



South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

February 7, 2018

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**Draft Environmental Impact Report (Draft EIR) for the Proposed
Paradise Valley Specific Plan
(Specific Plan No. 339, General Plan Amendment No. 686, Change of Zone No. 6915, EIR 506)**

The South Coast Air Quality Management District (SCAQMD) 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.

SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to construct 8,500 residential units, 1.38 million square feet of non-residential land uses, and 110 acres of recreational trails and parks on a 1,800-acre portion of 5,000 acres (Proposed Project). The Proposed Project will be developed as six villages. Construction is expected to occur in year 2021 with buildout years in 2035 and 2040. The Proposed Project is approximately eight miles east of the City of Coachella and 10 miles west of Chiriaco Summit near the interchange between Frontage Road and Interstate 10 in the community of Shavers Valley. Based on a review of the aerial photographs, the Proposed Project is currently surrounded by vacant lands.

SCAQMD Staff's Air Quality and Health Risk Impact Analyses

In the Air Quality Section, the Lead Agency quantified the Proposed Project's construction and operational air quality emissions and compared those emissions to SCAQMD's regional and localized air quality CEQA significance thresholds. The Proposed Project's construction emissions were quantified by each year from 2012 to 2035 and were found to be significant for VOC, NO_x, PM₁₀, and PM_{2.5} after incorporating mitigation measures (MM) AIR-1 through MM AIR-4¹. Operational regional emissions from the Proposed Project were also found to be significant for all criteria pollutants, except SO_x² after incorporating MM AIR-1 through MM AIR-5³. Since construction of the Proposed Project is expected to occur over a period of 15 years, overlapping construction and operational activities are reasonably foreseeable. The Lead Agency combined construction and operational emissions from the Proposed Project for interim milestone years of 2021, 2023, 2025, and 2035 and found that the combined total emissions would exceed SCAQMD's thresholds of significance for VOC, NO_x, CO, PM₁₀ and PM_{2.5} after MM AIR-1 through MM AIR-6 and MM GHG-1 through MM GHG-3⁴. The exceedance of SCAQMD thresholds for these pollutants is primarily due to mobile emissions (on-road vehicles) and, in the case of VOC, area emissions sources⁵.

The Lead Agency also conducted a health risk assessment (HRA) and found that after incorporating MM AIR-7 through MM AIR-11, the mitigated maximum cancer risk during construction would be 3.45 in

¹ Draft EIR. Section 4.3: Air Quality. Table 4.3-7. Pages 4.3-23, 4.3-28, and 4.3-29.

² *Ibid.* Table 4.3-8 and Table 4.3-9. Page 4.3-24.

³ *Ibid.* Page 4.3-29.

⁴ *Ibid.* Pages 4.3-29 and 4.3-30.

⁵ *Ibid.* Table 4.3-10. Pages 4.3-25 and 4.3-26.

one million which is below SCAQMD's CEQA significance threshold of 10 in one million for cancer risk, while the mitigated maximum cancer risk during operation for the 2035 operational year and the 2040 operational year would be 9.71 in one million and 8.93 in one million, respectively, which are also below SCAQMD's CEQA significant threshold for cancer risk⁶. The Lead Agency found that the combined construction and operational mitigated maximum cancer risk would be 8.33 in one million⁷.

SCAQMD's 2016 Air Quality Management Plan

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)⁸, which was later approved by the California Air Resources Board 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 (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. As described in the 2016 AQMP, to achieve NOx 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. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to NOx and ROG emissions during the overlapping construction and operational phases.

General Comments

SCAQMD staff has reviewed the Air Quality and HRA Analyses in the Draft EIR, and has comments on the modeling parameter for the HRA analysis. Details are included in the attachment. The attachment also includes information on limitation of filtration units, additional recommended mitigation measure, and SCAQMD rules and regulations.

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), SCAQMD staff requests that the Lead Agency provide SCAQMD 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 or useful to decision makers and to the public who are interested in the Proposed. Further, when the Lead Agency makes the finding that the recommended mitigation measures are not feasible, the Lead Agency should describe the specific reasons for rejecting them in the Final EIR (CEQA Guidelines Section 15091).

SCAQMD staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact me at lsun@aqmd.gov if you have any questions regarding the enclosed comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

⁶ *Ibid.* Table 4.3-17 and Table 4.3-18. Pages 4.3-43 and 4.3-44.

⁷ *Ibid.* Table 4.3-19. Page 4.3-44.

⁸ South Coast Air Quality Management District. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

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Attachment
MK: LS
RVC180102-01
Control Number

ATTACHMENT

Health Risk Assessment (HRA)

- In the HRA analysis, the Lead Agency stated that “[t]here are four age groups: third trimester, birth to less than two years, two years to less than 16 years, and 16 years to 70 years. The total cancer risk is calculated using a combined exposure factor to streamline incorporating the age group specific variables”⁹. The most recent 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) Guidance¹⁰ acknowledges that children are more susceptible to the exposure to air toxics and have revised the way cancer risks are estimated to take this into account. Since the trucks, vehicles, and equipment generally get cleaner with time due to existing regulations and technologies, it would not be appropriate to use a combined exposure factor to streamline age group specific variables which was done in the Draft EIR since this would likely underestimate the health risks to children who would be exposed to higher emission (DPM) concentrations during the early years of project construction and operation.

Each age group has different exposure parameters. The daily breathing rate should be on the 2015 OEHHA recommendations which vary depending on the age (See Table 1).

Table 1: 2015 OEHHA Recommended Residential Daily Breathing Rates for Point Estimate Dose Calculation (L/kg body weight)

	3 rd trimester	0-2 Years	2-9 Years	2-16 Years	16-30 Years
Average	225	658	535	452	210
95th Percentile	361	1090	861	745	335

When calculating cancer risks, the age sensitivity factors (ASF) accounts for greater susceptibility in early life, starting from the 3rd trimester of pregnancy to 70 years. Another factor in the cancer risk calculations is the fraction of time at home (FAH), which takes into account the time actually residing at the sensitive receptor location(s). The FAH is also age-dependent. In general, the earlier in life the greater fraction of time at home (See Table 2).

Table 2: 2015 OEHHA Recommended FAH for Evaluating Residential Cancer Risk

Age Range	FAH
3 rd Trimester and 0-2 Years	0.85
2-16 Years	0.72
16-70 Years	0.73

Therefore, SCAQMD staff recommends that the Lead Agency calculate cancer risks separately for each age group in the Final EIR.

Comments on Existing Mitigation Measure (MM) AIR-7 through MM AIR-11

- The Lead Agency proposed to implement MM AIR-7 through MM AIR-11 to reduce cancer risks from exposures to DPM emissions. MM AIR-7 through MM AIR-11 will require installation of

⁹ *Ibid.* Section 4.3: Air Quality. Page 4.3-32.

¹⁰ Office of Environmental Health Hazard Assessment. March 6, 2016. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015*. Available at: <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

MERV 13 or higher, and in some cases, MERV 15 or higher, filters. SCAQMD staff has comments on enhanced filtration units as follows.

Limits to Enhanced Filtration Units

SCAQMD staff recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that SCAQMD conducted to investigate filters¹¹, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the resident. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the analysis in the Draft EIR does not account for the times when the residents have their windows or doors open or are in common space areas of the project. In addition, these filters also have no ability to filter out any toxic gases from vehicle exhaust. The presumed effectiveness and feasibility of any filtration units should therefore be evaluated in more detail prior to assuming that they will sufficiently alleviate near roadway exposures to DPM emissions and before they are relied upon by Lead Agency as mitigation measures to reduce significant cancer risks to a less than significant level (CEQA Guidelines Section 15091(a)(1)).

Enforceability of Enhanced Filtration Units

Since enhanced filtration units are proposed, and to ensure that the enhanced filtration units are enforceable throughout the lifetime of the Proposed Project and that they are effective in reducing exposures to DPM emissions, SCAQMD staff recommends that the Lead Agency provide additional details on future operational and maintenance implementation and monitoring in the Final EIR. At a minimum, the Final EIR should discuss the responsible implementing and enforcement agency (or entity); recommended schedules for replacing the enhanced filtration units; ongoing monitoring schedules; ongoing cost sharing strategies, if any, for replacing the enhanced filtration units; disclosure on increased energy costs for running the HVAC system to prospective residents; criteria for assessing progress in installing and replacing the enhanced filtration units; and process for evaluating the effectiveness of the enhanced filtration units.

Enforceability of Existing MM AIR-1 through MM AIR-11

2. SCAQMD staff recommends that the Lead Agency develop strategies or tools to ensure existing proposed MM AIR-1 through MM AIR-11 are enforceable and effective in reducing air quality impacts. Example enforcement strategy includes performance standards-based technology review at a programmatic level that is appropriate for an area-wide and long-range plan such as the Proposed Project. Since the Proposed Project would be implemented over a period of 15 years, the Lead Agency should take this opportunity to deploy strategies that will foster and facilitate the deployment of the lowest emission technologies. 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 that are expected to be available in the life of the Proposed Project. As such, SCAQMD staff recommends that the Lead Agency develop strategies or tools to assess equipment availability, equipment fleet mixtures, and best available emissions control devices, and specify performance standards and appropriate timeline (or schedule) to achieve emission reductions that could also assist in supporting the 2016 AQMP.

¹¹ This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see also 2012 Peer Review Journal article by SCAQMD: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.

Additional Recommended Mitigation Measures

3. 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. As such, SCAQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR to further reduce emissions, particularly from VOC and NOx. Additional information on potential mitigation measures as guidance to the Lead Agency are available on the SCAQMD CEQA Air Quality Handbook website.
 - a) Require the use of 2010 model year diesel haul trucks that conform to 2010 EPA truck standards or newer diesel haul trucks (e.g., material delivery trucks and soil import/export) during construction, and if the Lead Agency determines that 2010 model year or newer diesel haul trucks are not feasible, the Lead Agency shall use trucks that meet EPA 2007 model year NOx emissions requirements, at a minimum.
 - b) Require the use of architectural coatings (no more than 50 grams/liter of VOC) that are beyond limits in SCAQMD Rule 1113 – Architectural Coatings.
 - c) Construct or build with materials that do not require painting or use pre-painted construction materials.
 - d) Limit parking supply and unbundle parking costs.
 - e) Require use of electric lawn mowers and leaf blowers.

Compliance with SCAQMD Rules and Regulations

4. The Final EIR should discuss how the Lead Agency will comply with other applicable SCAQMD rules and regulations, including, but are not limited to, the following:
 - a) Rule 403(e) – The Lead Agency included a discussion on general compliance with SCAQMD Rule 403- Fugitive Dust in the Draft EIR as MM AIR-1¹². Based on the project description, the Proposed Project is a large operation with the first phase of construction encompassing approximately 500 acres¹³ (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. However, the Lead Agency is also required to comply with SCAQMD Rule 403(e) – Additional Requirements for Large Operations¹⁴, 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 class¹⁵. Therefore, SCAQMD recommends that the Lead Agency include a discussion to demonstrate the specific compliance with SCAQMD Rule 403(e) in the Final EIR.
 - b) Rule 1113 – Architectural Coatings¹⁶.

¹² Draft EIR. Section 4.3: Air Quality. Pages 4.3-17.

¹³ *Ibid.* Page 4.3-47.

¹⁴ South Coast Air Quality Management District Rule 403. Last amended June 3, 2005. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.

¹⁵ SCAQMD 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.

¹⁶ South Coast Air Quality Management District Rule 1113. Last amended February 5, 2016. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf>.

Permits

5. In the Draft EIR, the Lead Agency stated that implementation of the Proposed Project would include new boilers and emergency generators which may require permits from SCAQMD. This makes SCAQMD a Responsible Agency for the Proposed Project. Therefore, the Final EIR should identify SCAQMD as a Responsible Agency. Should there be any questions on permits, please contact SCAQMD's Engineering and Permitting staff at (909) 396-2737. For more general information on permits, please visit the SCAQMD's webpage, at: <http://www.aqmd.gov/home/permits>.

Other Comments

6. As stated above, the Lead Agency analyzed air quality impacts from overlapping construction and operational activities by combining construction and operational emissions from the Proposed Project for interim milestone years of 2021, 2023, 2025, and 2035. Based on a review of Table 4.3-10 and Table 4.3-11 in the Draft EIR, SCAQMD staff found that the Lead Agency compared the combined emissions to SCAQMD's regional CEQA air quality significance thresholds for construction. However, according to the SCAQMD's recommendation on methodology for determining the significance level for air quality impacts from overlapping construction and operational activities, the combined emissions should be compared to SCAQMD's air quality CEQA *operational* thresholds of significance. While revisions to the Air Quality Analysis based on this comment are not expected to change the significance determination for the combined construction and operational air quality impacts for each of the interim milestone years, SCAQMD staff recommends that the Lead Agency revise the information in the "significance threshold" row in Table 4.3-10 and Table 4.3-11, respectively, in the Final EIR to be consistent with a more conservative analysis.
7. Table 4.3-19 showed the combined construction and operational mitigated maximum cancer and non-cancer risk for both construction and operation at 3.45 per million and 4.88 per million for the 2035 operational year, respectively, and the combined mitigated maximum cancer risk was 8.33 per million (3.45 + 4.88) which was below SCAQMD's CEQA significance threshold of 10 in one million for cancer risk. However, based on a review of Table 4.3-18, *Operational Mitigated Cancer Risk (per million)*, SCAQMD staff found that the mitigated *maximum* cancer risk would be 9.71 per million for the 2035 operational year and 8.93 per million for the 2040 operational year. Subsequently, the combined mitigated maximum cancer risk should be 3.45 per million plus 9.71 per million for 2035 and 3.45 per million plus 8.93 per million for 2040, and both of which would exceed SCAQMD's CEQA significance threshold of 10 in one million for cancer risk. Therefore, SCAQMD staff recommends that the Lead Agency provide additional information to clarify the calculation in Table 4.3-19 and to justify the use of 4.88 per million at Receptor No. 8 for the 2035 operational year in the Final EIR, and the Lead Agency explain why the combined construction and operational mitigated maximum cancer risk for the 2040 operational year was not disclosed in the Draft EIR.