South Coast
Air Quality Management District
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FAXED: FEBRUARY 29, 2008

February 29, 2008

Mr. Donn Montag
City of Rialto
Planning Division
150 South Palm Avenue
Rialto, CA 92376

Dear Mr. Montag:

Draft Environmental Impact Report (DEIR) for UPS Freight Facility (December 2007)

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 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 available 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
Planning, Rule Development & Area Sources

Attachment

SS:JK:CB
SBC080115-08
Control Number

Draft Environmental Impact Report (DEIR) for
UPS Freight Facility

Health Risk Assessment

1. Page D-2 of Appendix D in the "Air Quality Analysis" states that stack height and diameter were based on observation of many trucks and approximating typical dimensions. Exhaust temperature and velocity were taken from ARB guidance, which is footnoted as Appendix VII of the ARB Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.

   Stack height of three meters is reasonable. However, the stack diameter of 0.82 meters (2 feet, 8 inches) appears to be unreasonably large for on-road heavy-duty trucks. A more reasonable stack diameter would be between four and six inches.

   The exhaust velocity listed is for a low risk prime engine. The ARB report defines prime engines as engines that are used in a variety of applications, e.g., compressors, cranes, generators, pumps (including agricultural pumps), grinders, or screening units. ARB models trucks at distribution facilities as area sources. It is unclear if the velocity for a heavy-duty truck is the same as a prime engine. It is also not clear why the low risk prime engine velocity of 45.4 meters per second is more applicable than the high risk prime engine velocity of 90.8 meters per second.

   The prime engine temperature is listed as 769^0 Kelvin for the low risk prime engine and 739^0 Kelvin for the high risk prime engine. The Air Quality Analysis lists a stack temperature of 600^0 Kelvin, which is not presented in the ARB Report.

   Since concentrations estimates are sensitive to stack diameter, velocity and temperature, changes could increase the concentration by an order of magnitude. The air dispersion modeling should follow ARB or SCAQMD guidance or provide detailed references for stack parameters in the Final EIR.

2. The ten-minute idling time may be appropriate for the trucks traveling from off-site to the loading docks then leaving. However, additional idling time should be added for trucks refueling, being washed and under maintenance.

3. Emission factors were developed for the proposed sources based on type of truck (heavy, heavy-duty trucks; medium, heavy-duty trucks; etc.). The stack configuration of heavy, heavy-duty trucks and medium, heavy-duty trucks may not be the same. Heavy, heavy-duty trucks typically have vertical stacks, while medium, heavy-duty trucks may have horizontal stacks. Vertical stacks can be modeled as point, volume or area sources. Horizontal stacks should be modeled as capped stacks (velocity reduced to 0.01 meter per second and diameters adjusted to conserve momentum), volume sources or area sources. The heights

should also be adjusted to represent the actual release heights during idling. Stack parameters should be adjusted to match vehicle type.

4. Since the project has various sources with different stack parameters in different spatial locations, SCREEN3 may not be the most appropriate air dispersion model. ISCST3 appears to be the more appropriate tool to use to estimate concentrations from the proposed project. The Final EIR should contain air dispersion modeling that adequately represents the physical characteristics of the proposed project.

5. The "Air Quality Analysis" describes the nearest residence as 675 meters (2,000 feet) from the loading area. However, based on Figures 2.1 and 3.1 of the Draft EIR, it appears that the fueling, vehicle wash and maintenance areas are within 250 meters (800 feet) of the residential area. According to page 4.1-6 of the DEIR, however, the nearest residences are 600 feet from the eastern boundary of the project site and 900 feet from the truck fueling/washing/maintenance area. Health risk should be estimated from any potential diesel particulate source on the proposed project site to the nearest receptor not only from the loading docks. The Final EIR should include all potential diesel particulate source locations.

6. Health risk was only estimated for residential receptors. However from Figures 3.1 and 4.5-1, it appears that worker receptors are within 45 meters (150 feet) of areas where trucks would operate. The Final EIR should include worker health risk.

Construction and Operational Emissions

7. Review of Table 4.1.L on page 4.1-21 indicates that ROC emissions for the architectural coating and paving phase do not include the VOC combustion emissions from construction equipment that were calculated in the last table on page A-1 of the "Air Quality Analysis" in Appendix B to the DEIR. Please include the combustion VOC emissions in Table 4.1.L in the Final EIR.

8. The analysis of VOC emissions from architectural coatings calculates the total square feet to be coated, calculates the total VOC emissions from coating the total area to be coated, and divides the total VOC emissions by 66 days (three months x 22 work days per month). The result is 50 pounds of VOC emissions per day from architectural coatings. This analysis is an acceptable approach to calculating VOC emissions from architectural coatings. Using this approach the lead agency assumes that approximately 4,310 square feet will be coated per day. The SCAQMD requests that the lead agency incorporate a mitigation measure prohibiting the contractor from coating more than 4,310 square feet per day to ensure that architectural coating emissions are limited to 50 pounds per day.

9. On page 4.1-17 the lead agency states that the project will be graded in phases with no more than five acres operated on in any one day. The lead agency then

uses this assertion as justification for using the five-acre localized significance threshold (LST) look-up tables. If the lead agency uses the five-acre LST look-up table to evaluate localized air quality impacts rather than perform dispersion modeling, then a mitigation measure must be added to limit construction operations to five acres or less on any one day.

10. According to the LST analysis spreadsheets in Appendix A of the "Air Quality Analysis" in Appendix B to the DEIR, on-road mobile source emission factors for the heavy-duty trucks are based on EMFAC 2002 emissions factors. The current version of EMFAC, EMFAC 2007, has been available since November 2006, and should be used for on-road mobile sources.

11. To calculate operational emissions, which consist primarily of mobile source emissions, the lead agency used the URBEMIS 2007 model, using the trip rates of the traffic study prepared for the project. However, according to the URBEMIS 2007 printout in Appendix B of the "Air Quality Analysis" in Appendix B to the DEIR, 76 percent of the vehicles are passenger vehicles and light-duty passenger trucks, while the remaining 24 percent are larger trucks, which equate to two-axle or larger trucks. This fleet breakdown is inconsistent with the fleet breakdown shown in Table 4.7.E, which shows that approximately 55 percent of the fleet consists of two-axle or larger trucks, while 46 percent of the fleet consists of three-axle or larger trucks. Given that the emission factors for heavy-duty trucks are substantially higher than for passenger vehicles and light-duty trucks, it is likely that operational emissions calculated for the proposed project are substantially underestimated. The SCAQMD requests that the operational emissions analysis be revised using the correct fleet make-up, consistent with that shown in Table 4.7.E.

12. Depending on whether any operational emissions exceed applicable significance thresholds as a result of revising the operational emissions analysis (see comment # 11), the SCAQMD requests that the operational mitigation measures listed on page 31 of the "Air Quality Analysis" in Appendix B to the DEIR, be incorporated as mitigation measure in the Final EIR.

13. Mitigation measure 4.1.5.1B requires the use of low NO_X diesel fuel to reduce construction equipment combustion exhaust NO_X emissions. It is assumed that this refers to emulsified diesel fuel. The lead agency should be aware that the Lubrizol's PuriNO_X emulsified diesel fuel is no longer available in southern California. As a result, the SCAQMD requests the recommended measures in section 5.6 in the "Air Quality Analysis" in Appendix B to the DEIR, not already included as mitigation measures, be included as mitigation measures in the Final EIR.

14. The SCAQMD requests that unleaded gasoline be deleted as an alternative fuel in mitigation measure 4.1.5.1C as the SCAQMD doesn't consider unleaded gasoline to be a clean fuel. Further, including gasoline as a clean fuel is inconsistent with

measure C in section 5.6 of the "Air Quality Analysis" in Appendix B to the DEIR.

15. When including URBEMIS model printouts, the SCAQMD requests that the lead agency include the report on defaults modified so SCAQMD staff can evaluate whether or not changes to default values are appropriate.