



South Coast Air Quality Management District

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SENT VIA USPS AND E-MAIL:
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August 7, 2013

Ms. Carrie Tai, AICP, Senior Planner
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City of Lake Forest
25550 Commercentre Drive, Suite 100
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Draft Subsequent Environmental Impact Report (DSEIR) for the Proposed Portola Center Area Plan and Tentative Tract Maps (SCH# 2012061063)

The South Coast Air Quality Management District (SCAQMD) 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.

The lead agency proposes the construction of up to 930 single and multi-family residences, a small commercial component, parks, and open space on a 195-acre site. Approximately 4.27 million cubic yards of soil disturbance is planned that would be balanced on site with soil import and export occurring within a nominal hauling distance between the three project areas. Construction will begin in November 2013 and end in July 2017 with some overlap between the three phases. In the Air Quality Section, the lead agency quantified the project's construction and operation air quality impacts and has compared those impacts with the SCAQMD's recommended regional and localized daily significance thresholds.

The SCAQMD staff is concerned about the construction equipment methodology used to estimate off-road equipment emissions and that all feasible mitigation measures should be incorporated into the Final SEIR to reduce the significant adverse air quality impacts from short- and long-term activities. Details are included in the attachment.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The SCAQMD 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 Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Ms. Carrie Tai, AICP
Senior Planner

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August 7, 2013

Sincerely,

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

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

Attachment:

IM:GM

ORC130628-02
Control Number

Air Quality Analysis - Construction

1. In the air quality analysis, the lead agency estimated project construction air quality impacts using the CalEEMod land use model that uses default and user-defined settings to estimate emissions based on the expected land use. Based on User Entered Comments and review of the inputs to the model's off-road equipment list, the lead agency has modified the default settings for the load factor listed for the types of off-road equipment selected reducing each default load factor by a factor of about one third, effectively lowering the emissions calculated from these emission sources by one third. For example, the CalEEMod default load factor for a scraper is 0.72; a tractor/loaders/backhoe has a load factor of 0.55; and a crawler tractor is 0.64. In the air quality analysis, the lead agency used 0.48 as a load factor for a scraper; a load factor of 0.37 for a tractor/loaders/backhoe; and 0.43 for a crawler tractor. These edits to load factors are not recommended by the AQMD staff without substantial evidence to support their use. If the lead agency would like to take credit for recent ARB Rulemaking, the newer OFFROAD 2011 model should be used¹. Otherwise, the lead agency should commit to enforcing the assumed lower emission factors or use the default load factors provided in CalEEMod.

Construction Mitigation Measures

2. Since the lead agency has determined in the DSEIR air quality analysis that construction air quality impacts exceed the recognized air quality significance levels for NOx, PM10 and ROG, the SCAQMD staff recommends the following changes and additional mitigation measures in the DSEIR pursuant to CEQA Guidelines Section 15126.4 to reduce the project's significant air quality impacts in addition to the measures included starting on page 5.6-16.

Recommended Changes:

The SCAQMD staff recommends that the lead agency revise the following mitigation measures, as noted:

MM 3.3-1

- ~~Start of construction to December 31, 2014: Where available, incorporate Tier 2 and 3 equipment into the construction fleet off off road diesel construction equipment used for the project. Where available, non-Tier 2 or 3 off road diesel construction equipment shall be outfitted with the BACT devices certified by CARB. If CARB certified engines are not available, the project Applicant shall provide evidence to the City prior to issuance of grading permits, or within 30 days of procurement of the construction equipment fleet.~~

¹ OFFROAD 2011 shows that additional parameters affect emissions besides load factor, and that some equipment-specific emission factors can be either higher or lower than the OFFROAD 2007 emission factors used in CalEEMod. The new version of CalEEMod that incorporates ARB's OFFROAD 2011 is due out soon.

- Project Start to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3² 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: Where available and commercially feasible, incorporate Tier 3 and 4 equipment into the construction fleet off off road diesel construction equipment used for the project. Where available, non Tier 3 or 4 off road diesel construction equipment shall be outfitted with the BACT devices certified by CARB.~~
- 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.

MM 3.3-7

- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour ~~over a 30-minute period.~~

Recommended Additions:

The lead agency should also note that the following measure has been determined to be feasible and applicable to past projects within other jurisdictions³.

- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export), and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained, the lead agency shall use trucks that meet EPA 2007 model year NOx and PM emissions requirements.
- Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to
- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.

² Tier 3 off-road equipment has been available since 2008

³ For example see the Metro Green Construction Policy at:

http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf.

- 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.

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.

Operational Mitigation Measures

3. Given that the lead agency determined that the proposed project will exceed the CEQA regional operational significance thresholds for NO_x and ROG, the SCAQMD staff recommends that the lead agency provide the following additional mitigation measures pursuant to CEQA Guidelines Section 15126.4.

Transportation

- Make a commitment to install electric car charging stations (not just wiring infrastructure) for both non-residential and residential uses at the project site.

Energy

- Make a commitment that the project site include a solar photovoltaic or an alternate system with means of generating renewable electricity.