

SENT VIA E-MAIL:

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<u>Draft Environmental Impact Report (Draft EIR) for the Proposed</u> Costco/Vineyard II Retail Development Project (SCH No.: 2018061062)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments include recommended revisions to the air quality analysis and mitigation measures that the Lead Agency should include the Final EIR.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency is proposing to construct and operate a 153,362-square-foot warehouse, 72,600 square feet of retail uses, and a gasoline service station with 32 fueling pumps on 26.3 acres (Proposed Project). The Proposed Project is located on the northeast corner of Clinton Keith Road and Antelope Road within the City of Murrieta. Construction of the Proposed Project is anticipated to occur over a one-year period and will be constructed in two phases. Phase I will include construction of the warehouse and gasoline station. Phase II, which will overlap with Phase I, will include construction of the retail development¹. The Lead Agency is committed to Project Design Features (PDF) AQ/GHG1 and AQ/GHG2, which require the Proposed Project to include high-efficiency water and energy fixtures, the ability to accommodate future solar roofing, and installation of 17 electric vehicle (EV) charging stations².

Once operational, the Lead Agency anticipates that the Proposed Project's gasoline service station would have a maximum annual throughput of 26,000,000 gallons of gasoline³. The Proposed Project is expected to generate 12,780 vehicle trips per day, with heavy-heavy-duty and medium-heavy-duty trucks comprising 27 of the daily trips⁴. Based on a review of the Draft EIR and aerial photographs, South Coast AQMD staff found that the Proposed Project will be adjacent to existing residential uses to the east and is within 400 feet of a high school to the south⁵.

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

In the Draft EIR, the Lead Agency quantified the Proposed Project's construction emissions and compared those emissions to South Coast AQMD's recommended regional and localized CEQA significance thresholds for construction. The Proposed Project's regional construction air quality impacts were found to be significant for nitrogen oxide (NOx) emissions at 272 pounds per day (lbs/day)⁶, which would exceed South Coast AQMD's regional construction air quality CEQA significance threshold for NOx at 100 lbs/day. Localized PM10 and PM2.5 emissions would also be significant at 24 lbs/day and 16 lbs/day, respectively⁷. The exceedances of NOx, PM10 and PM2.5 emissions would be primarily due to

¹ Draft EIR. Section 3 Project Description. Pages 3-11 through 3-12.

² *Ibid.* Section 4.2 Air Quality. Pages 4.2-21 through 4.2-22.

³ Ibid. Appendix B Air Quality and Greenhouse Gas Emissions Report. Page 8.

⁴ *Ibid.* "2021 Operation Mobile Source Assumptions Summary". PDF Page 363.

⁵ *Ibid.* Page 15.

⁶ *Ibid*. Page 45.

⁷ *Ibid.* Page 50.

overlapping Phase I and II construction activities⁸. To reduce those emissions, the Lead Agency is committed to Mitigation Measures (MM)-AQ-1. MM-AQ-1 requires that all construction equipment greater than or equal to 75 horsepower (hp) meet Tier 4 Final engine standards, except where the project applicant establishes to the satisfaction of the Lead Agency that Tier 4 Final construction equipment is not available⁹. With implementation of MM-AQ-1 the Lead Agency found that the Proposed Project's regional mitigated NOx emissions would be reduced to less than significant at 94 lbs/day¹⁰. However, localized PM10 and PM2.5 emissions would remain significant and unavoidable at 16 lbs/day and 9 lbs/day, respectively, after mitigation¹¹.

The Lead Agency quantified the Proposed Project's regional operational emissions in the Draft EIR. Based on this analysis, the Lead Agency found that the Proposed Project's unmitigated regional operational air quality impacts would be significant for NOx and volatile organic compounds (VOCs) emissions at 60 lbs/day and 76 lbs/day¹², respectively, which would exceed South Coast AQMD's regional operational air quality CEQA significance thresholds for NOx and VOCs at 55 lbs/day. The exceedance of NOx emissions would be primarily due to mobile sources visiting the Proposed Project during operation¹³, while the exceedance of VOCs emissions would be primarily due to gasoline dispensing operations¹⁴. The Lead Agency is committed to implementing operational MM-AQ-2, which requires that the project applicant provide preferential parking for clean air vehicles and offer transit subsidies for all employees of the Proposed Project's operational NOx and VOCs emissions, but was not able to reduce those emissions to less than significant levels. Therefore, the Proposed Project's regional air quality impacts from operational NOx and VOC emissions would remain significant and unavoidable at 60 lbs/day and 76 lbs/day, respectively¹⁶.

The Lead Agency conducted a construction and operational health risk assessment (HRA). The Lead Agency found that that construction activities would result in 36.02 in one million for cancer risk¹⁷. After implementation of MM-AQ-1, this would be reduced to 3.96 in one million¹⁸, which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk. The Lead Agency also found that the Proposed Project's operational activities would result in a less than significant health risk impact when cancer risk was found to be 9.02 in one million¹⁹.

South Coast AQMD Staff's Comments

Air Quality Analysis and Mitigation Measures

Mobile source emissions contribute to the exceedance of NOx emissions during operation. However, it was not clear if the Lead Agency calculated mobile source emissions from operation of the gasoline service station in the Draft EIR. Additionally, the Proposed Project's construction and operational

⁸ *Ibid.* Pages 45 through 49.

⁹ *Ibid.* Pages 47 through 48.

¹⁰ *Ibid*.

¹¹ *Ibid.* Page 56.

¹² *Ibid*. Page 46.

¹³ *Ibid.* Table 10. Estimated Maximum Daily Operational Criteria Air Pollutants.

¹⁴ Ibid. "Emission Rates for 26 MMgal Gas Station. PDF page 527. The Lead Agency used South Coast AQMD's Risk Assessment Procedures for Rules 1401, 1401.1 and 2.12 Table X-1. Gasoline Emission Factors for Retail Service Stations Process to calculate VOC emissions from gasoline dispensing operations. Accessed at: <u>http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf</u>.

¹⁵ *Ibid.* Pages 47 through 48.

¹⁶ Ibid.

¹⁷ *Ibid*. Page 53.

¹⁸ *Ibid.* Page 57.

¹⁹ *Ibid*. Page 53.

activities would result in significant and unavoidable air quality impacts, particularly from NOx emissions. To further reduce those impacts, South Coast AQMD staff recommends that the Lead Agency strengthen the existing Project Design Features and mitigation measures for air quality and incorporate new mitigation measures in the Final EIR. Please see the attachment for more information.

South Coast AQMD Permits and Rules

Since the Proposed Project includes operation of a gasoline service station with 32 fueling pumps, permits from South Coast AQMD will be required. The assumptions in the air quality analysis and HRA in the EIR will be used as the basis for 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.

In the Draft EIR, the Lead Agency identified South Coast AQMD as a Responsible Agency for the Proposed Project²⁰ and included a discussion of compliance with applicable South Coast AQMD Rules, including, but not limited to, Rule 431.2 – Sulfur Content of Liquid Fuels²¹ and Rule 461 – Gasoline Transfer and Dispensing²². The Final EIR should also include a discussion of compliance with other applicable South Coast AQMD Rules, including but not limited to, Rule 201 – Permit to Construct²³, Rule 203 – Permit to Operate²⁴, and Rule 1401 – New Source Review of Toxic Air Containments²⁵.

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, 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 revisions to the existing Project Design Features and mitigation measures and additional recommended air quality mitigation measures are not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting them in the Final EIR (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 Alina Mullins, Assistant Air Quality Specialist, at <u>amullins@aqmd.gov</u> if you have questions or wish to discuss the comments.

²⁰ *Ibid.* Section 3 Project Description. Pages 3-12 through 3-13.

²¹ South Coast AQMD. Rule 431.2 – Sulfur Content of Liquid Fuels. Accessed at: <u>http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf</u>.

²² South Coast AQMD. Rule 461 – Gasoline Transfer and Dispensing. Accessed at: <u>https://www.aqmd.gov/docs/default-source/compliance/Gas-Dispensing/rule-461.pdf</u>.

²³ South Coast AQMD. Rule 201 – Permit to Construct. Accessed at: <u>http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf</u>.

²⁴ South Coast AQMD. Rule 203 – Permit to Operate. Accessed at: <u>http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf</u>.

²⁵ South Coast AQMD. Rule 1401 – New Source Review of Toxic Air Contaminants. Accessed at: <u>http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf</u>.

Sincerely,

Lijin Sun

Lijin Sun, J.D. Program Supervisor, CEQA IGR Planning, Rule Development & Area Sources

Attachment LS:AM <u>RVC200626-01</u> Control Number

ATTACHMENT

1. Operational Air Quality Analysis - Mobile Source Emissions from Gasoline Service Station

Upon reviews of the Draft EIR, Appendix B: *Air Quality and Greenhouse Gas Emissions Report*, and Appendix I: *Traffic Impact Analysis*, South Coast AQMD staff found that the Lead Agency estimated the number of vehicle trips and vehicle miles traveled that will be generated from delivery trucks, fuel trucks, and employees/customers for the warehouse and retail uses, generated emission factors for on-road mobile sources from EMFAC2017, and calculated the Proposed Project's operational mobile source emissions outside of CalEEMod²⁶. However, the analysis for calculating mobile source emissions from vehicles that would be visiting the gasoline station component of the Proposed Project was not clear in the Draft EIR and supporting technical documents. Mobile sources emissions will contribute to the exceedance of the Proposed Project's operational NOx emissions. Since the gasoline service station of the Proposed Project will include 32 fueling pumps and has an annual throughput of 26 million gallons of gasoline, it is important that mobile source emissions from operation of the gasoline service station are fully and adequately evaluated in the air quality analysis in the Final EIR.

2. <u>Recommended Revisions to Existing Project Design Features (PDFs)-AQ/GHG-1 and -AQ/GHG-2</u>

In the Draft EIR, the Lead Agency is committed to installing 17 electric vehicle (EV) charging stations at the Proposed Project. Three EV charging stations will be installed in the warehouse parking lot, and the remaining 14 stations will be installed in the parking lot for retail uses²⁷. Since the Proposed Project will result in significant and unavoidable long-term air quality impacts from VOCs and NOx emissions, and to further reduce those emissions, South Coast AQMD staff recommends that the Lead Agency strengthen the existing project design features to include additional EV charging stations in the Final EIR. The recommended revisions to PDFs-AQ/GHG-1 and -AQ/GHG-2 are in strikethrough and underlines as follows.

PDF-AQ/GHG-1 and PDF-AQ/GHG-2

Require at least six percent of the Proposed Project's 1,215 vehicle parking spaces (or 73 parking spaces) to include EV charging stations, four of which shall be tied to solar source from the roofs of two buildings at the time of opening, or at a minimum, require the Proposed Project to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in. Electrical hookups should be provided onsite for trucks to plug in any onboard auxiliary equipment. Electrical panels should be appropriately sized to allow for future expanded use. The Lead Agency should also include analyses to evaluate and identify sufficient power available for passenger vehicles, zero emission trucks, and supportive infrastructures (e.g., EV charging stations) in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate.

3. <u>Recommended Revisions to Existing Air Quality Mitigation Measure (MM)-AQ-1</u>

In Draft EIR, the Lead Agency is committed to requiring the use of Tier 4 Final construction equipment for all construction equipment 75 hp or greater, except where the project applicant establishes, to the Lead Agency's satisfaction, that Tier 4 Final construction equipment is not available (MM-AQ-1). With implementation of MM-AQ-1, the Proposed Project's daily maximum regional NOx emissions from construction activities would be reduced to be less than significant from 272 lbs/day to 94 lbs/day. The Proposed Project's daily maximum localized PM10 and PM2.5 emissions from construction activities would also be reduced to 15 lbs/day and 9 lbs/day²⁸, but would remain significant and unavoidable²⁹. To

²⁶ Draft EIR. Appendix B Air Quality and Greenhouse Gas Emissions Report. PDF Pages 329 through 377.

²⁷ *Ibid.* Pages 2 through 3.

²⁸ *Ibid.* Pages 50 through 56.

further reduce localized PM10 and PM2.5 emissions during construction, and to ensure that nearby sensitive receptors (e.g., nearby residents, and students and staff at the high school) are not adversely affected by emissions from the use of off-road diesel-powered construction equipment that will occur in close proximity to sensitive receptors, South Coast AQMD staff recommends that the Lead Agency strengthen the existing MM-AQ-1 in the Final EIR by requiring the use of Tier 4 Final construction equipment for 50 hp or greater diesel-powered equipment, and specify the alternatives to Tier 4 Final construction equipment such as Tier 4 Interim construction equipment if Tier 4 Final construction equipment is found to be not available by the Lead Agency.

MM-AQ-1

To reduce the potential for criteria air pollutants, specifically particulate matter (PM) and oxides of nitrogen (NOx), as a result of construction of the project, the applicant shall:

Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all 75 50 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Final engines or better., except where the project applicant establishes to the satisfaction of the City of Murrieta (City) that Tier 4 Final equipment is not available. Such equipment should be outfitted with Best Available Control Technology (BACT) devices including, but not limited to, a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions³⁰. A list of CARB verified DPFs are available on the CARB website³¹. Additionally, the Lead Agency should include this requirement in applicable bid documents, and that successful contractor(s) must demonstrate the ability to supply compliant equipment prior to the commencement of the grading activity. A copy of each unit's certified tier specification and CARB or South Coast AQMD operating permit (if applicable) should be available upon request at the time of mobilization of each applicable unit of equipment. The Lead Agency should require periodic reporting and provision of written documentation by contractors to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance.

An exemption from these requirements may be granted by the City in the event that the City is provided sufficient evidence that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. In the event that the Lead Agency finds that Tier 4 Final construction equipment is not feasible pursuant to CEQA Guidelines Section 15364, the Project representatives or contractors must demonstrate through future study with written findings supported by substantial evidence that is reviewed and approved by the Lead Agency before using other technologies/strategies. Before an exemption may be considered by the City, the applicant shall: (1) be required to demonstrate that two construction fleet owners/operators in Riverside County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Riverside County; and (2) the proposed replacement equipment has been evaluated using the California Emissions Estimator Model or other industry standard emission estimation method and documentation provided to the City to confirm the project-generated emissions do not exceed applicable South Coast Air Quality Management District mass daily thresholds of significance thresholds.

²⁹ South Coast AQMD's localized air quality CEQA significance thresholds for PM10 and PM2.5 are 11 lbs/day and 7 lbs/day, respectively, for a four-acre site with sensitive receptors at 25 meters in Source Receptor Area 26 (Temecula Valley).

³⁰ California Air Resources Board. November 16-17, 2004. *Diesel Off-Road Equipment Measure – Workshop*. Page 17. Accessed at: <u>https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf</u>.

³¹ *Ibid*. Page 18.

Alternative applicable strategies may include, but would not be limited to, Tier 4 Interim construction equipment and/or reduction in the number and/or horsepower rating of construction equipment, if appropriate. Any approved alternative technologies/strategies for use by the Lead Agency should be included and disclosed in the Air Quality Section of the Final EIR as a project requirement or mitigation measure as a condition of approval.

4. Additional Recommended Air Quality Mitigation Measures

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. Implementation of the Proposed Project contributes to Basin-wide NOx emissions. Requiring additional construction and operational air quality mitigation measures 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 NOx emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment³². It also fulfills the Lead Agency's legal obligation to mitigate the Proposed Project's significant air quality impacts and complies with CEQA's requirements for mitigation measures.

As stated above, the Proposed Project's construction and operation will result in significant and unavoidable air quality impacts from localized PM10 and PM2.5 construction emissions and regional NOx and VOCs operational emissions. To further reduce those emissions, South Coast AQMD staff recommends that the Lead Agency incorporate additional construction and operational mitigation measures as follows in the Final EIR for implementation at the Proposed Project.

Construction-related Air Quality Mitigation Measures

- a) 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 can that and should be used during construction is available at: https://www.forconstructionpros.com/construction-technology/article/21107531/electrifiedconstruction-equipment-gaining-momentum.
- b) 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.
- c) Encourage construction contractors to apply for South Coast AQMD "SOON" funds. 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. More information on this program can be found at South Coast AQMD's website: <u>http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-dieselengines</u>.

³² South Coast AQMD. March 3, 2017. 2016 Air Quality Management Plan. Accessed at: <u>http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan</u>.

Operational-related Air Quality Mitigation Measures

d) Require the use of zero-emissions (ZE) or near-zero-emissions (NZE) for vendor and material delivery trucks that would be visiting the warehouse and retail developments during operation, 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). At a minimum, the project operator(s) shall ensure, through sale or leasing agreements, that the truck fleet consist of trucks that meet the emissions standards of a 2010 vehicle model, and as trucks are replaced they are replaced with the newest available model. To monitor and ensure that ZE, NZE, or 2010 model year or newer trucks are used at the Proposed Project, the Lead Agency should require that operators maintain records of all trucks and equipment associated with the Proposed Project's operation, and make these records available to the Lead Agency upon request. 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.

Technology is transforming the transportation sector at a rapid pace. Cleaner trucks such as ZE or NZE trucks are increasingly more feasible and commercially available as technology advances. If using ZE or NZE trucks as a mitigation measure to reduce the Proposed Project's operational air quality impacts is not feasible today, cleaner trucks could become feasible in a reasonable period of time within the lifetime of the Proposed Project (CEQA Guidelines Section 15364). Therefore, it is recommended that the Lead Agency develop a process with performance standards to deploy the lowest emission technologies and incentivize the use of ZE or NZE heavy-duty trucks during operation (CEQA Guidelines Section 15126.4(a)). The Lead Agency can and should develop the performance standards as follows or any other comparable standards in the Final EIR.

- Develop a minimum amount of ZE or NZE heavy-duty trucks that the Proposed Project must use during each year of the operation to ensure adequate progress. Include this requirement in the Proposed Project's tenant selection and operation management bid documents and business agreement.
- Establish a tenant/truck operator(s) selection policy that prefers tenant/truck operator(s) who can supply the use of ZE or NZE heavy-duty trucks at the Proposed Project. Include this policy in the bid documents and business agreement.
- Develop a target-focused and performance-based process and timeline to review the feasibility to implement the use of ZE or NZE heavy-duty trucks during operation. Include this process and timeline in the Proposed Project's tenant selection and operation management bid documents and business agreement.
- Develop a project-specific process and criteria for periodically assessing progress in implementing the use of ZE or NZE heavy-duty trucks during operation. Include this process and criteria in the Proposed Project's tenant selection and operation management bid documents and business agreement.
- e) Design the Proposed Project such that entrances and exits are such that vendor and material delivery trucks are not traversing past neighbors or other sensitive receptors.
- f) Design the Proposed Project to ensure that vendor and material delivery truck traffic within the Proposed Project site are located away from the property line(s) closest to its residential or other nearby sensitive receptors.
- g) Restrict overnight parking of vendor and material delivery trucks in residential areas.

- h) Develop, adopt, and enforce truck routes both in and out of city, and in and out of facilities.
- i) Create a buffer zone of at least 300 meters (roughly 1,000 feet), which can be office space, employee parking, greenbelt, etc. between the Proposed Project and sensitive receptors.

Additional mitigation measures for operational air quality impacts from area sources that the Lead Agency should consider and incorporate in the Final EIR may include the following.

- j) Maximize the planting of trees in landscaping and parking lots.
- k) Use light colored paving and roofing materials.
- 1) Require use of electric or alternatively fueled sweepers with HEPA filters.
- m) Use of water-based or low VOC cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.

5. Other Comment

Upon review of Appendix B: Air Quality and Greenhouse Gas Emissions Report, South Coast AQMD staff found that the Lead Agency intended to include two supplemental technical appendices as part of Appendix B to the Draft EIR: Appendix A: Emissions Calculations and Appendix B: AERMOD Input and HARP2 Output Files. The Lead Agency included the Emissions Calculations and HARP2 Output Files but did not include the AERMOD Input Files that should have been included in the Draft EIR for public review.