



South Coast Air Quality Management District

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8353 Sierra Avenue
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Draft Environmental Impact Report (DEIR) for the West Valley Logistics Center Specific Plan (WVLCSP)

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.

In the project description, the Lead Agency proposes the construction of seven buildings for warehouse distribution and office space uses totaling approximately 3.48 million square feet on a 291-acre site. The Lead Agency has projected 6,384 total daily vehicle trips including at least 1,302 daily truck trips operating at the site. 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. Based on its analyses, the Lead Agency has determined that construction air quality impacts will exceed the recommended regional daily significance threshold for NO_x and operational daily air quality impacts for VOC, NO_x, CO and PM₁₀.

The SCAQMD staff has concerns regarding the air quality assumptions used in the operational portion of the CalEEMod land use model and that the proposed project should include all feasible mitigation measures in the Final CEQA document to further reduce the projected significant project construction and operational impacts. Details are included in the attachment.

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Jack Cheng, Air Quality Specialist, at (909) 396-2448, if you have any questions regarding the enclosed comments.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

Attachment
JW:JC
SBC141223-01
Control Number

Siting of an Incompatible Land Use

1. The SCAQMD staff is concerned that the existing sensitive receptors will be exposed to significant regional and localized operational impacts, mostly from the daily truck activities that will likely operate using diesel fuel. Based on information in the DEIR (air quality analyses, the project truck distribution, or by aerial map inspection), the Lead Agency shows a minimum distance of 150 feet meters to the nearest sensitive receptor; a residence located east of the project site.¹

As a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land-use decision making process, the California Air Resources Board (CARB) has provided the CARB Air Quality and Land Use Handbook (CARB Land Use Handbook). Based on guidance from the CARB Land Use Handbook, CARB recommends a buffer of at least 1,000 feet between land uses that will have 100 or more trucks per day.²

In accordance with the state CEQA Guidelines §15126.4 (a)(1)(D), the Lead Agency should discuss the proposed siting of this land use and any potential impacts resulting from any proposed mitigation related to the CARB Land Use Handbook guidance in the Final EIR.

Air Quality Analysis

Daily Truck Trip Rate

2. In the Air Quality Impact Analysis, the Lead Agency uses the Institute of Transportation Engineers Trip Generation Manual, 9th Edition, 2012 (ITE Manual) 1.68 overall trip generation rate (for cars and trucks totaling approximately 6,384 daily vehicles) for the proposed Project, but does not use the 0.64 (38.1%) daily truck trip rate from this same reference. Rather, the air quality analysis used a 0.343 daily truck trip rate (ITE 1.68 total daily trip rate minus 1.337 passenger vehicle trip rate = 0.343 (20.43%) daily truck trip rate) and truck vehicle fleet mixture percentages from the City of Fontana Truck Trip Generation Study (Fontana Study) to estimate project air quality operational impacts in the CalEEMod modeling. By using the 0.343 Fontana Study daily truck trip rate, trucks are estimated at 1,302 daily truck trips in the DEIR instead of approximately 2,225 daily truck trips using the ITE 0.64 daily truck trip rate.

Specifically, the Fontana Study fleet mixture percentages include: 3.46 percent of the total fleet for 2-axle Trucks; 4.64 percent for 3-axle trucks; and 12.33 percent for 4-axle and larger trucks with truck categories totaling 20.43 percent of the total vehicle fleet. Passenger Vehicles would therefore comprise 79.57 percent of total vehicles during operations. However, the 0.343 daily truck trip rate resulted in fleet percentages for the CalEEMod truck subcategories that were not proportionally adjusted consistent with the percentage of trucks

¹ Table 4.2.2.2-1. Sensitive Land Uses in the Project Vicinity

² CARB Air Quality and Land Use Handbook: <http://www.arb.ca.gov/ch/handbook.pdf> . Guidance is for siting new sensitive land uses within 1,000 feet of a distribution center, Page 4. The buffer is a neutral mitigation measure provided to minimize truck activity emission impacts to sensitive receptors. Besides truck activity of more than 1,000 trucks per day, this guidance applies to distribution centers that accommodate more than 40 transport refrigeration units per day or where TRU operations will exceed 300 hours per week truck activities and sensitive receptors, Page 4.

estimated using the ITE 0.64 daily truck trip rate. In order to avoid underestimating project operational and related air quality and health effect impacts, the Air Quality Analysis, HRA and FEIR should be revised using the following truck percentages: LHD2 = 0.0645, MHD = 0.0865, HHD = 0.2300.

Absent from a specific traffic study of known tenants, the Final EIR should be consistent using the associated ITE truck trip rate to estimate project daily truck trips so that project trips and associated emission and health effect impacts are not underestimated.

Vehicle Fleet Mixture Percentages

3. In the Air Quality Analysis, the Lead Agency has included the input parameters for the California Emissions Estimator Model (CalEEMod) land use model. Under fleet mixture percentages, the Lead Agency assigned 3.5 percent to Light-Duty Trucks 1 (LDT1) instead of Light Heavy Duty 1 (LHD1) and 2.3 percent respectively to Medium Duty Vehicle and Light Heavy Duty 1. Based on the CalEEMod user guidance, these vehicles are likely heavier vehicles and the 3.5 percent should be assigned to the Light Heavy Duty category and the two 2.3 percentages assigned to MDV and LHD1 should rather be assigned to the Light Heavy Duty 2 category (4.6 percent total). These changes in the fleet mixture parameters follow the CalEEMod guidance and would also avoid underestimating the model's operational air quality impacts.

Health Risk Assessment (HRA)

4. SCAQMD staff did not receive the electronic modeling files for this project during the public comment period and were unable to verify the accuracy of the modeled impacts described in the DEIR. Specifically, SCAQMD staff was not able to verify the emission rates used in the HRA, the appropriateness of the meteorological station, the flag pole receptor height used, the location of sources modeled, and the selection of the points of maximum impact. Furthermore, Figures 4 and 5 are missing in the HRA.
5. The American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) was formed to introduce state-of-the-art modeling concepts into the EPA's air quality models. Through AERMIC, a modeling system, AERMOD, was introduced that incorporated air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. As of December 9, 2006, AERMOD is fully promulgated as a replacement to ISC3, in accordance with [Appendix W \(http://www.epa.gov/ttn/scram/dispersion_prefrec.htm\)](http://www.epa.gov/ttn/scram/dispersion_prefrec.htm). AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. AERMOD-ready meteorological data for various meteorological stations within the South Coast Air Basin (SCAB) are available for download free of charge at <http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod>. The Lead Agency used AERMOD (version 09292) to prepare the dispersion modeling for the Health Risk Assessment (HRA), which is outdated. The current version is AERMOD (version 14134). The improvements to AERMOD affect volume sources as well

as building downwash treatment. Therefore, SCAQMD staff recommends the Lead Agency revise the HRA with the current version of AERMOD.

6. The Lead Agency used the rural option in the dispersion modeling. SCAQMD modeling methodology requires the use of the urban option. Please provide an explanation of why the rural option is appropriate or revise the HRA using the urban option.

Warehouse Land Use Model Input

7. The Lead Agency states that the Project will include both refrigerated and unrefrigerated warehouse space. On page 4.2.2-29 of the DEIR, the Lead Agency estimates that a “worst-case analysis, it was assumed that 5% of trucks serving the project site and up to 5% of the warehouse area within the site would be climate controlled.” However, in Appendix A – CalEEMod Model Printouts, refrigerated warehouse space accounts for approximately 8% of the entire warehouse space. The square footage used throughout the Draft EIR is inconsistent and the Lead Agency should update the total square footage analyzed in the Air Quality Analysis in the Final EIR.

Construction

8. Since the Project is considered a large operation (50 acre sites or more of disturbed surface area; or daily earth-moving operations of 5000 cubic yards or more on three days in any year) in the South Coast Air Basin, the Lead Agency is required to comply with all SCAQMD Rule 403 – Large Operation requirements. This may include but not limited to Large Operation Notification, appropriate signage, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class. Therefore, the Final EIR should contain a description of how the Project will comply with Rule 403.

Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

9. Because the California Air Resources Board has classified the particulate portion of diesel exhaust emissions as carcinogenic and during project operations, the Lead Agency has determined that project operation emissions are significant for Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOx), primarily from truck activity emissions, the SCAQMD staff therefore recommends the following changes and additional measures that should be incorporated in the Final EIR to reduce exposure to sensitive receptors and reduce potential significant project air quality impacts:

Electric Vehicle (EV) Charging Stations

- 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.³ 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.

CNG Fueling Station and Convenience Site

- Because the proposed project will generate significant regional NOx operational impacts, the SCAQMD staff recommends that the project pro-actively take measures that could reduce emissions sooner rather than later. The SCAQMD staff therefore recommends that the Lead Agency ensure the availability of alternative fueling facility (e.g., natural gas) to serve the project site prior to operation of any logistics warehousing within the project area.

Recommended Changes

Mitigation AQ-13

- The Applicant shall specify a minimum of amount of electric vehicle charging stations that are accessible for trucks and vehicles.

Additional Mitigation Measures

- Provide minimum buffer zone of 300 meters (approximately 1,000 feet) between truck traffic and sensitive receptors.
- Limit the daily number of trucks allowed at each facility to levels analyzed in the Final EIR. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the project through CEQA prior to allowing this higher activity level.
- Design the site such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside of the facility.
- On-site equipment should be alternative fueled.
- Provide food options, fueling, truck repair and or convenience stores on-site to minimize the need for trucks to traverse through residential neighborhoods.
- Improve traffic flow by signal synchronization.

³ http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf , page 95.

- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
- 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.

Mitigation Measures for Operational Air Quality Impacts (Other)

10. In addition to the mobile source mitigation measures identified above the Lead Agency should incorporate the following on-site area source mitigation measures below to reduce the project's regional air quality impacts from NOx emissions during operation. 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.
- 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.