



South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

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Draft Environmental Impact Report (Draft EIR) for the Proposed Rancho Santa Margarita General Plan Update (SCH No.: 2018041075)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to update the City of Rancho Santa Margarita's (City) General Plan conservation and open space, economic development, land use, noise, and safety elements with a planning horizon year of 2040 on 8,607 acres, of which 8,280 acres are located within the City's incorporated limits and 327 acres are located within the City's Sphere of Influence (Proposed Project). The Proposed Project anticipates a net growth of 528 residential units and 3,085,014 square feet of non-residential uses¹ throughout the planning horizon year of 2040.

South Coast AQMD Staff's Summary of Air Quality Analysis

In the Air Quality Analysis, the Lead Agency did not quantify construction emissions because, "construction-related emissions that may occur [...] are speculative and cannot accurately be determined at this stage of the planning process [...]"². Individual development projects would evaluate and determine significant impacts to air quality from construction and appropriate mitigation measures when undergoing project-specific CEQA review; however, because "[t]he General Plan Update would facilitate future development and generate construction emissions that could potentially exceed South Coast AQMD thresholds, impacts would be considered significant and unavoidable"³.

The Lead Agency quantified the Proposed Project's operational emissions based on the expected buildout scenario (year 2040) and compared the incremental increases in emissions at buildout (year 2040) to the existing baseline conditions (year 2016)⁴. The Proposed Project would result in increases in operational PM10 and PM2.5 emissions and decreases in operational ROG, NOx, CO, and SOx emissions at buildout⁵. "CEQA review of individual development projects would include an evaluation to determine whether potential air pollutant emissions generated from growth could result in a significant impact to air quality [...]. However, due to the magnitude of development [...] [operational] air quality impacts would be significant and unavoidable"⁶. The Lead Agency also found that the Proposed Project would not conflict with South Coast AQMD's 2016 Air Quality Management Plan (AQMP) because,

¹ Draft EIR. Section 3 Project Description. Table 3-3 General Plan Update Net Growth. Page 3-17.

² Draft EIR. Section 5.5 Air Quality. Pages 5.5-16 through 5.5-17.

³ *Ibid.* Page 5.5-17.

⁴ *Ibid.* Pages 5.5-13 through 5.5-20.

⁵ *Ibid.*

⁶ *Ibid.* Page 5.5-21.

“concentrations of CO, NO_x, PM₁₀ and PM_{2.5} under the General Plan Update would be lower than existing settings”⁷.

South Coast AQMD’s 2016 AQMP

On March 3, 2017, South Coast AQMD’s Governing Board adopted the 2016 AQMP⁸, which was later approved by the California Air Resources Board (CARB) on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NO_x) emissions in 2023 and an additional 55 percent NO_x reduction beyond 2031 levels for ozone attainment.

South Coast AQMD Staff’s General Comments

South Coast AQMD staff has comments on the Air Quality Analysis. The use of a future baseline to analyze the Proposed Project’s air quality impacts improperly credits the Proposed Project with emission reductions that will occur independent of the Proposed Project. Since the Proposed Project will be implemented over a 20-year period, interim milestone years, in addition to year 2016 and year 2040, should be used to analyze the Proposed Project’s air quality impacts. This will avoid under-estimating the Proposed Project’s peak emissions during earlier years since the air quality is improved over time in later years. While information on the Proposed Project’s development potential at buildout (e.g., 528 residential units and 3,085,014 square feet of non-residential uses) is available⁹, the Lead Agency did not use this information to quantify the Proposed Project’s construction emissions or analyze a scenario where construction activities overlap with operational activities. Additionally, the Lead Agency did not perform a localized air quality impact analysis. South Coast AQMD staff is also concerned about the Lead Agency’s finding that the Proposed Project is consistent with the 2016 AQMP. Please see the attachment for more information

As described in the 2016 AQMP, achieving NO_x emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. South Coast AQMD is committed to attaining the ozone NAAQS as expeditiously as practicable. To further reduce the Proposed Project’s construction and operational criteria pollutants emissions and to facilitate implementation of General Plan Update Policies 4.1 through 4.6 and the goals of the 2016 AQMP, South Coast AQMD staff recommends revisions to the existing air quality mitigation measure (AQ-3) and additional mitigation measures, including a commitment to periodic technology review, which the Lead Agency should review for incorporation in the Final EIR. Please see the attachment for more information.

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, when the Lead Agency makes the finding that the recommended revisions to Mitigation

⁷ *Ibid.* Pages 5.5-25 through 5.5-27.

⁸ 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>.

⁹ Draft EIR. Section 3 Project Description. Page 3-6.

Measure AQ-3 and additional new mitigation measures are not feasible, the Lead Agency should describe the specific reasons 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 amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS:AM

ORC190501-02

Control Number

ATTACHMENT

CEQA Baseline

1. Notwithstanding the general rule that baseline conditions exist at the time of the environmental review is initiated and that a project's environmental impacts are assessed by limiting the examination to changes in the existing physical conditions in the affected area as they exist at the time the Notice of Preparation (NOP) is published, if there is a published NOP, the use of future baseline is proper in some cases, supported by substantial evidence in the record. Consideration of future conditions in determining whether a project's impacts may be significant is consistent with CEQA's rules regarding baseline, especially when the project has a long-term buildout schedule. "[N]othing in CEQA law precludes an agency ... from considering both types of baseline—existing and future conditions—in its primary analysis of the project's significant adverse effects." (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 454.). "Even when a project is intended and expected to improve conditions in the long term—20 or 30 years after an EIR is prepared—decision makers and members of the public are entitled under CEQA to know the short- and medium-term environmental costs of achieving that desirable improvement. ... [¶] ... The public and decision makers are entitled to the most accurate information on project impacts practically possible, and the choice of a baseline must reflect that goal." (See also *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310).

The Proposed Project's operational emissions were estimated for the 2016 CEQA baseline year and the 2040 future buildout year. The 2016 existing conditions were held constant (i.e. using emission rates from year 2016) and compared to the future year (i.e. using emission rates from the future year). The Lead Agency found that overall emissions are anticipated to be lower than existing conditions¹⁰. This approach using a comparison between the Proposed Project's impacts in the future year (using emission rates from year 2040) and the 2016 baseline (using emission rates from year 2016) improperly credits the Project with emission reductions that will occur independent of the Proposed Project due to adopted state and federal rules and regulations and technology advancements, since these rules and regulations and technology are expected to improve air quality over time, even in the absence of the Proposed Project, which the Lead Agency has acknowledged in the Draft EIR¹¹. For example, the California Air Resources Board's (CARB) current regulation for trucks and buses will provide significant near-term and long-term reductions in NOx emissions from trucks and buses, at 124 tons per day for 2014 and 98 tons per day for 2023¹². This state regulation might have led to the Proposed Project's operational ROG, NOx, CO, and SOx emission reductions at buildout¹³. Therefore, the methodology used to analyze the Proposed Project's long-term operational impacts in the Draft EIR may have led to an under-estimation of actual emission increases from the Proposed Project.

The purpose of CEQA is to disclose environmental impacts from the Proposed Project to the public and decision makers in order to provide the public and decision makers with the actual changes to the environment from the activities involved in the Proposed Project. By taking credit for future emission reductions from existing air quality rules, regulations, emissions reductions strategies, and technological advancements that are not contributed by the Proposed Project, the Proposed Project's air quality impacts are likely underestimated. Therefore, South Coast AQMD staff recommends that the Lead Agency revise the Air Quality Analysis to include comparisons between emissions in year

¹⁰ Draft EIR. Section 5.5 Air Quality. Pages 5.5-20, 5.5-24 through 5.5-27.

¹¹ *Ibid.*

¹² California Air Resources Board. July 14, 2017. Trucks and Bus Regulation: On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Accessed at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>, and <https://www.arb.ca.gov/msprog/onrdiesel/documents/truckrulehealth.pdf>.

¹³ Draft EIR. Pages 5.5-13 through 5.5-20.

2016, year 2020, year 2025, year 2030, year 2035, and year 2040 with the Proposed Project and emissions in the same respective years without the Proposed Project, and use the comparisons to determine the level of significance for the Proposed Project's air quality impacts.

Air Quality Analysis – Interim Milestone Years

2. This Comment is related to Comment No. 1. The Air Quality Analysis in the Draft EIR included only two analysis years: baseline year (2016) and buildout year (2040). By 2040, the Proposed Project is assumed fully built. Although the Proposed Project may not be at peak capacity in earlier years, it is possible that due to higher emission rates of vehicles, trucks, and equipment in earlier years, peak daily emissions may occur in 2017 and beyond. The overall emission rates of vehicles, trucks, and equipment are generally higher in earlier years as more stringent emission standards and cleaner technologies have not been fully implemented, and fleets have not fully turned over. Air quality is improving overtime with substantial emissions reduction occurring in later years. Therefore, South Coast AQMD staff recommends that the Lead Agency include interim milestone years (i.e., year 2020, year 2025, year 2030, year 2035, and year 2040) for analysis to ensure the peak daily emissions are identified and adequately disclosed in the Final EIR. The interim milestone years will also demonstrate progress in emission reductions overtime from implementing the air quality-related mitigation measures and General Plan Update policies included in the Draft EIR.

Air Quality Impact Analysis – Construction Impact Analysis

3. The Lead Agency did not quantify the Proposed Project's construction emissions in the Draft EIR. The Lead Agency stated that "[...] construction-related emissions that may occur at any one time are speculative and cannot accurately be determined at this stage of the planning process"¹⁴.

When specific development is reasonably foreseeable as a result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Preparing the CEQA analysis "necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can" (CEQA Guideline Section 15144).

Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips).

When the precise construction schedule or scenario is unknown, the Lead Agency should use its best efforts to identify and quantify a worst-case construction impact scenario that is reasonably foreseeable at the time the Draft EIR is prepared. As discussed in Section 3.5.3 "General Plan Update Growth and Assumptions" in the Draft EIR, the Lead Agency has identified the estimated development potential of the Proposed Project. For example, the Lead Agency discussed that "anticipated growth over existing (2016) conditions is 528 additional dwelling units and 3,085,014 additional square feet of non-residential uses based upon historical development patterns in the City and the reasonably assumed development intensities and densities based on Table 3-2 ["General Plan Update Development Potential"]¹⁵. Therefore, the Lead Agency can and should use this information

¹⁴ Draft EIR. Section 5.5 Air Quality. Pages 5.5-16 through 5.5-17.

¹⁵ Draft EIR. Section 3 Project Description. Pages 3-15 through 3-18.

to develop construction scenarios that would be required to implement the full buildout of the Proposed Project, quantify associated construction emissions, including emissions from any demolition activities, and compare the emissions to South Coast AQMD's air quality CEQA significance thresholds to determine the level of significance. The Lead Agency should use the most current version of California Emission Estimator Model (CalEEMod)¹⁶ to quantify construction emissions. While this recommendation may not change the Lead Agency's finding that the Proposed Project's construction air quality impacts would be significant and unavoidable¹⁷, a quantitative analysis will facilitate the goal and purpose of CEQA on public disclosure with useful information on the kind, size, scope, intensity, duration, density, and location of subsequent project-level development to foster meaningful public participation and informed decision making.

Air Quality Analysis – Overlapping Construction and Operational Impacts

4. When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in a CEQA document. Based on a review of the Air Quality Analysis, South Coast AQMD staff found that the Lead Agency did not analyze a scenario where construction emissions overlap with operational emissions. Since implementation of the Proposed Project is expected to occur over a period of 20 years, an overlapping construction and operation scenario may be reasonably foreseeable, unless the Proposed Project includes requirement(s) that will prohibit overlapping construction and operational activities. To conservatively analyze a worst-case impact scenario that is reasonably foreseeable at the time the Draft EIR is prepared, South Coast AQMD staff recommends that the Lead Agency use its best efforts to identify the overlapping years, combine construction emissions (including emissions from demolition) with operational emissions from the overlapping years, and compare the combined emissions to South Coast AQMD's air quality CEQA *operational* thresholds of significance to determine the level of significance in the Final EIR.

Air Quality Analysis – Localized Significance Thresholds (LSTs) Analysis

5. The Proposed Project has numerous land uses with sensitive receptors, and these land uses are expected to increase with the implementation of the Proposed Project¹⁸. South Coast AQMD staff recommends that the Lead Agency use its best efforts, based on already available Proposed Project development potential information, such as the maximum dwelling units and build-out of nonresidential uses in square feet¹⁹, to quantify and disclose the Proposed Project's localized emissions in the Final EIR. South Coast AQMD guidance for performing a localized air quality analysis is available on South Coast AQMD website²⁰. Alternatively, the Lead Agency should consider to include an additional component on project-level LSTs analysis to the existing Mitigation Measure AQ-3. Please see Comment No. 8 for more information.

Consistency Analysis with South Coast AQMD's 2016 AQMP

6. Section 15125(d) of the CEQA Guidelines requires that EIRs analyze and discuss any inconsistencies between a proposed project and applicable general plans, specific plans, and regional plans. For example, a discussion of consistency between a regionally applicable AQMP and a proposed project helps identify if a proposed project is inconsistent with the assumptions and objectives that were taken into consideration for the development of the AQMP, and thus would interfere with the region's ability to comply with federal and state air quality standards and achieve attainment deadlines. If an

¹⁶ South Coast AQMD. CalEEMod Version 2016.3.2. Accessed at: <http://www.aqmd.gov/caleemod/download-model>.

¹⁷ Draft EIR. Section 5.5 Air Quality. Pages 5.5-17 through 5.5-18.

¹⁸ *Ibid.* Page 5.5-15.

¹⁹ Draft EIR. Section 3 Project Description. Pages 3-15 through 3-18.

²⁰ South Coast AQMD. Localized Significance Thresholds. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

inconsistency is found, lead agencies should consider ways to mitigate or eliminate the inconsistency so that there is no interference with regional air quality objectives.

In the Draft EIR, the Lead Agency analyzed the Proposed Project's consistency with the 2016 AQMP and found that, "program-level emissions associated with the future development in the City with the implementation of the General Plan Update would exceed South Coast AQMD thresholds" however the Lead Agency also found that, "South Coast AQMD thresholds are intended to evaluate the air quality impacts from individual development projects and do not apply to the plan-level projects such as the General Plan Update [...]. Concentrations of CO, NOx, PM10 and PM2.5 under the General Plan Update would be lower than existing settings [...]; [therefore,] the project would not result in an increase in the frequency or severity of an existing violation or cause or contribute to new violations"²¹.

South Coast AQMD staff is concerned with the Lead Agency's consistency analysis. First, the Proposed Project's operational PM10 and PM2.5 emissions will increase overtime, not decrease²². Second, as discussed in Comment Nos. 1 and 2, the Proposed Project's operational emissions, particularly from NOx, may have been under-estimated. Third, the Proposed Project's air quality impacts from overlapping construction and operational activities were not analyzed and could potentially be significant after comparing the combined emissions from overlapping activities to South Coast AQMD's air quality CEQA significance thresholds for operation. Given these reasons, the Proposed Project may play an important role in contributing additional ROG, NOx, CO, particulate matter emissions to the Basin that could delay the efforts towards achieving attainment deadlines. Therefore, it is recommended that the Lead Agency revise the consistency analysis in the Final EIR.

Health Risk Assessment (HRA) Analysis and Risk Reduction Strategies

7. To facilitate the implementation of General Plan Update Policy 4.6²³, which requires new development and/or revitalization projects with sensitive uses located within 500 feet of a freeway or an urban road with 100,000 vehicles per day to be designed to lessen potential health risks, the Lead Agency should require subsequent freeway adjacent (e.g., within 500 feet) individual residential projects to conduct project-specific health risk assessment (HRA) analysis²⁴ in the CEQA documents. This requirement will demonstrate that the Lead Agency has adequately addressed the Proposed Project's health risks analysis in this programmatic CEQA document and that a project-level HRA analysis will be completed in a later stage to facilitate the disclosure of health impacts to prospective residents. Further, the Lead Agency should require implementation of measures to reduce exposures, should a project-level HRA analysis show an exceedance of South Coast AQMD CEQA significance threshold for cancer risk²⁵.

Additional Considerations for Implementing General Plan Update Policy 4.6

- a) The Lead Agency should consider the use of high efficiency or enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better in residential units within 500 feet of

²¹ Draft EIR. Section 5.5 Air Quality. Pages 5.5-24 through 5.5-26.

²² *Ibid.* Page 5.5-20

²³ *Ibid.* Pages 5.5-17 through 5.5-18.

²⁴ South Coast AQMD. "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis." Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

²⁵ South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA analysis, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

freeways to ensure the maximum reduction of health risks from exposures to diesel particulate matter (DPM) emissions from vehicles and trucks traveling on the freeway. South Coast AQMD staff recommends that the Lead Agency require subsequent individual residential projects to install enhanced filtration units as a project design feature that must be verified during occupancy inspection prior to the issuance of an occupancy permit.

- b) If enhanced filtration systems are installed, it is important to consider limitations. In a study that South Coast AQMD conducted to investigate filters²⁶, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the residents. 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. Moreover, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail and disclosed to prospective residences prior to assuming that they will sufficiently alleviate exposures to DPM emissions.
- c) Because of the limitations, South Coast AQMD staff recommends that the Lead Agency provide additional details regarding the ongoing, regular maintenance of filters in the Final EIR. To facilitate a good faith effort at full disclosure and provide useful information to future residents who will live and/or work in proximity to freeways, the Lead Agency should require subsequent individual residential projects within 500 feet of freeways to include the following information, at a minimum, in the project-level CEQA documents:
- Disclosure potential health impacts to prospective residents from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open and/or when residents are outdoors (e.g., in the common usable open space areas);
 - Identify the responsible implementing and enforcement agency, such as the Lead Agency, to ensure that enhanced filtration units are installed on-site at the Proposed Project before a permit of occupancy is issued;
 - Identify the responsible implementing and enforcement agency such as the Lead Agency, to ensure that enhanced filtration units are inspected and maintained regularly;
 - Disclose the potential increase in energy costs for running the HVAC system to prospective residents;
 - Provide information to residents on where MERV filters can be purchased;
 - Provide recommended schedules (e.g., every year or every six months) for replacing the enhanced filtration units;

²⁶ 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: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.

- Identify the responsible entity such as future residents themselves, Homeowner's Association (HOA), or property management for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if residents should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the Lead Agency should include this information in the disclosure form);
- Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units;
- Set City-wide or project-specific criteria for assessing progress in installing and replacing the enhanced filtration units.
- Develop a City-wide or project-specific process for evaluating the effectiveness of the enhanced filtration units.

Recommended Revisions to and Considerations for Existing Mitigation Measure AQ-3

8. The Lead Agency included a specific requirement in Mitigation Measure AQ-3 for future, project-specific operational air quality analysis. South Coast AQMD staff recommends that the Lead Agency include more specific details as they relate to both *construction* and operational air quality analyses in the existing mitigation measure in order to provide useful information to guide subsequent, project-specific air quality analyses and mitigation measures (*emphasis added*). These details will assist in the Lead Agency's decision making when it reviews and approves subsequent individual projects implementing the Proposed Project. Additionally, the details will provide guidance for project-level air quality analysis and facilitates CEQA streamlining and tiering as an option, where appropriate. Specifically, South Coast AQMD staff recommends that the Lead Agency incorporate the following recommended revisions Mitigation Measure AQ-3 in the Final EIR.

AQ-3:

To identify potential short-term and long-term construction and operational-related air quality impacts from projects subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects), project-specific air emissions impacts shall be determined in compliance with the latest version of the South Coast AQMD CEQA Guidelines. To address potential regional and localized impacts, the air quality analysis shall be completed pursuant to the latest version of South Coast AQMD's CEQA Handbook and Final Localized Significance Threshold Methodology document, or other appropriate methodologies as determined in conjunction with South Coast AQMD. The results of the construction and operational-related and regional and localized air quality impacts analyses shall be included in the development project's CEQA documentation. Construction and operational emissions should be compared to the most recent version of South Coast AQMD's CEQA air quality regional²⁷ and localized²⁸ significance thresholds in order to identify if a Proposed Project will result in significant air quality impacts. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts as required by CEQA Guidelines Section 15126.4.

Additional Considerations for AQ-3 on Localized Significance Thresholds (LSTs) Analysis

²⁷ South Coast AQMD. Regional Air Quality Significance Thresholds. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

²⁸ South Coast AQMD. Localized Air Quality Significance Thresholds. Accessed at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

Prior to issuance of a grading permit for new development projects that are one acre or larger, the applicant/developer shall provide modeling of the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emissions would exceed South Coast AQMD's air quality CEQA localized thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of South Coast AQMD's significance thresholds for those emissions.

Additional Recommended Mitigation Measures

9. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. In addition to Mitigation Measures AQ-1 through AQ-3, South Coast AQMD staff recommends that the Lead Agency incorporate the following project-level mitigation measures in the Final EIR. These recommended mitigation measures will further reduce construction and operational emissions from subsequent individual projects implementing the Proposed Project, guide project-level air quality analysis and formulation of mitigation measures, provide CEQA streamlining and tiering benefits, implement the General Plan Update Policies 4.1 through 4.6²⁹, and facilitate the achievement of attainment goals and timelines outlined in the 2016 AQMP. For more information on potential mitigation measures as guidance to the Lead Agency, please visit South Coast AQMD's CEQA Air Quality Handbook website³⁰.

Performance Standards-Based Periodic Technology Review

- Since the Proposed Project would be implemented over an estimated period of 20 years, the Lead Agency should take this opportunity to incorporate a periodic, technology review of both off-road construction equipment and on-road haul trucks that will be used during the Proposed Project. South Coast AQMD staff recommends that the Lead Agency develop project-specific or agency-wide strategies to foster and facilitate the deployment of the lowest emissions technologies as they become available. This may include incorporating a performance standards-based technology review, or developing other comparable strategies or tools, to periodically assess equipment availability, equipment fleet mixtures, and best available emissions control devices. The deployment should include those technologies that are "capable of being accomplished in a successful manner within a reasonable period of time" (California Public Resources Code Section 21061.1), such as zero and near-zero emission technologies or best available control technologies (BACTs) that are expected to become more readily available over the life of the Proposed Project. A technology review should also incorporate an appropriate timeline/schedule for the assessment that will also be supportive of emissions reductions goals being implemented at local, regional, state, and federal levels (e.g. South Coast AQMD's AQMPs and other air quality and public health goals). If the technology review identifies that cleaner equipment and fleets have become available, the Lead Agency should commit to incorporating this new technology into the Proposed Project to further reduce the Proposed Project's emissions. South Coast AQMD staff encourages the Lead Agency to involve the public and interested parties, such as the South Coast AQMD and the CARB, in developing an appropriate process and performance standards for technology review.

²⁹ Draft EIR. Section 5.5 Air Quality. Page 5.5-18.

³⁰ South Coast AQMD. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

Mitigation Measures for Construction Air Quality Impacts

- Require the use of off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during construction. 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 emissions³¹. A list of CARB verified DPFs are available on the CARB website³².

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 any construction activities. 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.

In the event that the Lead Agency finds that Tier 4 construction equipment is not feasible pursuant to CEQA Guidelines Section 15364, the Project representative or contractor 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. Alternative applicable strategies may include, but would not be limited to, Tier 3 construction equipment, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting the number of individual construction project phases occurring simultaneously, if applicable. 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.

- Require the use of zero-emission (ZE) or near-zero emission (NZE) on-road haul trucks (e.g., material delivery trucks and soil import/export) such as heavy-duty trucks with natural gas engines that meet the California Air Resources Board (CARB)'s adopted optional NOx emission standard at 0.02 grams per brake horsepower-hour (g/bhp-hr). When requiring ZE or NZE on-road haul trucks, the Lead Agency should include analyses to evaluate and identify sufficient power and supportive infrastructure available for ZE/NZE trucks in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate.

CARB also 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 equivalent³³. Since the construction schedule of the Proposed Project extends beyond 2023 to 2040, 2010 model year trucks will be required for the Proposed Project and should become more

³¹ California Air Resources Board. November 16-17, 2004. *Diesel Off-Road Equipment Measure – Workshop*. Page 17. Accessed at: https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

³² *Ibid.* Page 18.

³³ California Air Resources Board. December 20, 2018. <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

widely available commercially. Therefore, South Coast AQMD staff recommends that the Lead Agency implement the Truck and Bus Regulation early and require, at a minimum, that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year or newer engines, or establish a vendor(s)/contractor(s) selection policy that prefers vendor(s)/contractor(s) who can supply 2010 model year trucks, and include the requirement in the Proposed Project's Construction Management Plan. The Lead Agency's commitment to early implementation of the Truck and Bus Regulation at the Proposed Project helps facilitate the Project's transition to 2010 model year trucks in 2023, provides time and opportunities to resolve any implementation challenges ahead of 2023, eases the costs and burden of regulatory compliance, and yields emission reductions from fleets earlier than 2023.

To monitor and ensure ZE, NZE, or 2010 model year trucks are used at the Proposed Project, the Lead Agency should require that operators maintain records of all trucks associated with the Proposed Project's construction and make these records available to the Lead Agency upon request. The records will serve as evidence to prove that each truck called to the Proposed Project during construction meets the minimum 2010 model year engine emission standards. Alternatively, the Lead Agency should require periodic reporting and provision of written records by contractors, and conduct regular inspections of the records to the maximum extent feasible and practicable.

- 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: <http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines>.

Mitigation Measure for Operational Air Quality Impacts from Mobile Sources

- To facilitate the implementation of General Plan Update Policy 4.3³⁴, which encourages alternative modes of transportation to reduce emissions associated with automobile use, the Lead Agency should provide electric vehicle (EV) charging stations. Require at least 5% of all vehicle parking spaces include 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 and trucks to plug-in. Electrical hookups should be provided at the onsite truck stop for truckers 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 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.

Mitigation Measures for Operational Air Quality Impacts from Area Sources

- Maximize the use of solar energy including solar panels. Installing the maximum possible number of solar energy arrays on the building roofs and/or on the Proposed Project site to generate solar energy for the facility and/or EV charging stations.
- Require the use of electric landscaping equipment, such as lawn mowers and leaf blowers.

³⁴ Draft EIR. Section 5.5 Air Quality. Page 5.5-18.

- Require the use of electric or alternatively fueled sweepers with HEPA filters.
- Maximize the planting of trees in landscaping and parking lots.
- Use light colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices, and appliances.

Compliance with South Coast AQMD Rule 403(e) – Large Operations

10. In the event that a subsequent individual project implementing the Proposed Project is a large operation (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin, it will be required to comply with South Coast AQMD Rule 403(e) – Additional Requirements for Large Operations³⁵, which includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class³⁶. Therefore, South Coast AQMD recommends that the Lead Agency include a requirement for subsequent individual projects to demonstrate specific compliance with SCAQMD Rule 403(e) in the Final EIR. Compliance with South Coast AQMD Rule 403(e) will further reduce particulate matter from the Proposed Project.

³⁵ South Coast AQMD. Rule 403. Last amended June 3, 2005. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.

³⁶ South Coast AQMD. Compliance and Enforcement Staff's contact information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at dustcontrol@aqmd.gov.