced the default one-way truck trip length from 20 miles to 10 miles to quantify the Proposed Project’s construction emissions from hauling construction materials and importing or exporting soil. In the Public Utilities and Energy Section of the Draft EIR/EIS, the Authority identified five off-site disposal landfill facilities for solid waste collections: Burbank Landfill Site No. 3 in the City of Burbank, Scholl Canyon Landfill in the City of Glendale, Chiquita Canyon Landfill in the community of Castaic in Los Angeles County, Calabasas Landfill in the community of Agoura Hills in Los Angeles County, and Sunshine Canyon Landfill in the community of Sylmar in the City of Los Angeles¹⁵. As shown in Table A below, the majority of the landfill facilities are more than 10 miles away (one-way). Additionally, as discussed in Comment No. 2, the Proposed Project will require the removal of contaminated soil. Depending on the type of contamination, contaminated soil may not be accepted at any of these off-site disposal landfill facilities identified in the Draft EIR/EIS and may need to be disposed at a permitted hazardous disposal facility outside Los Angeles County with a one-way trip length that is likely longer than 39 miles. During the earth moving construction phase, which spans over a five-year period between 2020 and 2025, an estimated 398,750 one-way truck trips would be required for hauling 3,190,000 cubic yards of soil¹⁶. Using a one-way truck trip length of 10 miles likely underestimated the Proposed Project’s construction emissions. Therefore, South Coast AQMD staff recommends that the Authority identify the permitted hazardous disposal facility that the Proposed Project will use to dispose contaminated soil, disclose it in the Final EIR/EIS, and re-calculate the Proposed Project’s construction emissions from haul truck trips based on the appropriate one-way trip length.

Table A: Trip Lengths to Landfills Identified in the Draft EIR/EIS

<u>Off-site Disposal Landfill Facilities Identified in the Draft EIR/EIS</u>	<u>One Way Truck Trip Length from the Proposed Project (Hollywood Burbank Airport)</u>	<u>One Way Truck Trip Length from the Proposed Project (Los Angeles Union Station)</u>
Burbank Landfill No. 3	6 miles	12 miles
Scholl Canyon Landfill	15 miles	13 miles
Chiquita Canyon Landfill	28 miles	39 miles
Calabasas Landfill	26 miles	32 miles
Sunshine Canyon Landfill	15 miles	26 miles

Source: South Coast AQMD staff generated using Google Maps. Date: July 2020.

Removal of Contaminated Soil

In the Draft EIR/EIS, the Authority quantified the Proposed Project’s construction emissions from removing 80,000 cubic yards of contaminated soil but did not explain how this amount of soil export was developed. Additionally, in the Hazards and Hazardous Materials Section of the Draft EIR/EIS, the Authority lists 47 properties within the Proposed Project’s footprint that present a

¹⁵ *Ibid.* Section 3.6 Public Utilities and Energy. Page 3.6-18.

¹⁶ *Ibid.* Air Quality Technical Report, Appendix A: *CalEEMod Construction Emissions*. CalEEMod Annual Run “HSR B-LA Earthmoving Phase”. PDF page 1417.

potential environmental concern (PEC) due to known or suspected site contamination. Six of them are listed as “high-risk”, which is defined as a property where “additional investigation and review indicated contamination is present and likely to be encountered during construction, and abatement of building materials will be required prior to construction”¹⁷. It is unclear if additional amount of contaminated soil will need to be removed for cleaning up those 47 properties or is included in 80,000 cubic yards of contaminated soil for export. The Authority should include additional information to clarify that in the Final EIR/EIS. If more than 80,000 cubic yards of contaminated soil will need to be removed, the Authority should re-calculate the Proposed Project’s construction emissions for hauling from soil export in the Final EIR/EIS.

2. CEQA Air Quality Analysis for Regional Operational Impacts

In the Draft EIR/EIS, the Authority quantified statewide and regional operational emissions associated the HSR system based on the medium and high ridership scenarios¹⁸. Although emissions from electrical demands are expected to increase, vehicle and air travel are expected to be reduced¹⁹. As such, the Authority found that the HSR system will result in net decreases in criteria pollutants emissions, both statewide and regionally²⁰. For example, in the regional air quality analysis, the Authority found that, with implementation of the Proposed Project (based on a high ridership scenario), changes to air travel in Southern California would result in NOx emissions reductions ranging from 254 tons/year to 465 tons/year²¹.

The California HSR system includes more than 800 miles of rail tracks throughout the state, connecting the major population centers of Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County, and San Diego²². It is appropriate to assume that the HSR system will, collectively, reduce the demand for air travel and include aircraft emissions reductions in the first-tier, programmatic-level environmental documents²³.

The Proposed Project involves a 14-mile rail track for freight and passenger services and has a limited geographic scale between Hollywood Burbank Airport in the City of Burbank and Los Angeles Union Station in the City of Los Angeles. The Authority is also developing two other project sections of the HSR system (the Palmdale to Burbank Project Section and the Los Angeles to Anaheim Project Section) in Southern California. While the statewide HSR system and the three Southern California project sections of the HSR system are expected to provide an alternative transportation mode to air travel and reduce aircraft emissions, there is not enough information in the Draft EIR/EIS to support that the Proposed Project in itself will cause a reduced demand in intrastate or regional air travel. Including reductions in aircraft emissions from changes to air travel for all of the Southern California project sections may have improperly credited the Proposed Project with emissions reductions that are independent of the Proposed Project. Therefore, South Coast AQMD staff recommends that the Authority quantify the portion of emissions from air travel that will be reduced because of the Proposed Project and include those emissions in the Proposed Project’s operational emissions profile to be compared to South Coast AQMD’s regional air

¹⁷ *Ibid.* Section 3.10 Hazardous Materials and Wastes. Table 3.10-6. Pages 3.10-32 and 33.

¹⁸ *Ibid.* Section 3.3. Pages 3.3-62 to 71.

¹⁹ *Ibid.* Section 3.2 Transportation. Page 3.2-81.

²⁰ *Ibid.* Section 3.3. Page 3.3-62 to 71.

²¹ *Ibid.* Air Quality and Global Climate Change Technical Report. Pages 7-14 to 7-17.

²² *Ibid.* Page S-1.

²³ *Ibid.* Section 3.2. Page 3.2-81.

quality CEQA significance thresholds for operation to determine the level of significance. This recommendation facilitates the intended use of this EIR/EIS as a second-tier, project-level environmental document²⁴.

3. CEQA Air Quality Analysis for Localized Operational Impacts

In the Draft EIR/EIS, the Authority explains that, as a part of the Proposed Project, the existing Metrolink CMF will be redesigned to accommodate both the HSR operations and most existing CMF yard operations. The new configuration will require that wheel turning operations and progressive maintenance bays be relocated to another Metrolink facility; however, the Authority did not identify a relocation site or analyze the localized air quality impacts from operation of the relocated railyard activities at the relocation site in the Draft EIR/EIS²⁵. Since the relocation of wheel turning operations and progressive maintenance bays from the Metrolink CMF to another Metrolink facility is directly related to the Proposed Project, the environmental impacts associated with the activities occurring at the relocation site should be analyzed and disclosed to the public in the Final EIR/EIS. The Authority should provide more information regarding the relocation site, including the proximity to nearby sensitive receptors (e.g. residents, schools, etc.), and analyze the localized air quality impacts from the relocated activities for comparison to South Coast AQMD's CEQA air quality localized significance thresholds or the National Ambient Air Quality Standards and the California Ambient Air Quality Standards in the Final EIR/EIS²⁶. In addition, if Metrolink train activity is altered to accommodate this new maintenance location in the system, then any potential air quality impacts from that relocation should be analyzed along with other project air quality impacts, and mitigated if found to be significant.

4. Air Dispersion Modeling Parameters

To analyze the Proposed Project's localized construction air quality impacts, the Authority performed project-specific air dispersion modeling in the Draft EIR/EIS. South Coast AQMD staff recommends that the Authority revise the modeling parameters based on the following comments.

- In Appendix G: *Health Risk Assessment Technical Report*, the Authority explains that sensitive receptors were set at the Proposed Project's fence line boundary extending out to 1,000 feet (300 meters) at a 25-meter spacing²⁷. Upon review of the air dispersion modeling files, South Coast AQMD staff found that sensitive receptors were only placed along the fence line boundary. This placement may not have captured the maximum predicated receptors and the peak concentrations. Therefore, South Coast AQMD staff recommends that the Authority use a uniform Cartesian grid with a spacing of 100 meters or less for all distances less than 1,000 feet²⁸, or provide information to demonstrate that the peak concentrations were identified with placement of discrete receptor locations along the fence line boundary.

²⁴ *Ibid.* Page S-4.

²⁵ *Ibid.* Chapter 2 Alternatives. Page 2-48.

²⁶ South Coast AQMD. *Localized Significance Thresholds*. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

²⁷ *Ibid.* Appendix G: *Health Risk Assessment Technical Report*. Pages 3-3 to 3-4.

²⁸ South Coast AQMD. "Modeling Guidance for AERMOD". Accessed at: <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>

- In the air dispersion model, the Authority used the non-regulatory default option “FASTAREA”. South Coast AQMD staff recommends using the regulatory default option or providing justification for using the non-regulatory default FASTAREA option.
- Emissions from construction equipment were modeled as an “Open Pit” source. The “Open Pit” source in AERMOD is used to model emissions from surface coal mines and rock quarries. South Coast AQMD staff recommends the Authority provide additional information to explain how the emission characteristics of off-road construction equipment are representative of those of an “Open Pit” source to justify the use of this source in the air dispersion model.

5. Recommended Revisions to Existing Impact Avoidance and Minimization Features

In the Draft EIR/EIS, the Authority is committed to six air quality and 12 transportation Impact Avoidance and Minimization Features (IAMFs). Among them, AQ-IAMF#4 requires that all off-road diesel construction equipment meet Tier 4 engine requirements. AQ-IAMF#5 requires that all on-road construction haul trucks consist of an average fleet mix of model year 2010 or newer engine standards. Transportation (TR) IAMF #7 requires the use of construction truck routes away from sensitive receptors²⁹. 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.

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

The Proposed Project is anticipated to be constructed over a nine-year period beginning in 2020; however, it is likely that construction could be delayed beyond this timeframe and cleaner off-road construction equipment may become available as the construction schedule extends further out. Therefore, it is recommended that the Authority require the use of Tier 4 Final or cleaner construction equipment, such as more electric powered construction equipment (also see Comment No. 6 for more details), and include additional information on implementation and monitoring of this IAMF in the Final EIR/EIS.

South Coast AQMD staff’s recommended revisions AQ-IAMF#4 are in strikethrough and underline as follows.

- All heavy-duty off-road construction diesel equipment used during the construction phase would meet Tier 4 ~~Final or newer engine requirements, which includes the use of zero-emission 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 specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. Require periodic reporting and provision of written~~

²⁹ Draft EIR/EIS. Appendix 2-B *Impact Avoidance and Minimization Features*. Pages 2-B-2 through 2-B-3 and 2-B-11.

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

In the Draft EIR/EIS, the Authority is committed to requiring an average fleet mix of 2010 model year trucks or newer. This means that not all haul trucks for the Proposed Project will need to meet or exceed 2010 model year engine standards. South Coast AQMD staff recommends that all on-road trucks used to haul construction materials and soil import/export meet and/or exceed 2010 model year engine standard. However, it is possible that the construction could be delayed beyond the construction timeframe of 2020 to 2028 that the Draft EIR/EIS used to estimate the Proposed Project's construction emissions. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of zero-emissions (ZE) and near-zero-emissions (NZE) trucks such as the Advanced Clean Trucks Rule³⁰ and the Heavy-Duty Low NOx Omnibus Regulation³¹, ZE and NZE trucks will become increasingly more available to use. Since the Proposed Project's construction air quality impacts would be significant and unavoidable, particularly for NOx emissions, the Authority should require the use of ZE or NZE trucks during construction. (Also see Comment No. 6 for more details).

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

- Prior to 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 the use of 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 TR-IAMF#7 is in strikethrough and underline as follows.

³⁰ California Air Resources Board. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.

³¹ CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: <https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox>.

- 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, day care 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.

6. Additional Recommended Air Quality Mitigation Measures

Construction-related Air Quality Mitigation Measures

In the Draft EIR/EIS, the Authority will require implementation of one air quality mitigation measure (AQ-MM#1). AQ-MM#1 would require the purchase of emission offsets through an anticipated contractual agreement between the Authority and South Coast AQMD to reduce the Proposed Project's construction NOx emissions³².

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).

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 due to funding uncertainty for the Proposed Project³³ (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.

³² *Ibid.* Section 3.3. Page 3.3-54.

³³ *Ibid.* Page S-1.

- 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 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 to implement 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^{34,35}. 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 5,210 vehicle parking spaces (or 313 parking spaces) at the Burbank Airport Station and the Los Angeles Union Station³⁶ 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

³⁴ 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>.

³⁵ Based on the air dispersion modeling that was performed to analyze the Proposed Project's localized air quality impacts, the Lead Agency found that the Proposed Project would result in NO₂ concentrations that would exceed the federal 1-hour standard and the state annual standard during construction. (Draft EIR/EIS. Chapter 3. 3 Air Quality. Page 3.3-61 and 62). In the Appendix I: *Health Effects* of the 2016 AQMP, South Coast AQMD staff discussed a 2016 health study by the U.S. EPA. The study found that when adults with asthma are exposed to NO₂ at the 100 parts per billion (ppb) to 300 ppb concentrations, they experienced an increase in airway responsiveness, which in asthmatics can worsen symptoms and reduce lung function. (Page I-54. Accessed 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>).

³⁶ *Ibid.* Page S-14.

Project's operational air quality impacts in the Final EIR/EIS (See Comment No. 2 above). 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 implementation of Smart Parking systems to reduce vehicle idling time in parking facilities.
- Collaborate with local and regional agencies and transportation providers to develop incentive programs or other methods to increase ridership.

7. South Coast AQMD Rules and Permits

In the Draft EIR/EIS, the Authority will require the use of concrete batch plants outside the Burbank Airport Station area during construction (AQ-IAMF#6), implement best management practices for gas monitoring, including installation of gas venting, collecting, and monitoring systems during construction [Geologic Resources (GEO)-IAMF #3], and abandon any active oil and gas wells within 200 feet of the Proposed Project's rail tracks [Safety and Security (SS)-IAMF#4]. The Authority should include discussions on how construction activities will comply with South Coast AQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil³⁷ and Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments³⁸.

It is also recommended that the Authority consult with South Coast AQMD's Engineering and Permitting staff to determine if any permits from South Coast AQMD will be required, and if compliance with other applicable South Coast AQMD rules is required and should be discussed in the Air Quality Section of the Final EIR/EIS. In the event that the Proposed Project requires permits from South Coast AQMD, the Authority should identify South Coast AQMD as a Responsible Agency in the Final EIR/EIS. Any assumptions used in the Final EIR/EIS will be used as the basis for evaluating the permits under CEQA and imposing permit conditions and limits. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) methodology is being used by South Coast AQMD for determining operational health risks for permitting applications and also for all CEQA projects where South Coast AQMD is the Lead Agency. Should there be any questions on permits, please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. 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 Authority provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR/EIS. 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

³⁷ South Coast AQMD. Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf>.

³⁸ South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Containments. Accessed at: <https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf>.

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 Authority makes the finding that the recommended revisions to the existing IAMFs and additional mitigation measures are not feasible, the Authority should describe the specific reasons supported by substantial evidence for rejecting them in the Final EIR/EIS (CEQA Guidelines Section 15091).