



South Coast Air Quality Management District

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Review of the Draft Mitigated Negative Declaration (MND) for the Redlands Fulfillment Center Project

The South Coast Air Quality Management District (SCAQMD) staff 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 revised CEQA document as appropriate.

The proposed project includes development of an approximately one million square foot warehouse in the northwestern portion of the city. The Draft MND concludes that air quality impacts from this project would be less than significant. SCAQMD staff is concerned that the air quality analysis did not adequately evaluate potential air quality impacts from this project. If emissions from this project are calculated using standard methodologies, impacts may be significant and undisclosed. Further, the emissions calculations are substantially different from those described in the text of the Draft MND. In particular, the calculation of diesel exhaust emissions from trucks serving the project appears to be underestimated. SCAQMD staff recommends that the lead agency re-evaluate air quality impacts following the methods described in the attached comments and provide a strong commitment to implementing all feasible mitigation should impacts be found significant.

Please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final CEQA document. Further, staff is available to work with the lead agency to address these issues and any other air quality questions that may arise. Please contact me at (909) 396-3244 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

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Control Number

Truck Trips

Emissions from heavy duty trucks serving high cube warehouses typically present a large source of emissions, especially NO_x and diesel particulate matter emissions. The calculation of these potential emissions relies heavily on the estimate of future trucking activity. The Draft MND states that there will be a total of only 200 truck trips per day (100 delivery + 100 shipping), however there is not substantial evidence provided that validates this low trip generation rate. The determination of truck trip rates is presented in a conclusory manner without referencing any tenant specific information or standard available guidance. For example, the CalEEMod software and User's Guide contain methods for determining peak daily truck trip rates from large warehouses. Using CalEEMod default rates, there would be approximately 1050 *peak* daily truck trips. Other guidance that presents less conservative daily truck trip rates, such as the ITE manual, would yield rates of approximately 650 *average* daily truck trips for a facility of this size.

Although the proposed facility may have slightly different operational characteristics as a 'fulfillment center' compared to other high cube warehouses, there do not appear to be any conditions on the project that limit future activity, including trucking activity, to the proposed rate. Absent any conditions on the project limiting activity to the proposed 200 truck trips per day, the Draft MND should evaluate the potential impacts of a more conservative trip rate (i.e., the CalEEMod rate) that accounts for more typical uses at high cube facilities. This condition is also important to consider for future tenants that may move into this building that aren't currently foreseen for the immediate future as the lead agency's action will apply to the general land use, regardless of who occupies the building.

Truck Travel Distance

The Draft MND (pg. 4) states that delivery trips are estimated to be 75 miles in length (150 mile round trips). However the calculation of emissions from trucks only evaluated emissions from truck travelling 7.5 miles in the unmitigated scenario. This trip distance appears to be derived from default light duty auto trip length values from CalEEMod. As these default CalEEMod trip rates are not appropriate for goods movement truck trip lengths, the analysis should be recalculated to include emissions from the entire truck trip distance. Further, the truck trip distances are shown to be mitigated by measures such as transit subsidies and a vanpool program. These mitigation measures are designed to reduce VMT from light duty vehicles, and VMT from goods movement trucking should not take credit for these reductions.

By calculating the correct trip distance, emissions would exceed thresholds, and impacts would be less than significant. These emissions would potentially be even higher considering the comments on truck trip rates above.

Fleet Mix

There does not appear to be substantial evidence provided for the fleet mix used to calculate vehicle emissions. The Draft MND Air Quality Appendix contains a truck fleet mix that includes: 34% heavy-heavy duty, 34% medium-heavy duty, and 31% light-heavy duty. This fleet mix appears to be ad hoc and does not correspond to other standard mixes, such as those described in the CalEEMod User's Guide. The lead agency

should revise the fleet mix based on substantial evidence, such as a tenant's known fleet mix (with accompanying substantial evidence) or with a fleet mix from a standard reference. Typical high cube warehouses utilize mostly heavy-heavy duty trucks (with higher emissions), and only a smaller minority of other truck classes.

Additional Emission Sources

The CEQA document should clarify if there will potentially be additional emission sources onsite, including emergency generators, transportation refrigeration units, and/or hostlers. Any emissions from these activities must be included in the final air quality analysis.

CalEEMod

A new version of CalEEMod was released on July 26, 2013. The lead agency is encouraged to use this updated version to re-analyze project impacts. This updated version includes up-to-date emission factors from CARB for offroad and onroad vehicles. Using this new version will also correct errors in assumptions from the previous CalEEMod analysis in the Draft MND, including an inappropriate non-default reduction of construction equipment load factors.

2010 Truck Mitigation

The proposed project includes potentially robust mitigation for truck emissions in AQ-4, however the measures as written do not appear to be enforceable. For example, it appears that only trucks meeting 2010 emission standards are intended to be allowed onsite. However, the language of the mitigation measure makes it appear that this provision will only be enacted if found feasible, presumably at some future unspecified date. Further complicating the issue is that the mitigated emission factor only appears to partially account for the lower NO_x emissions from using 2010 trucks. The lead agency should provide additional information regarding how the emission factors were derived for the mitigated and unmitigated analyses. Further, if the lead agency intends to limit site access to only 2010 standard trucks, then the mitigation measure should be rewritten to be more explicit about this requirement and the measure should become a condition on the project. This mitigation measure is particularly important in light of comments above. If emissions are calculated correctly, then impacts are anticipated to be significant, and a Draft MND would not be an appropriate CEQA document.

Additional Mitigation

If impacts are found to be significant after re-analysis, additional mitigation should be considered to reduce these impacts to the maximum extent feasible. This could include:

- Installing charging stations and related onsite electrical system capacity for both cars and future electric trucks
- Installing natural gas fueling onsite for cars or trucks
- Committing to applying to the local utility to install the maximum number of solar panels as possible on the building roof.
- Providing electrical plugs for any docks that might serve trucks with Transportation Refrigeration Units so that they can plug in while at dock
- Installing particulate traps and using the highest tier engine commercially available for any onsite emergency generators