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Mitigated Negative Declaration (MND) for the Proposed Waterman Logistics Center

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.

The proposed Project is the construction of a concrete tilt-up logistics warehouse building totaling approximately 426,858 square feet on approximately 19.65 acres. Based on recommended guidance from the Institute of Transportation Engineers (ITE),[1] the proposed Project could have as many 717 total daily trips including 273 trucks operating daily as opposed to the 148 daily truck trips calculated in the MND. The SCAQMD staff has concerns about the modeling assumptions used to estimate project operational, localized and health effect impacts. Specifically, the SCAQMD staff recommends using the associated daily truck trip rate from the Institute of Transportation Engineers Manual (ITE Manual) instead of the non-standard truck rate used in the MND. The air quality modeling should also be revised in the Final CEQA document to reflect the Fontana Truck Trip Generation Study fleet mixture percentages cited for trucks only in the trip generation portion of the Traffic and Circulation Section of the MND.

Since the proposed Project involves a General Plan Amendment, the SCAQMD staff has concerns about the significant adverse long-term air quality impacts estimated in the MND to existing sensitive receptors (residences) near the proposed Project site and along truck routes from increased truck activities described in the air quality and traffic analyses. The SCAQMD staff therefore recommends that all feasible mitigation measures including a 1,000 foot buffer between the on-site truck activities and the sensitive receptors be incorporated into the final Project and Final CEQA document to reduce these impacts. The SCAQMD staff also has concerns about the assumptions used in the modeling to estimate regional, localized and health effect impacts. Additional details are included in the attachment.

[1] ITE, 9th Edition, Land Use 152 High-Cube Warehouse/Distribution Center 152, Weekday Weighted Average Truck Trip Generation Rate of 0.64 trip ends per 1,000 square feet.

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 CEQA document. 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 Baker

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

Attachment
JB:JC
SBC 141211-08
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 MND (air quality analyses, the project truck distribution, or by aerial map inspection), the Lead Agency shows a minimum distance of 25 meters to the nearest sensitive receptor; a residence located north of the project site. [2]

   Although approved as designated truck routes in the Lead Agency's Circulation Element in its General Plan, project truck traffic will pass by sensitive receptors daily using Mill St., 2nd St., and Waterman Ave. to access the Interstate 215 and Interstate 10 Freeway. 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. [3]

   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 CEQA document.

Air Quality Analysis

2. Section 3.2 of the MND (page 3-14) states 4,900 tons of waste material will be generated by demolition and will require 110 haul trips to remove waste material (Appendix A – Air Quality Impact Analysis). The haul trips in CalEEMod underestimate the number of trips that would be required to remove 24,260 square feet/4,900 tons of building debris. The SCAQMD staff recommends that detailed demolition and hauling information[4] be provided in the Final CEQA document or CalEEMod haul trip calculations be adjusted to account for the amount of waste generated.

Daily Truck Trip Rate

3. In the Air Quality Impact Analysis (Air Quality Study), 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 + trucks totally approximately 717 daily vehicles) for the proposed Project, but does not use the 0.64 daily truck trip rate from this same reference.

[2] Mobile Source Health Risk Assessment

[3] 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 minimizes 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.

[4] (Waste tonnage)/(Density of demolition waste) = Volume of waste
(Volume of waste)/(Capacity of haul trucks) = Minimum number of haul trucks required to remove waste
*Cite appropriate sources

Rather, the Trip Generation Rates use a passenger car daily trip rate of 1.337 vehicles per day and a daily truck trip rate of 0.343 truck trips per day. By using the 0.343 daily truck trip rate, trucks are estimated at 148 daily truck trips in the MND instead of approximately 273 daily truck trips using the ITE 0.64 daily truck trip rate. Therefore, absent from a specific traffic study of known tenants, the Final CEQA document should be consistent using the associated ITE truck trip rate to estimate project daily truck trips so that project trips and associated emissions and health effect impacts are not underestimated.

Trip Length

4. In the Air Quality Study, the Lead Agency uses an average internal truck trip length of 24.11 miles according to the Southern California Association of Government (SCAG) Heavy Duty Truck Model. Most warehouses, distribution centers, and industrial land use projects would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles as well as to destinations outside of SCAQMD boundaries.

    - Project site to Port of Los Angeles/Long Beach: 74 miles
    - Project site to Banning Pass: 38 miles
    - Project site to San Diego County line: 55 miles
    - Project site to Cajon Pass: 24 miles
    - Project site to downtown Los Angeles: 60 miles

    Assuming that 50 percent of all delivery trips will travel to and from the project and the Port of Los Angeles/Long Beach, the use of 24.11 miles as an average internal truck trip greatly underestimates the air quality impacts. In order to ensure that the MND conservatively evaluates the potential for air quality impacts, the Lead Agency should utilize a trip length that is reflective of the potential truck trips or limit the truck trip miles allowed to levels analyzed in the MND. If higher truck trip miles are anticipated or required, the Lead Agency should update the Air Quality Impact Analysis, Health Risk Assessment and Final CEQA document to disclose this impact to the public.

Vehicle Fleet Mixture Percentages

5. In the Traffic Impact Analysis (Traffic Study), the Lead Agency states that "the ITE Trip Generation manual includes very limited data regarding the types of vehicles that are generated (passenger cars and various sizes of trucks)" [5] and used the vehicle mix in the City of Fontana Truck Trip Generation Study (Fontana Study). In the Traffic Study, the Lead Agency acknowledges that the Fontana Study utilized a small sample size and that the ITE Manual trip generation rates would be more conservative. The Fontana Study evaluated four warehouses (two of which do not have complete data), whereas the SCAQMD study evaluated 34 warehouses. The results from this larger sample size are consistent with the ITE recommended rate. Therefore, in order to ensure that the MND conservatively evaluates the potential for air quality impacts, including peak day impacts (consistent with SCAQMD guidance), the Lead Agency should utilize the ITE Manual trip generation rates for both vehicles and trucks. On Page 267 of the ITE Manual, the trip generation rate for truck trips is

[5] Appendix H, Traffic Impact Analysis

listed as 0.64 per 1,000 square feet of gross floor area for High-Cube Warehouse/Distribution Centers (ITE Land Use 152). This value is higher than the 0.34 per 1,000 square foot truck rate the MND derives by using the Fontana Study.

In the MND, 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 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. 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 estimated using the ITE 0.64 daily truck trip rate. Specifically, the number of daily trucks using the ITE 0.64 trip rate results in a greater number of daily truck trips: approximately 273 with the ITE 0.64 rate compared with approximately 148 daily trucks using the 0.343 daily truck trip rate based on the trip generation rates used in the Traffic and Circulation Section. Therefore, based on the increase numbers of trucks, the CalEEMod fleet mixture truck subcategories should be proportionally adjusted with the higher numbers of trucks after using the recommended ITE 0.64 daily truck trip rate. In the modeling inputs, however, the individual vehicle category percentages totaled 9.37 percent, which is lower than the percentage of trucks in the Traffic Study. In order to avoid underestimating project operational and related air quality and health effect impacts, the Air Quality Analysis, HRA and Final CEQA document should be revised using the following truck percentages: LHD2 = 0.0645, MHD = 0.0865, HHD = 0.2300.

Health Risk Assessment (HRA)

6. 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). 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 14134) to prepare the dispersion modeling for the Health Risk Assessment (HRA) but used SCREEN3, which is the screening level version of ISC to perform the LST dispersion modeling analysis. Given that AERMOD is the US EPA's recommended model for dispersion modeling, SCAQMD staff recommends that the Lead Agency revise the LST analysis using the latest version of AERMOD (version

14134). SCAQMD's modeling guidance for AERMOD can be found at http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance. Please note that when using AERMOD, the regulatory default option should be used (i.e. without the use of the "FASTALL" or "FLAT" options).

7. The HRA analysis involved the use of separate discrete receptors placed randomly. SCAQMD staff recommends that the Lead Agency revise the HRA using a receptor grid of no more than 100-meter spacing over the existing residences and areas zoned or planned for residential development, in order to ensure that the maximum impacts to a residential receptor are properly analyzed. Likewise, a similar receptor grid should be used for the worker receptors, as appropriate.

8. Based on a review of the input files, the Lead Agency placed one receptor at each school location, while ignoring the portion of school property which is much closer to the sources of emissions from the proposed Project. SCAQMD staff recommends that the Lead Agency revise the Health Risk Assessment (HRA) to include a receptor grid of no more than 100-meter spacing placed over the entire school property (includes classrooms, stadium, baseball fields, etc) in order to properly analyze and characterize the cancer risk impacts to the school.

9. In the HRA, the Lead Agency identified the various schools as "school receptors" and used a nine-year exposure duration. However, worker receptors (teachers and administrative staff, etc.) were not identified in the HRA. Worker receptors placed on school property should therefore be identified and evaluated for a 40-year exposure period in the Final CEQA document.

Use of Un-Refrigerated Warehouse Without Rail Land Use Model Input

10. Based on a review of the project's emissions calculations in Appendix A: Air Quality Analysis [6] (CalEEMod Output Sheets), the Lead Agency determined the proposed Project's air quality impacts using emission factors for unrefrigerated warehouses/truck activity. However, in the Stationary Noise Impacts section (page 68) the Lead Agency compares noise level measurements to warehouse facilities utilizing refrigerated containers and cooling equipment. The SCAQMD staff therefore recommends that the Lead Agency include a mitigation measure that precludes the use of refrigerated warehousing at the Project site or revise the air quality analysis to account for emissions from refrigerated warehouse uses.

Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

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

[6] Appendix 3.1: CalEEMod Emissions Model Output.

Recommended Changes:

Additional Mitigation Measures:

- The Applicant shall provide electric vehicle charging stations that are accessible for trucks.

  Discussion

  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[7]. 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.

- 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 the facility to levels analyzed in the MND. 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.
- Limit the truck trip miles allowed to levels analyzed in the MND. If higher truck trip miles are anticipated or required, 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.

[7] http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf

- 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)

12. 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.

Mitigation Measures for Construction Air Quality Impacts

13. Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and import/export) and if the Lead Agency determines that 2010 model year or newer diesel trucks cannot be obtained the Lead Agency shall use trucks that meet EPA 2007 model year NOx emissions requirements.

14. Consistent with measures that other lead agencies in the region (including Port of Los Angeles, Port of Long Beach, Metro and City of Los Angeles)[1] have enacted, require all on-site construction equipment to meet EPA Tier 3 or higher emissions standards according to the following:
    a. Project start, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In

[1] For example see the Metro Green Construction Policy at: http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf

addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

b. Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
c. A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
d. Encourage construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm

For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.

Additional NOx Mitigation Measures:

- Prohibit truck idling in excess of five minutes;
- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow;
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hour to the extent practicable;
- Reroute construction trucks away from congested streets or sensitive receptor areas; and
- Limit construction activities to the amounts analyzed in the MND.

Additional PM_{10} Mitigation Measures:

- Implement fugitive dust control measures:
    - Proper maintenance and watering of internal haul roads.
    - Spraying water 2 times a day over all disturbed surfaces or use of dust suppressants and nontoxics binders.
    - Reducing and limiting the speed of vehicles on unpaved portions of the project.
    - Use of rumble grates and wheel washers to prevent trackout.
    - Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM_{10} generation.