



South Coast
Air Quality Management District

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E-mailed: October 28, 2010
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Mr. Kris Flanigan
Riverside County Flood Control &
Water Conservation District
1995 Market Street
Riverside, CA 92501

**Review of the Draft Environmental Impact Report (Draft EIR)
for the Eagle Canyon Dam and Debris Basin Project**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are intended to provide guidance to the lead agency and should be incorporated into the final Environmental Impact Report (EIR) as appropriate.

Based on a review of the draft EIR the AQMD staff is concerned that the lead agency may have underestimated the number of on-road diesel haul trucks and off-road construction equipment pieces needed for the proposed project. As a result, the lead agency may have underestimated air quality impacts from the proposed project; therefore, AQMD staff recommends that the lead agency revise the air quality analysis to include emissions from all diesel haul trucks, backhoes and auxiliary equipment necessary for project construction. Further, AQMD staff requests that upon revision of the air quality analysis the lead agency identify any significant air quality impacts from the proposed project and minimize or eliminate these impacts in accordance with CEQA Guidelines §15370.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the final EIR. Further, staff is available to work with the lead agency to address these issues and any

questions related to air quality 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,

A handwritten signature in black ink that reads "Ian V. MacMillan". The signature is written in a cursive style with a large initial "I" and "M".

Ian MacMillan

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

Attachment

IM:DG

RVC100914-04
Control Number

Construction Emissions from On-Road Diesel Trucks

1. On pages 17 and 19 of Section 3.2 (Air Quality) the lead agency summarizes the regional and localized air quality impacts from the proposed project. Based on technical information¹ provided to AQMD staff by the lead agency the project's air quality analysis assumes that the project would require 2,777 cubic yards of soil per day to be transported offsite to a nearby landfill. However, it does not appear that the lead agency accounted for a sufficient number of on-road diesel trucks needed to transport this volume of soil in the air quality analysis. The analysis assumes that only 52 trucks per day are needed to transport the 2,777 cubic yards of soil offsite. However, a recently published builder's reference manual (i.e., Walkers Building Estimator's Reference Book)² indicates that a conventional on-road haul truck has a carrying capacity of 20 cubic yards of soil; as a result, the proposed project would require a minimum of 139 trucks per day to transport 2,777 cubic yards of soil from the project site to the landfill.

Given the potential discrepancy in the number of haul trucks needed to transport soil offsite AQMD staff is concerned that the regional and localized air quality impacts may be underestimated. Therefore, AQMD staff recommends that the lead agency revise the regional and localized air quality analysis to accurately reflect the project's construction activity with respect to the number of haul trucks required to transport soil offsite.

Construction Emissions from Off-Road Diesel Equipment

2. Given that the proposed project would require 2,777 cubic yards of soil to be transported offsite per day AQMD staff is concerned that the lead agency has underestimated the number of off-road construction equipment pieces needed to complete the proposed project resulting in an underestimate of air quality impacts. Specifically, based on the technical information provided by the lead agency the air quality analysis assumes that the proposed project would require one backhoe, one loader, and one grader to excavate the site. However, labor and equipment data provided in the builder's reference manual indicates that 2,777 cubic yards of soil handling would require at least 30 hours of operation per backhoe. Based on this data the proposed project would require at least five (5) backhoes to handle the loading of 2,777 cubic yards of soil per day onto haul trucks and any auxiliary equipment needed (e.g., loaders) to support this function. Therefore, AQMD staff recommends that the lead agency revise the regional and localized air quality analysis to accurately reflect the project's construction air quality impacts from the actual equipment required to complete the proposed project.

¹ Summary of URBEMIS Assumptions provided in an e-mail from the lead agency's environmental consultant to AQMD staff on October 25, 2010.

² Jerrold Ratner. Walker's Building Estimators Reference Book. Frank R Walker Company. Lisle, Illinois, 2002.

Mitigation for Construction Activities

3. In the event that the lead agency's revised air quality analysis requested in comment #1 and #2 demonstrates that any criteria pollutant emissions from the regional and/or localized construction emissions analysis create significant adverse impacts the AQMD staff recommends that the lead agency require mitigation pursuant to CEQA Guidelines §15370, which could minimize or eliminate significant adverse air quality impacts. To assist the lead agency with identifying possible mitigation measures for the project, please refer to AQMD's CEQA webpage at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.htm. Further, a list of mitigation measures has been provided below.
- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow,
 - Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site,
 - Reroute construction trucks away from congested streets or sensitive receptor areas,
 - Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation,
 - Replace ground cover in disturbed areas as quickly as possible,
 - Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications,
 - Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, and
 - Require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following:
 - ✓ April 1, 2010, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - ✓ January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- ✓ Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

Also, the lead agency should consider encouraging construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program accelerates clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>

Mitigation to Prevent Significant Air Quality Impacts from Lead Contaminated Soil

4. Given that the proposed project requires excavation of large quantities of lead contaminated soil during construction the AQMD staff is concerned about potentially significant air quality impacts from dust containing airborne lead particles. Therefore, AQMD staff recommends that the lead agency revise the third bullet in mitigation measure AQ-1 as follows:
 - Water material excavated or graded sufficiently to prevent excessive amounts of dust. Water at least ~~twice~~ three times daily with complete coverage, preferable in the late morning and after work done for the day and ensure that all disturbed areas of potentially lead contaminated soil maintain at least 12% moisture content during construction.