



South Coast Air Quality Management District

AQMD

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FAXED: JULY 13, 2005

July 13, 2005

Ms. Olivia Barnes
Department of Community Development and Planning
City of Perris
135 North "D" Street
Perris, CA 92570-1998

Dear Ms. Barnes

Draft Environmental Impact Report (DEIR) for
Perris Warehouse/Distribution Facility
May 25, 2005

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD also appreciates the additional time allowed by the lead agency for providing comments on the DEIR for the proposed project. The following comments are meant as guidance for the Lead Agency and should be incorporated in the Final Environmental Impact Report.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final Environmental Impact Report. The SCAQMD would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Charles Blankson, Ph.D., Air Quality Specialist – CEQA Section, at (909) 396-3304 if you have any questions regarding these comments.

Sincerely

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development & Area Sources

Attachment

SS: CB

RVCO50525-04
Control Number

**Draft Environmental Impact Report (DEIR) for
Perris Warehouse/Distribution facility**

1. **Estimated Peak Daily Construction Emissions, Table 4.2-3:** It was difficult to reconcile construction emission results presented in Table 4.2-3 on page 4.2-18 of the DEIR with the URBEMIS output reports in Appendix B. It would have been helpful if the lead agency had included a discussion in Appendix B explaining the purpose of each of the various URBEMIS output report runs and identifying the URBEMIS output report runs which provided the emission results used to conclude whether or not construction and operation air quality impacts are significant.
2. **Demolition and Grading Emissions:** It is noted on page 4.2-8 of the DEIR that the 80.08-acre project site contains a single-family residence. It is assumed that this vacant single-family residence will be demolished prior to site preparation. The URBEMIS model has the capability of calculating demolition emissions so it is unclear why the lead agency ignored this potential impact. For completeness, the SCAQMD recommends that the lead agency include air quality impacts from demolition of the residential structure in the FEIR.
3. **Maximum Versus Minimum Construction Emissions:** Page 4.2-19 indicates that the URBEMIS model was run for a maximum construction scenario when the most number of construction equipment would be used and a minimum construction scenario using the lowest number of construction equipment. Further, the URBEMIS output reports in Appendix B identify the equipment for each scenario. Although it is reasonable that during different periods of a construction phase that differing numbers of construction equipment would be used, no information is available regarding the types of activities underlying the two construction scenarios. As a result, staff is unable to determine whether the number of construction equipment and equipment activities are appropriate for each construction scenario. For example, according to the URBEMIS output reports in Appendix B, the minimum construction scenario includes two cranes, but the maximum construction scenario does not include cranes. Cranes are an important component of construction activities so it is not clear why the maximum construction scenario does not also include cranes. Until more information is provided on the assumptions used to develop each construction scenario and the activities involved, staff cannot confirm whether or not the scenarios and resulting emissions are appropriate.
4. **Construction Equipment:** According to the URBEMIS output reports for phase 2 site grading in Appendix B, PM10 (fugitive dust) generated by grading equipments is calculated to be 800.8 pounds per day (total PM10 emissions equal 805.91 pounds per day). The lead agency then activates several mitigation measures that reduce total PM10 emissions to 175.75, which is what is reported for PM10 in Table 4.2-3 on page 4.2-18. The lead agency then applies an additional watering for active sites, reducing total PM10 emissions to 76.26

pounds per day, which is less than the construction PM10 significance threshold of 150 pounds per day.

Unfortunately, a bug was recently discovered in the model relative to PM10 emissions. The control efficiency for each mitigation measure is applied to the total PM10 emissions rather than PM10 emissions from the specific source generating the emissions. This means that the model overestimates PM10 emission reductions associated with the PM10 mitigation measures. Consequently, it is unlikely that PM10 emissions greater than 800 pounds per day can be mitigated to less than 150 pounds per day with the mitigation measures activated.

To ensure that PM10 emissions are less than the construction PM10 significance threshold of 150 pounds the lead agency should consider restricting the number of acres graded per day. The URBEMIS output reports in Appendix B shows that the entire 80.08 acres would be disturbed per day. Restricting the number of acres disturbed per day to 40 acres or less and activating the watering the active sites mitigation measure (watering twice per day resulting in a control efficiency of 50 percent, would result in PM10 emissions less than 150 pounds per day.

5. **VOC Emissions:** Table 4.2-3 on page 4.2-18 includes VOC emissions from architectural coatings. Footnote a to the table states that a maximum of 64,000 square feet of primer would be coated per day and footnote b states that 40,000 square feet of paint would be coated per day. There is no explanation regarding why less paint is coated per day than primer. In addition, staff was unable to verify the worker trip emissions associated with applying the architectural coatings. None of the URBEMIS output reports in Appendix B included similar worker trip emissions. Please explain why less paint is coated per day than primer and how worker trip emissions were derived.
6. **Operational Emissions: (Diesel Truck Exhaust Emissions):** Table 4.2-4 on page 4.2-23 of the DEIR is misleading because it appears to show no exhaust emissions from the heavy-duty trucks that will be servicing the warehouse facility at build out except for PM10 emissions. Footnote a indicates that the heavy-duty diesel truck PM10 emissions are from the HRA analysis in Appendix C. There are a couple of problems with this table as explained in the following paragraph.

First, the "Motor Vehicles" line in the table already includes PM10 emissions from heavy-duty diesel trucks, so PM10 emissions from this source appear to be double counted. However, the number of diesel truck trips in Table B on page 17 of Appendix C is greater than the number of truck trips represented by the URBEMIS output reports in Appendix B. For example, Table B shows 1,032 heavy-heavy-duty truck trips per day. Based on the percentage of heavy-heavy-duty diesel trucks that make up the fleet in the URBEMIS output reports, 80 percent ($0.09 \text{ heavy-heavy-duty trucks} \times 0.88 \text{ diesel trucks} = 0.80$), and the total number of vehicle trips, 8,366.33 trips per day, the number of heavy-heavy-duty

truck trips per day based on the URBEMIS output reports would be 669. This same inconsistency occurs for the medium-heavy-duty and light-heavy-duty truck trip categories. If the daily truck trip numbers in Table B in Appendix C are correct, then it is likely that the emission results for operational emissions are underestimated. The lead agency needs to explain or correct this apparent discrepancy.

7. **CO Hotspots Analysis:** The lead agency used the simplified screening method presented in the BAAQMD CEQA Guidelines, December 1999, to complete the CO hot spots analysis. SCAQMD staff recommends that the lead agency use CALINE4 to analyze CO hot spots in the Final EIR. The CO hot spots analysis should be completed according to the methodology prescribed in Appendix B of the Transportation Project-Level Carbon Monoxide Protocol (CO Protocol) by the Institute of Transportation Studies, UC Davis, revised December 1997 on the following website: <http://www.dot.ca.gov/hq/env/air/coprot.htm>.
- The Simplified CALINE4 Carbon Monoxide Analysis Worksheets state that the CO emission factors were developed using EMFAC 2002. Insufficient information was available to verify the emission factors. The lead agency should include in the FEIR for this project geographic area, temperature, humidity, speeds and vehicle categories used to develop the emission factors, so that the public can verify the methodology used to develop the emission factors. The SCAQMD requests that all supporting air quality technical data be provided along with the draft CEQA document to allow a comprehensive review of the air quality analysis and avoid delays in completing review of the analysis.
- The Simplified CALINE4 Carbon Monoxide Analysis Worksheets estimate CO concentrations at 25 feet, 50 feet and 100 feet. The BAAQMD CEQA Guidelines present values to estimate the CO concentrations at the edge of the roadway. Since most roadways include sidewalks, the FEIR should either include CO concentration estimates at the edge of the roadway or explain why receptors would not be located closer than 25 feet to the roadway.

The Simplified CALINE4 Carbon Monoxide Analysis Worksheets use an eight-hour CO persistence factor of 0.6. Since the South Coast Air Basin has not been redesignated as attainment, the FEIR should include eight-hour CO estimates based on a CO persistence factor of 0.7 (nonattainment) or 0.8 (urban areas with persistent stagnation and/or congestion).

8. **Health Risk Assessment (HRA):** The HRA was completed using the Hotspots Analysis and Reporting Program (HARP) version 21.7.30, which is an older version of the model. Given the date the NOP/IS was made available for public review, November 2004, a more current version of HARP, e.g., version 21.11.02, was available at that time. Therefore, the HRA should have been completed with at least version 21.11.02, the September BPIP and health pollutant files. The

Final EIR should include a revised HRA based upon the 21.11.02 version of HARP with September 2004 Updates.

- The diesel exhaust HRA emission factors were developed using an average of 2010 to 2040 emission factors generated by EMFAC2002. Operational emissions from the proposed project would begin in 2007. The HRA in the Final EIR should be revised using the average of 2007 to 2040 emission factors generated by EMFAC2002 or explain why the 2010 to 2040 average was used.
- An initial vertical dimension of 2.83 meters was chosen to represent exhaust plumes from diesel trucks. The Final EIR/HRA should contain a detailed discussion on the development and justification of the use of the 2.83 meter initial vertical dimension for diesel truck exhaust.

Footnote 4 on page 17 of the HRA in Appendix C states that the HRA analysis assumed that each truck idles for 1.5 minutes per truck. The SCAQMD recommends that the HRA be revised to assume a total of at least 10 minutes of idling per truck trip. Although state law prohibits heavy-duty trucks from idling more than five minutes, this is per idling event and it is expected that trucks would have more than one idling event while at the proposed facility. Therefore, an assumption of idling for 10 minutes is a reasonable assumption.

9. **Mitigation Measures for Operational Air Quality Impacts:** According to Table 4.2-4 on page 4.2-23 of the DEIR, operational CO, VOC and NO_x emissions all exceed the recommended daily operation significance thresholds. To reduce these emissions, the lead agency has proposed two mitigation measures that are listed on page 4.2-22 of the DEIR. The lead agency should also consider the following mitigation measures to further reduce operational emissions:

Prohibit all diesel trucks from idling in excess of five minutes, both on-site and off-site.

Signage will be installed directing heavy-duty trucks to identified truck routes that avoid residential areas within the vicinity of the project site. Also, place signs at the exits of the warehouse/distribution center that indicate which way to turn and the specific truck route to take to get to the freeway.

As part of the lease agreements, the proposed project owner shall educate drivers/tenants on alternative clean fuels. Flyers and pamphlets shall also be provided for truck drivers informing truck drivers of the health effects of diesel particulate, to encourage drivers to implement diesel reduction measures, and of the importance of being a good neighbor. The following information could be included:

Health effects of diesel particulate.

Minimize idle time to less than five minutes.

Air Resources Board Idling Regulation

Proper rest stops

Importance of not parking in residential neighborhoods.

- Re-route truck traffic by adding direct off-ramps for the truck or by restricting truck traffic on certain sensitive routes;
- Improve traffic flow by signal synchronization;
- Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1;
- Pave road and road shoulders;
- Require or provide incentives to use low sulfur diesel fuel with particulate traps;
- Conduct air quality monitoring at sensitive receptors ;
- Alternative fueled off-road equipment;
- Create a buffer zone of at least 300 meters (roughly 1,000 feet), which can be office space, employee parking, greenbelt, etc. between the warehouse/distribution center and sensitive receptors;
- Design the warehouse/distribution center such that entrances and exits are such that trucks are not traversing past neighbors or other sensitive receptors;
- Design the warehouse/distribution center such that any check-in point for trucks is well inside the facility property to ensure that there are no trucks queuing outside of the facility;
- Require the warehouse/distribution center to clearly define the primary entrance and exit of the warehouse/distribution center;
- Restrict overnight parking in residential areas;
- Enforce truck parking restrictions;
- Establish overnight parking within the warehouse/distribution center where trucks can rest overnight;
- Establish area(s) within the facility for repair needs.
- Require all warehouse/distribution centers to operate the cleanest vehicles available;
- Conduct periodic community meetings inviting neighbors, community groups, and other organizations;
Consider coordinating an outreach program to educate the public on, and their concerns relating to the potential for cumulative impacts from a new warehouse/distribution center;
- Post signs outside of the facility providing a phone number where neighbors can call if there is a specific issue;
- Provide food options, fueling, truck repair and or convenience store on-site to minimize the need for trucks to traverse through residential neighborhoods.