



South Coast
Air Quality Management District

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E-MAILED: AUGUST 4, 2011

August 4, 2011

Mr. Daniel Bott, Principal Planner, dbott@ocwd.com
Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708

**Draft Environmental Impact Report (Draft EIR) for the Proposed Miraloma
Recharge Basin Project**

The South Coast Air Quality Management District (AQMD) 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 CEQA document.

In the project description, the lead agency proposes the construction and operation of an approximate 13-acre recharge basin. The proposed project would include demolition of about 150,000 square feet of building and 451,300 square feet of asphalt area. Debris disposal would include approximately 120 daily round trip truck trips and occur over approximately 60 days. Excavation would also occur with approximately 180,000 cubic yards of material exported off-site and involve about 260 daily round trip truck trips and occur over approximately 80 days. The project is estimated to take approximately 12 months to complete and begin in October 2011.

AQMD staff is concerned that potentially significant regional and localized air quality impacts from construction activities to sensitive receptors (i.e., the residences located within a quarter mile of the project) have not been fully mitigated pursuant to CEQA Guidelines §15074. AQMD staff therefore recommends that additional mitigation measures be considered as described in the detailed comments attached to this letter. Other mitigation measures to reduce the project's air quality impacts are also available at the AQMD website.¹

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. The AQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality

¹ http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html

Mr. Daniel Bott,
Principal Planner

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August 4, 2011

Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

A handwritten signature in black ink that reads "Ian V. MacMillan". The signature is written in a cursive, flowing style.

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

IM:GM

ORC110622-01
Control Number

Air Quality Analysis

1. Review of the emission factors used to calculate construction heavy-duty truck trip emissions demolition and excavation in Appendix B (Air Quality and Greenhouse Gas Emissions) indicate that the weighted delivery truck emission factors from the AQMD webpage were used. These factors are a weighted factor derived from all heavy-duty truck classes, e.g., light-, medium-, and heavy-heavy-duty trucks. If the debris hauling and soil export trucks will be heavy-heavy-duty trucks (weighing between 33,001 to 60,000 pounds), it is recommended that emissions for these vehicles be calculated using the heavy-heavy-duty truck emission factors, which can be found at the following web address:
http://www.aqmd.gov/ceqa/handbook/onroad/onroadEFHHDT07_26.xls . For vehicles weighing 8,500 to 33,000 pounds, the use of the on-road delivery truck emission factors is recommended for calculating emissions for these vehicles, which can be found at the following web address:
http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls .
2. In the lead agency's discussion starting on page 3.1-16 in the Air Quality Section of the Draft EIR, the agency used the CalEEMod land use computer model to estimate localized construction impacts and compared those estimates with the AQMD look-up tables for a 5-acre construction area. Based on that parameter, the lead agency should include the following mitigation measure in the Final EIR consistent with its localized air quality analysis:
 - Construction soil disturbance activities will be limited to activities specified in the Draft EIR (e.g., 5 acres or less per day).
3. The fugitive dust emissions calculated from unpaved roads in the technical appendix to the Draft EIR appear to incorrectly aggregate mitigation effectiveness. The lead agency specifies that two mitigation measures will be used to reduce road dust, including watering twice per day (55% effectiveness), and limiting speeds to 15 mph (44% effectiveness). These two measures were inappropriately summed to achieve a 99% reduction in road dust. When aggregating mitigation effectiveness, the second measure should be multiplied by the remaining total, not summed.

For example;

$$\begin{aligned} 1.0 \times 0.44 &= 56\% \text{ remaining emissions,} \\ 0.56 \times 0.55 &= 31\% \text{ remaining total emissions} \end{aligned}$$

More importantly, these mitigation measures have already been accounted for in the unpaved road dust equation utilized from EPA's AP-42 guidance. The AP-42 equation already includes terms both for moisture content and for speed. As the "unmitigated" emissions already assume 12% moisture (equivalent to 3 times watering per day) and 15 mph vehicle travel, these measures should not be counted again to the resulting emissions total. Lastly, the mean vehicle weight of 10 tons

should be justified in this equation as each truck may carry substantially greater weight.

Construction Mitigation Measures

4. Because the lead agency has determined that construction emissions for NOx and particulate matter (PM10) exceed the established significance thresholds, the SCAQMD recommends the following change and additional mitigation measures, if applicable and feasible.

Recommended change:

MM AQ-1b

- ~~Demolition, excavation, grading, and other soil disturbance activities shall be prohibited~~ suspended when wind speeds (as instantaneous gusts) exceed 25 miles per hour;

Recommended additions:

- Replace ground cover in disturbed areas as quickly as possible;
- Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more);
- Water active sites at least twice daily;
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered;
- Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces;
- Pave road and road shoulders;
- Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads using SCAQMD Rule 1186 certified street sweepers or roadway washing trucks (recommend water sweepers with reclaimed water);
- Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation;
- Reduce daily construction activity by prolonging the number of days for construction phases that exceed AQMD daily LST limits; and
- Require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following schedule adopted by other lead agencies in the South Coast Air Basin:
 - April 1, 2010, to December 31, 2011: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 2 off-road 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 off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road 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 off-road 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 AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website:

www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.