



# South Coast Air Quality Management District

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## **Review of the Draft Environmental Impact Report (Draft EIR) for the Azusa Rock Quarry Revised Conditional Use Permit and Reclamation and Plan**

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comment is intended to provide guidance to the lead agency and should be incorporated into the revised Draft or Final Environmental Impact Report (Draft or Final EIR) as appropriate.

SCAQMD staff appreciates that the lead agency included design features and mitigation measures specific to the project to minimize its air quality impacts. However, given the high baseline regional emissions at the project site, SCAQMD staff recommends that the lead agency ensure that the project's incremental impacts remain less than significant by enforcing the project's air quality mitigation measures in the new Conditional Use Permit (CUP). As noted in the Draft EIR, the facility's throughput is currently limited by its SCAQMD permits to 10.8 million tons per year. Air Quality Mitigation Measure 1 (MM AQ-1) limits the project's throughput to 6.0 million tons per year.

It is the AQMD staffs understanding to avoid truck transport, that the current CUP requires all quarry materials from this facility be transported via the belt conveyance system. SCAQMD staff recommends that this condition be included in the future CUP, including for any increased output from the quarry. Recommended enhancements to the mitigation measures are further described in comments 1 through 5 below.

Also, SCAQMD staff recommends that the lead agency carefully examine all future project activities subject to the above mentioned project design features and mitigation measures (for example, if the project's throughput is modified at a future date), and if potentially significant impacts are identified the lead agency should prepare the necessary CEQA document pursuant to the Public Resources Code (PRC) §15168(c). If future changes to the project site require modifications or additions of equipment, the SCAQMD should be consulted regarding potential permitting requirements. Also,

SCAQMD staff requests that pursuant to PRC §15168(e) the lead agency place the SCAQMD on any future notice of activity.

Pursuant to PRC §21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,



Ian MacMillan  
Program Supervisor, CEQA Inter-Governmental Review  
Planning, Rule Development & Area Sources

Attachment

IM:DG

LAC091223-03  
Control Number

## **Air Quality Analysis and Mitigation Measures:**

### Project Design and Mitigation Measures

1. The lead agency conducted an air quality analysis to determine the project's regional air quality impacts. The results of the analysis provided on page 4.2-24 (i.e., Table 4.2-10 and Table 4.2-11) reflect the output values provided in Appendix C of the Draft EIR. Specifically, the results summarized in Table 4.2-11 indicate the project's air quality impacts exceed the SCAQMD's recommended regional significance thresholds for operational emissions from NO<sub>x</sub>, VOC and CO. Based on these results the lead agency identified air quality mitigation measures, including Mitigation Measure AQ-1 and Mitigation Measure AQ-2.

The lead agency relies on mitigation measures AQ-1 and AQ-2 to reduce regional NO<sub>x</sub>, VOC and CO impacts. To ensure that these mitigation measures reduce adverse regional NO<sub>x</sub>, VOC and CO emissions during operation the SCAQMD staff recommends that mitigation measures AQ-1 be enhanced in the Final EIR to include the methodology provided in the Emissions Inventory Plan (EIP) to calculate air quality impacts. Specifically, SCAQMD staff recommends that the lead agency revise AQ-1 to include AQ-1.0 through AQ-1.4 as follows:

- AQ-1.0 Daily peak production throughput as measured at the overland conveyor transfer shall be restricted to not more than 19,000 tons per day and 6,000,000 tons per year.
- AQ-1.1 The limitation of a daily throughput to 19,000 tons per day shall be implemented to reduce the Proposed Project's potential to emit NO<sub>x</sub>, SO<sub>x</sub>, VOC, CO, PM<sub>10</sub> and PM 2.5 emissions to less than the SCAQMD CEQA significance thresholds.
- AQ-1.2 The SCAQMD CEQA significance thresholds shall be used to curtail the facility's throughput to reduce the project's potential to emit NO<sub>x</sub>, SO<sub>x</sub>, VOC, CO, PM<sub>10</sub>, and PM 2.5 emissions to less than significant. The Emissions Inventory Plan (Appendix C.2.3, sub-appendix II-B) includes the methodology to evaluate each of the three pollutants (i.e. NO<sub>x</sub>, VOC, and CO) that exceed the SCAQMD CEQA significance thresholds in a similar manner to that presented below for NO<sub>x</sub>.
- The facility-wide NO<sub>x</sub> emissions factor shall be 0.0213 lb/ton processed,
  - The baseline (i.e., current) peak day NO<sub>x</sub> emissions is 351 lb/day, and
  - The SCAQMD mass daily threshold is NO<sub>x</sub> 55 lb/day.

In light of the above information, the Facility may emit 405 lb/day of NO<sub>x</sub> and remain less than the SCAQMD NO<sub>x</sub> Mass Daily Threshold (405 lbs/day = 351 lbs/day current emissions + 54 lbs/day to remain under the NO<sub>x</sub> significance threshold). In order for the Project to result in less than

significant impacts for all air quality aspects, it shall be restricted to a throughput restriction of 19,000 tons per day unless and until circumstances change such that the facility emissions factors can be revised.

AQ-1.3 Should the applicant request an increase in daily production (i.e. throughput) commensurate with a reduction in the facility emission factors, an updated air quality assessment shall be prepared, and CEQA shall be complied with as applicable, in order to demonstrate that any increased production and increased use of equipment will not exceed air quality thresholds and standards. The revised air quality assessment shall be calculated based on the following but not all-inclusive factors:

- Off road engine emissions factors and add-on control equipment efficiencies shall be based on the CARB Executive Order for each engine family, the Verified Diesel Emissions Control Strategy (VDECS), or other CARB approved values as implemented through the CARB In-Use Off-Road Diesel Regulation and any other applicable regulation.
- Load factors shall be based on URBEMIS default load factors for each equipment type,
- The Caterpillar Performance Handbook or equivalent reference shall be used to estimate haul truck and loader cycle time,
- Length of the haul road and resulting modified haul truck usage shall be accounted for in the reassessment, and
- Removal of equipment will credit the peak day activity amount at the emissions rate (i.e. NO<sub>x</sub>, SO<sub>x</sub>, VOC, PM<sub>10</sub>, and PM 2.5) of the unit removed.

AQ-1.4 The lead agency shall record any approved increase in daily production levels which correspond to a reduction in the facility emission factors. Also, the lead agency shall demonstrate that the increased production and increased use of equipment will not exceed air quality thresholds and standards. Furthermore, any recorded increase in daily production shall be made available for public review.

The SCAQMD staff recommends that the lead agency carefully examine all future project activities subject to AQ-1.0 through AQ-1.4 and if potentially significant impacts are identified the lead agency should prepare the necessary CEQA document pursuant to the Public Resources Code 15168(c). Also, SCAQMD staff requests that pursuant to Section 15168(e) the lead agency place the SCAQMD on future notices of activity.

#### Material Conveyance

2. The lead agency incorporated project design features (PDF) including PDF-5 (continued use of the material conveyance system) to minimize the air quality impacts

from the proposed project. Therefore, to ensure that the project's air quality impacts do not exceed the SCAQMD CEQA significance thresholds consistent with AQ-1 the SCAQMD staff requests that the lead agency incorporate PDF-5 as a mitigation measure.

#### Impact and Summary Mitigation Table

3. On page 2-16 of the Draft EIR the lead agency summarized the proposed project's air quality impacts and mitigation (i.e., Table 2-1: Impact and Summary Mitigation Table). Therefore, SCAQMD staff requests that any revisions made to AQ-1 through AQ-7 are reflected on the Impact and Summary Mitigation Table, 2-1 of the Final EIR.

#### Construction Emission Factors

4. SCAQMD staff was not able to verify the emission factors presented in Appendix C.2.3, Sub-Appendix II-B. The emission factors cited are more stringent than baseline offroad NOx emission factors from USEPA/ARB Offroad Tier standards. In the Final EIR, the lead agency should present documentation of these more stringent emission factors, and provide verification that this equipment is currently in use at the project site. If this equipment is not yet in use, a mitigation measure should be added requiring use of equipment capable of achieving these reductions.

Sub-Appendix II-B also states that a 15 percent NMHC to 85 percent NOx split is used to calculate emissions. SCAQMD staff recommends that a 95 percent NOx to 5 percent NMHC split be utilized in the mitigation methodology<sup>1</sup> or that the project proponent secure a letter from an equipment vendor that verifies that equipment that meets the proposed NOx emission factors would be available for the proposed project. Should emission factors require revision based on the comments above, the FEIR should recalculate the project emissions, and re-evaluate the limits imposed by mitigation measure AQ-1.

#### SOON Program Emissions Reductions

5. The DEIR misstates on page 4.2-9 that emissions from the project will be reduced due to SCAQMD's participation in the SOON program. The SOON program provides funding assistance to applicable fleets for the purchase of low-emissions heavy-duty engine technologies to achieve near term reduction of NOx emissions from in-use, off-road engines<sup>2</sup>. These reductions can only occur if the project proponent replaces its current on-site fleet with lower emitting engines ahead of the CARB-required schedule. As participation and compliance by the project proponent in the SOON program is not guaranteed, taking credit for these emission reductions would be inappropriate unless the vehicles are already in use. It is unclear if the emission factor discrepancies noted in the comment #4 above are due to an assumption of SOON compliance. If so, the Final EIR should recalculate the project emissions assuming non-compliance with the SOON program and re-evaluate the

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<sup>1</sup> [http://www.aqmd.gov/CEQA/handbook/mitigation/offroad/Off-Road\\_MM\\_Overview.pdf](http://www.aqmd.gov/CEQA/handbook/mitigation/offroad/Off-Road_MM_Overview.pdf)

<sup>2</sup> <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>.

limits imposed by mitigation measure AQ-1.0. As an additional mitigation measure, SCAQMD recommends that the lead agency consider requiring the project proponent to apply for funding from the SOON program.

## **Health Risk Assessment**

### Dispersion Modeling

6. AERMOD air dispersion modeling should follow SCAQMD guidance<sup>3</sup>. The guidance includes a warning for modeling receptors with elevations below sources. According to the AERMOD Implementation Guide<sup>4</sup>, for cases in which receptor elevations are lower than the base elevation of the source, AERMOD will predict concentrations that are less than what would be estimated from an otherwise identical flat terrain situation. While this is appropriate and realistic in most cases, for cases of down-sloping terrain where the plume is terrain-following, AERMOD will tend to underestimate concentrations when terrain effects are taken into account. In order to avoid underestimating concentrations in such situations, SCAQMD staff recommends the following:
  - 1) If all receptor elevations are lower than the base elevation of the source, the non-default option within AERMOD should be applied to assume flat, level terrain.
  - 2) If some receptors are lower and some receptors are higher than the base elevation of the source, AERMOD should be run twice – once using the default option and the second time using the non-default option. The maximum ground-level concentration from both runs should be reported.

Since it appears that some combinations of sources and receptors are above and below each other, AERMOD should be run with both the default and non-default options. A comparison between both runs should be made. If the concentrations estimated for the flat, level terrain option are higher, then the non-default AERMOD run should be imported into HARP and health risk values generated and evaluated.

### Exposure Parameters

7. Appendix C.2.3, sub-Appendix II-E mistakenly reports the output from HARP as a 70-year carcinogenic risk for the project. This calculation leads a reader to conclude that the lifetime (i.e., 70-year) risk was calculated. It is our understanding that the reported 70-year risk assumes that the project will operate for 70 years, while the reported 30-year risk represents a more accurate lifetime (70-year) cancer risk from the project assuming a 30-year project life. In order to more clearly articulate the risks from this project, the Final EIR should clarify what risks are really being calculated and reported.
8. The 30-year durations utilized in the chronic risk calculations may be appropriate for the inhalation pathway, however they are not necessarily appropriate for additional

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<sup>3</sup> [http://www.aqmd.gov/smog/metdata/AERMOD\\_ModelingGuidance.html](http://www.aqmd.gov/smog/metdata/AERMOD_ModelingGuidance.html)

<sup>4</sup> [http://www.epa.gov/scram001/7thconf/aermod/aermod\\_implmntn\\_guide\\_19March2009.pdf](http://www.epa.gov/scram001/7thconf/aermod/aermod_implmntn_guide_19March2009.pdf)

exposure pathways (e.g., soil ingestion, etc.). Removal of deposited contaminants is expected to last longer than 30 years. The Final EIR should present a lifetime risk (70-year) that sums the 70-year exposure for all pathways except inhalation, and the 30-year exposure for the inhalation pathway. If risks are significant following this re-evaluation, mitigation measures should be considered to reduce these risks to a less than significant level.