



South Coast Air Quality Management District

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Notice of Availability of a Draft Environmental Impact Report (EIR) for the Menifee Valley Specific Plan Project (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to review the above-mentioned document. The City of Menifee is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. To provide context, South Coast AQMD staff has provided a brief summary of the project information and prepared the following comments which are organized by topic of concern.

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

Based on the Draft EIR, the Proposed Project consists of constructing 1,718 residential units, 275.5 acres of business park uses, 32.1 acres of commercial uses, 33.3 acres of public facilities, 19.6 acres of roadway improvements, and 44.5 acres allocated for open space. The project comprises 590.3 acres of land and approximately 59 acres of off-site improvements necessary to provide access and utilities to the project. The first set of off-site improvements includes roadway improvements to existing roadways, utility connections, landscaping, and construction of a non-vehicular bridge. The second off-site roadway improvements include widening and additional turn lanes to address traffic impacts.¹

Regional access to the Project site is provided by State Route 74 (SR-74), which is located adjacent to the northern boundary of the Project site, and Interstate 215 (I-215), which is located approximately 2 miles west of the Project site.² Based on a review of aerial photographs, South Coast AQMD staff found that the nearest sensitive receptor (residential development) is located adjacent to the Proposed Project site, approximately 135 feet west and south of the Proposed Project.³ Construction of the Proposed Project is anticipated to occur in three phases, commencing in October 2023 and being completed in April 2030.⁴ The project is located on the northeast corner of Matthews Road and Menifee Road.⁵

South Coast AQMD Staff's Comments

Overlapping Construction and Operational Activities

¹ Draft EIR p. 23.

² Ibid. p. 23.

³ Ibid. p. 229.

⁴ Ibid. p. 79.

⁵ Ibid. p. 23.

Considering that the Proposed Project consists of two construction phases over the course of 7 years of construction, the Draft EIR does not analyze the scenario of overlapping between the construction and operational activities. Therefore, South Coast AQMD staff recommends that the Lead Agency revise the air quality analysis section to consider the overlapping construction and operation. The estimated overlapped emissions should then be compared to South Coast AQMD's regional air quality CEQA operational thresholds to determine their level of significance, which should be included in the Final EIR.

Discrepancies Between Draft EIR and CalEEMod Modeling Data in Overall Air Quality Impact Analysis for on-site Construction emissions

Table 4.3.F and Table 4.3.G in the Air Quality section in the Draft EIR show the Unmitigated and Mitigated On-site Improvements Construction Emissions (lb/day).⁶ Based on the review of the CalEEMod technical files provided, it appears that the pollutant emissions for ROG, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} in Table 4.3.F and Table 4.3.G do not match the corresponding pollutant emission in the CalEEMod technical files (refer to Page 97 of the Draft EIR). Please provide an explanation for this discrepancy and revise the construction emissions analyses for the mentioned pollutants.

Inconsistencies in Land Use Lot Acreage: A Comparison Between CalEEMod and Draft EIR Documentation

In accordance with the Draft EIR, the Project's Land Use Plan would divide the 590.3-acreage property into 14 "Planning Areas" to accommodate 1,718 residential units, business park, business park, commercial areas, and civic uses. According to Table 3.A: Summary of Land Uses, the total land use designation for Residential (R) is 202.3 acres. However, the total residential land use in both Phase 1 and Phase 2 of the project used in the CalEEMod modeling is 185 lot acres. A similar inconsistency is observed in the Business Park (BP) land use figures between the Draft EIR document and the CalEEMod modeling assumptions, specifically in terms of total lot acreage. This inconsistency leads to the underestimation of emissions for different types of land use. Therefore, it is recommended that the Lead Agency provide an explanation for this discrepancy between the Draft EIR and the CalEEMod modeling.

Multiple plot files for the individual sources in the AERMOD modeling

South Coast AQMD staff's review of the construction AERMOD and HRA files noted in the Construction.AD folder, 14 different plot files are the model output from the 14 individual area poly sources for the diesel particulate matters (DPM). However, there is no plot file evaluated the combined concentrations from all 14 poly area sources to represent the cumulative construction impacts. The Lead Agency is recommended to revise and rerun the AERMOD model, selecting the 'Include Group All' tab in the source section, to combine the data into one comprehensive plot file for all 14 sources.

Air Quality Mitigation Measures for NO_x and PM Emissions from Construction

⁶ Ibid, p. 215.

Although the Proposed Project has committed to adopt Tier 4 technology for the equipment during project construction phase in the Draft EIR, given the long-range plan of the Proposed Project from year 2023-2030, Tier 4 technology may not be the cleanest technology when construction occurs later for individual projects. According to the CARB Strategies for Reducing Emissions from Off-Road Construction Equipment, the implementation of off-road Tier 5 starting in 2027 or 2028 and the Governor's Executive Order in September 2020 requires CARB to develop and propose a full transition to Zero Emissions (ZE) by 2035.⁷ Considering the scope of the project, it is crucial to ensure that the levels of construction emissions, specifically NOx and PM₁₀, remain below significant thresholds during the construction period for each proposed individual project. Moving towards achieving this goal, where feasible, involves opting for electric emission-free engines instead of diesel-fueled engines for the construction equipment. This proactive choice not only aligns with environmental concerns but also demonstrates a commitment to minimizing the project's environmental footprints. The abatement of NOx can also be pursued by enforcing greener constructions, such as, limiting the usage of older engines in favor of adopting the latest available technologies, or even incorporating exhaust retrofits such as cutting-edge exhaust aftertreatment techniques. Additionally, several other resources to assist the Lead Agency with identifying additional potential mitigation measures for the Proposed Project are included in the South Coast AQMD's CEQA Air Quality Handbook⁸ for both operational and construction emissions.

Additional Recommended Air Quality and Greenhouse Gases 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 air quality impacts. To further reduce the Proposed Project's air quality impacts, and in addition to SWIP SP FEIR Mitigation Measures MM 4.2-1a to MM 4.2-1f, MM 4.2-2a to MM4.2-2l, and MM 4.2-5a, South Coast AQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR.

Mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider in the Draft EIR may include the following:

- Require ZE or near-zero emission (NZE) on-road haul trucks, such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of ZE and NZE trucks, such as the Advanced Clean Trucks Rule⁹ and the Heavy-duty Low NOx Omnibus Regulation,¹⁰ ZE and NZE trucks will become

⁷ 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>

⁸ <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>

⁹ CARB. June 25, 2020. Advanced Clean Trucks Rule. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-cleantrucks>.

¹⁰ CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in the state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will

increasingly more available to use. The Lead Agency should require a phase-in schedule to incentivize the use of these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency. At a minimum, require the use of a 2010 model year¹¹ that meets CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. All heavy-duty haul trucks should meet CARB's lowest optional low-NOx standard starting in 2022.¹² Where appropriate, include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the CEQA document. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing this higher activity level.
- Provide electric vehicle (EV) charging stations or, at a minimum, provide electrical infrastructure, and electrical panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

Mitigation measures for operational air quality impacts from other area sources that the Lead Agency should consider in the Draft EIR may include the following:

- Maximize the use of solar energy by installing solar energy arrays.
- Use light-colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices and appliances.

Design considerations for the Proposed Project that the Lead Agency should consider reducing air quality and health risk further impacts include the following:

- Clearly mark truck routes with trailblazer signs so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, daycare centers, etc.).
- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Design the Proposed Project such that any truck check-in point is inside the Proposed Project site to ensure no trucks are queuing outside.

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>.

¹¹ CARB adopted the statewide 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 Regulation is available at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

¹² CARB's optional low-NOx emission standard is available at: <https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards>.

- Design the Proposed Project to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site.

Health Risk Reduction Strategies

Many strategies are available to reduce exposures, including, but are not limited to, building filtration systems with MERV 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. Enhanced filtration units are capable of reducing exposures. However, enhanced filtration systems have limitations. For example, in a study that South Coast AQMD conducted to investigate filters¹³, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter panel. The initial start-up cost could substantially increase if an HVAC system needs to be installed and if standalone filter units are required. Installation costs may vary and include costs for conducting site assessments and obtaining permits and approvals before filters can be installed. Other costs may include filter life monitoring, annual maintenance, and training for conducting maintenance and reporting. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy consumption that the Lead Agency should evaluate in the Final EIR. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the environmental analysis does not generally account for the times when the residents have their windows or doors open or are in common space areas of the project. These filters have no ability to filter out any toxic gases. Furthermore, when used filters are replaced, replacement has the potential to result in emissions from the transportation of used filters at disposal sites and generate solid waste that the Lead Agency should evaluate in the Final EIR. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to diesel particulate matter emissions.

South Coast AQMD Air Permits and Role as a Responsible Agency

If the implementation of the Proposed Project would require the use of new stationary and portable sources, including but not limited to emergency generators, fire water pumps, boilers, spray booths, and etc., air permits from South Coast AQMD will be required and the role of South Coast AQMD would change from a Commenting Agency to a Responsible Agency under CEQA. In addition, if South Coast AQMD is identified as a Responsible Agency, per CEQA Guidelines Sections 15086, the Lead Agency is required to consult with South Coast AQMD. In addition, CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, including making a decision on the adequacy of the CEQA document for use as part of evaluating the applications for air permits. For these reasons, the Final EIR should include a discussion about any new stationary and portable equipment requiring South Coast AQMD air permits and identify South Coast AQMD as a Responsible Agency for the Proposed Project.

¹³ This study evaluated filters rated MERV 13 or better. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see 2012 Peer Review Journal article by South Coast AQMD: <https://onlinelibrary.wiley.com/doi/10.1111/ina.12013>.

The Final EIR should also include calculations and analyses for construction and operation emissions for the new stationary and portable sources, as this information will also be relied upon as the basis for the permit conditions and emission limits for the air permit(s). Please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385 for questions regarding what types of equipment would require air permits. For more general information on permits, please visit South Coast AQMD's webpage at: <http://www.aqmd.gov/home/permits>.

Conclusion

As set forth in California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088 (a-b), the Lead Agency shall evaluate comments from public agencies on the environmental issues and prepare a written response at least 10 days prior to certifying the Final EIR. As such, please provide South Coast AQMD written responses to all comments contained herein at least 10 days prior to the certification of the Final EIR. In addition, as provided by CEQA Guidelines Section 15088(c), if the Lead Agency's position is at variance with recommendations provided in this comment letter, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided.

Thank you for the opportunity to provide comments. 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 Sahar Ghadimi, Air Quality Specialist, at sghadimi@aqmd.gov should you have any questions.

Sincerely,

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SG:SW

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