



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

SENT VIA USPS AND E-MAIL:

August 15, 2014

Ms. Loralee Farris, Associate Planner  
Development Services Department  
City of Redlands  
35 Cajon Street, Suite 20  
Redlands, CA 92373

## **Draft Mitigated Negative Declaration (Draft MND) for the Proposed Redlands Commerce Center Building 1 and 2 Project**

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 Mitigated Negative Declaration.

In the project description, the Lead Agency (Draft MND) proposes construction of two separate warehouse distribution centers totaling approximately 1.1 million square feet on a 50.67 acre site. Construction is expected to take approximately eight months to complete. Grading of the vacant site will take approximately eight weeks in a single phase with all cut and fill balanced on-site. Operations are expected to begin in 2015 with two work shifts that would employ up to 110 employees per shift. During operations, the proposed project is estimated to have 1,852 daily vehicle trips including approximately 378 heavy-duty trucks.

In the air quality analysis, the overall vehicle trip rates (cars and trucks) are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9<sup>th</sup> Edition (2012), while the truck trip rates are based on the Fontana Truck Trip Generation Study (2003). For high cube warehouse projects, the SCAQMD staff has been working on a Warehouse Truck Trip Study<sup>1</sup> to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. Draft final results for the Warehouse Truck Trip Study are completed and are lower than current SCAQMD recommended truck trip rates in the California Emissions Estimator Model (CalEEMod).

As an interim measure, staff is recommending truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in SCAQMD. Consistent with CEQA Guidelines, the MND may use a non-default trip rate if there is substantial evidence indicating another rate is more appropriate for the air quality analysis. Staff will be bringing this item to the SCAQMD Governing Board in the Fall

---

<sup>1</sup> Details regarding this study can be found online here:  
<http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/high-cube-warehouse> .

Ms. Lorelee Farris,  
Associate Planner

1

August 15, 2014

2014 and anticipates to have a formal policy recommendation on truck trip rates for high cube warehouses based on the study results.

Finally, the SCAQMD staff recommends that additional feasible mitigation be incorporated to minimize or reduce operational emissions to less than significant levels if further analyses indicate that significant impacts occur. Additional details are included in the attachment.

Please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final MND. 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.

Sincerely,



Edward A. Eckerle  
Program Supervisor  
Planning, Rule Development & Area Sources

Attachment

EE:IM:DG:GM

SBC140722-03  
Control Number

## **Operations Air Quality Analysis**

### **Interim Recommendation for Truck Trip Rates**

1. The Draft MND used a 0.34 daily truck trip rate and an overall daily trip generation rate of 1.68 vehicles per thousand square feet of floor area for high cube warehouse uses based on the Fontana Truck Trip Generation Study (2003) and the Institute of Transportation Engineers (ITE) Trip Generation, 9<sup>th</sup> Edition (2012). For high cube warehouse projects, the SCAQMD staff has been working on a Warehouse Truck Trip Study to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. Draft final results for the Warehouse Truck Trip Study<sup>2</sup> are completed and are lower than current SCAQMD staff recommended truck trip rates in the California Emissions Estimator Model (CalEEMod). As an interim measure, SCAQMD staff is recommending the use of truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in SCAQMD, i.e., 0.64 daily truck trips per thousand square feet of warehouse space. The SCAQMD staff recommends revising the Final MND using the 0.64 rate in lieu of the 0.34 truck trip rate unless substantial evidence demonstrates that another rate is more appropriate for the air quality and other applicable analyses.
2. In the Project Trip Generation Table, the lead agency uses a truck fleet mixture percentage of 20.43 from the Truck Trip Generation Study, City of Fontana (August 2003). However, in the modeling files, a fleet percentage of 0.005 was entered under LHD2 instead of 0.0346 consistent with the Trip Generation Table in Traffic Impact Analysis. This inconsistency between the project trip generation fleet mixture percentage data and the modeling inputs should be reconciled in the Final MND.

### **Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)**

3. Based on recommended revisions to the air quality analyses in the cover letter, NO<sub>x</sub> and PM<sub>2.5</sub> emissions from diesel particulate matter, which is primarily from mobile source truck emissions related to on-road vehicle trips associated with the proposed project may increase beyond the SCAQMD significance thresholds. As a result, additional mitigation may be needed. In addition to the measures proposed starting on page 25 of the Draft MND, the SCAQMD staff therefore recommends the following on-road mobile-source truck related mitigation measures that should be incorporated in the Final MND in order to reduce potential significant project air quality impacts.
  - Require the use of 2010 compliant diesel trucks, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) at commercial/retail sites upon project build-out. If this isn't feasible, consider other measures such as incentives, phase-in schedules for clean trucks, etc.

---

<sup>2</sup> Details regarding this study can be found online at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/high-cube-warehouse> .

- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
- Re-Route truck traffic by restricting truck traffic on certain sensitive routes.
- Develop, adopt and enforce truck routes both in and out of city, and in and out of facilities.
- Prohibit all vehicles from idling in excess of five minutes, both on- and off-site.
- Improve traffic flow by signal synchronization.
- Limit activities to the amounts analyzed in the Draft CEQA document.
- Promote clean truck incentive programs (see the discussion above regarding Cleaner Operating Truck Incentive Programs), and
- Provide electric vehicle (EV) Charging Stations (see the discussion below regarding EV charging stations).
- Should the proposed project generate significant regional emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in health risks, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce project impacts. SCAQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency and project applicant.
- Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. Further, trucks that run at least partially on electricity are projected to become available during the life of the project as discussed in the 2012 Regional Transportation Plan. It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, the SCAQMD staff recommends the Lead Agency require the proposed warehouse and other plan areas that allow truck parking to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces (including for trucks) include EV charging stations<sup>3</sup>.

---

<sup>3</sup> [http://ladbs.org/LADBSWeb/LADBS\\_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf](http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf)

Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. At a minimum, electrical panels should appropriately sized to allow for future expanded use.

**Mitigation Measures for Operational Air Quality Impacts (Other Area Sources)**

4. In addition to the mobile source mitigation measures identified above the Lead Agency should incorporate the following onsite area source mitigation measures below to reduce the project's regional air quality impacts from NOx emissions during operation, if further revisions to the air quality impact analysis prove that operational NOx impacts are significant. These mitigation measure should be incorporated pursuant to CEQA Guidelines §15126.4, §15369.5.
  - Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
  - Maximize the planting of trees in landscaping and parking lots.
  - Use light colored paving and roofing materials.
  - Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
  - Install light colored "cool" roofs and cool pavements.
  - Limit the use of outdoor lighting to only that needed for safety and security purposes.
  - Require use of electric or alternatively fueled sweepers with HEPA filters.
  - Use of water-based or low VOC cleaning products.