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Draft Environmental Impact Report (Draft EIR) for the Proposed Modular Logistics Center (EIR Case P13-130 - SCH. No. 2014031068))

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 Environmental Impact Report (FEIR).

The Lead Agency proposes construction of an approximate 1.1 million square foot warehouse distribution center building on a 50.84 gross acre site. Construction activities would begin after the existing industrial buildings are demolished involving approximately 38, 240 tons of debris, of which 97 percent (37,712 tons) would be processed and reused on-site or recycled. Approximately 108,400 cubic yards of cut, 88,200 cubic yards of fill, and 26,000 cubic yards of soil import will be needed during soil disturbance activities. Construction is expected to take approximately 11 months to complete with opening year starting in 2015. The proposed warehouse building's tenants are unknown at this point but operations are estimated to include approximatey1,864 total daily trips including up to 710 daily truck trips. [1]

The SCAQMD staff has concerns about the modeling assumptions used to estimate the Project health risk assessment (HRA) and localized significance threshold (LST) impacts. Based on these concerns, Project impacts from cancer risk and localized air quality impacts could be substantially underestimated, so therefore, the SCAQMD staff recommends that both analyses be revised in the FEIR. In addition, although the Lead Agency used the recommended 9th Edition of the Institute of Traffic Engineers (ITE) 1.68 overall daily vehicle trip rate for the High-Cube Warehouse/Distribution Center land use, a non-standard 0.40 daily truck trip rate was used in the Draft EIR analyses instead of the ITE and SCAQMD recommended 0.64 daily truck trip rate. The SCAQMD staff therefore recommends revising all applicable analyses in the FEIR, i.e., HRA, LST,

[1] Recommended weighted average daily truck trip generation rate of 0.64 truck trips per 1,000 square feet of gross floor area, Institute of Transportation Engineers (ITE), 9th Edition, Page 267, Land Use 152 – High Cube Warehouse Distribution Center (0.64 times 1,109.378 equals 710 daily trips).

operational air quality analysis, etc., using the more conservative ITE 0.64 truck trip rate since the prospective occupants and related truck activities are unknown.

Finally, the SCAQMD staff recommends that additional feasible mitigation be incorporated to minimize or reduce operational emissions to less than significant levels if further analyses indicate that significant impacts occur. Additional details are included in the attachment.

Pursuant to Public Resources Code Section 21092.5, the 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 Gordon Mize, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,

Jillian Baker

Jillian Baker, Ph.D.
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Attachment

JB:GM

SBC141024-02
Control Number

HRA and LST Analyses

1. The American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) was formed to introduce state-of-the-art modeling concepts into the Environmental Protection Agency's (EPA) air quality models. Through AERMIC, a modeling system, Atmospheric Dispersion 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 the Industrial Source Complex (ISC3) model, in accordance with EPA guidance. [1] 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 the SCAQMD website. [2] The Lead Agency used AERMOD (version 13350) 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, released on May 14, 2014), which was available at the time that the Lead Agency performed its dispersion modeling analysis (dated June, 19 2014).

2. The HRA analysis for the resident, worker, and school receptor involved the use of separate discrete receptors placed randomly. The SCAQMD staff is therefore concerned that the Draft EIR has under-estimated the cancer risk impacts to residents, workers, and the school (students, faculty and administrative staff) from the proposed Project's generated diesel particulate matter emissions. 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 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), the existing residences and areas zoned or planned for residential development, in order to properly analyze and characterize the cancer risk impacts to the school.

3. In the HRA report, the Lead Agency says that meteorological data from the Perris station was used. However, a review of the modeling input and output files shows that the Riverside meteorological station, which is located 14.5 miles northwest of the proposed Project site, was used in the analysis. SCAQMD staff recommends the

[1] EPA Website: Appendix W (http://www.epa.gov/ttn/scram/dispersion_prefrec.htm)
[2] SCAQMD website: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod

Lead Agency revise the dispersion modeling performed for the HRA and LST analyses using the Perris meteorological station.

4. In the HRA report, the Lead Agency mentions that only one year of meteorological data would be used for the analysis (Table 2-5 of Appendix B2). If the Lead Agency chooses to only use one year of meteorological data, the Lead Agency must first do an analysis to see which one year will result in the highest impacts. Alternatively, for HRAs, the Lead Agency can run all 5-years of available meteorological data using the Period option in AERMOD to get the appropriate concentration to use in the estimation of health risks. The SCAQMD staff recommends that the Lead Agency either perform an analysis to identify the one year, which will result in the highest annual concentration or revise the HRA using the entire 5-years of meteorological data.

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

6. In the HRA analysis for the school, the Lead Agency used an hour of day adjustment factor for the emissions. The Lead Agency used this adjustment factor without explaining why those adjustments were used only for the school receptor analysis. By taking an additional hour of day adjustment for the emission sources, the HRA would likely have under-estimated the health risks to school receptors. The FEIR should either provide an explanation as to why the hour of day adjustment is appropriate or include a revised HRA analysis without the use of the hour of day adjustment.

Operations Air Quality Analysis

7. In the Draft EIR, the Lead Agency used the Institute of Transportation Engineers (ITE) [2] recommended 1.68 overall daily vehicle trip generation rate for high cube warehouse land use but did not use the ITE recommended 0.64 daily truck trip rate to estimate daily truck trips. Rather, a 0.40 daily truck trip rate was used based on vehicle classification surveys conducted by the Lead Agency at different high-cube warehouse locations in the City of Moreno Valley. Consistent with ITE Manual and SCAQMD Governing Board direction, the SCAQMD staff recommends using the truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in the South Coast Air Basin, i.e., 0.64 daily truck trips per thousand square feet of warehouse space. Further, since prospective tenants and specific traffic information are unknown at this time, the SCAQMD staff recommends revising the FEIR using the 0.64 rate instead of the 0.40 truck trip rate to

[2] Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012) per thousand square feet of floor area for high cube warehouse (Land Use 152), Pages 267 and 273.

be consistent and as a more conservative estimate of project truck trips and air quality impacts.

Use of Un-Refrigerated Warehouse Land Use Model Input

8. Based on a review of the project's emissions calculations in Appendix 3.1: CalEEMod Emissions Model Outputs (CalEEMod Output Sheets), the Lead Agency determined the proposed Project's air quality impacts using emission factors for unrefrigerated warehouses/truck activity. However, in mitigation measure MM 4.2-13 to reduce Operational Emissions starting on Page 4.2-40, the Lead Agency refers to the use of "future building tenant trucks that that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the buildings electrical system" … to reduce idling and air emissions associated with the burning of fuel. If future tenants will use Transport Refrigeration Units (TRUs), 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. Further, if the Lead Agency chooses to include refrigerated warehouses in the air quality analysis then MM 4.2-13 should be incorporated into the project and remain in the FEIR.

Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

9. The Lead Agency has determined that operational air quality impacts exceed the SCAQMD recommended daily significance threshold for NOx, primarily from mobile source truck emissions related to on-road vehicle trips associated with the proposed project. The SCAQMD staff therefore recommends the following on-road mobile-source truck related mitigation measures that should be incorporated in the FEIR in addition to the measures proposed starting on page 4.2-39 the DRAFT EIR in order to reduce potential significant project air quality impacts:

    - Require the use of 2010 compliant diesel trucks, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) at commercial/retail sites upon project build-out. If this isn't feasible, consider other measures such as incentives, phase-in schedules for clean trucks, etc.
    - Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
    - Limit activities to the amounts analyzed in the Draft CEQA document.
    - Promote clean truck incentive programs (see the discussion above regarding Cleaner Operating Truck Incentive Programs), and
    - Provide electric vehicle (EV) Charging Stations (see the discussion below regarding EV charging stations).
    - 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.

- 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.

Mitigation Measures for Operational Air Quality Impacts (Other Area Sources)

10. In addition to the mobile source mitigation measures identified above the Lead Agency should incorporate the following onsite area source mitigation measures below to reduce the project's regional air quality impacts from NOx emissions during operation, if further revisions to the air quality impact analysis prove that operational NOx impacts are significant. 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.
    - Maximize the planting of trees in landscaping and parking lots.
    - Use light colored paving and roofing materials.

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

- 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.