South Coast
Air Quality Management District
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Mitigated Declaration (MND) for the Proposed
Thrifty Oil Warehouse Facility Project Located in Unincorporated Bloomington

The South Coast Air Quality Management District (SCAQMD) staff 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 MND.

The Lead Agency proposes the construction and operation of a 371,442 square foot (sf) high-cube warehouse (including 10,000 square feet of office space) with unknown occupants on an approximately 18.8-acre site. The MND estimates approximately 624 total vehicle trips, including approximately 125 daily diesel truck trips. In the Air Quality Section, the Lead Agency quantified the project's construction and operation air quality impacts and compared those impacts with the SCAQMD's recommended regional and localized daily significance thresholds. The Lead Agency determined that localized and regional daily construction and operation emissions are less than significant. The Lead Agency also conducted a health risk assessment for the proposed warehouse project.

The SCAQMD staff has concerns about the daily truck trip rate and associated fleet mixture percentages assumed in the MND. Details are included in the attachment. After revising the air quality analysis, should the Lead Agency determine that project air quality impacts will exceed the SCAQMD recommended significance thresholds, the identification and evaluation of mitigation measures to reduce impacts below significance levels before the consideration of the MND for adoption are required by the CEQA Guideline Section 15074(b). Additionally, the SCAQMD staff has included a list of mitigation measures in the attachment to assist the Lead Agency in identifying feasible mitigation measures which have the potential to substantially lessen such significant air quality effects as stated in Public Resources Code Section 21002. In an event that the Lead Agency determines that such significant air quality impacts cannot be mitigated or avoided, a draft environmental impact report shall be prepared pursuant to the CEQA Guideline Sections 15073.5, 15086, and 15087.

Please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final MND. The SCAQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

Attachment

LS:JC:GM

SBC170203-02
Control Number

ATTACHMENT

Air Quality Analysis

Daily Truck Trip Rate

1. SCAQMD staff recommends revising the air quality and related analyses using the Institute of Transportation Engineers (ITE) recommended Truck Trip Generation Rate of 0.64[1] (trip ends per 1,000 square feet) that is associated with the ITE Land Use for High-Cube Warehouse/Distribution Center (152) Total Trip Generation Rate of 1.68[2] so that potential air quality and health risk impacts are not underestimated for the project since the future occupants/operators are unknown.

   Specifically, the Air Quality Analysis used the ITE 1.68 overall trip generation rate estimating 624 total vehicle trips (for cars and trucks), but does not use the referenced ITE 0.64 daily truck trip rate, which is 38.1% of total trips (approximately 238 daily truck trips). Rather, the air quality analysis uses a 0.343 daily truck trip rate that estimates approximately 125 daily truck trips (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 presumably 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 125 daily truck trips in the MND instead of approximately 238 daily truck trips using the ITE 0.64 daily truck trip rate. Consistent with the ITE 1.68 total trip rate, SCAQMD staff recommends revising the air quality and related analyses using the ITE 0.64 truck rate in order to avoid underestimating the number of trucks and associated adverse air quality and health impacts.

   Fleet Mixture Percentages

2. SCAQMD staff recommends revising the CalEEMod estimates for operations using the proportion of trucks (2-axle, 3-axle and 4-plus axle trucks) in the appropriate truck subcategories in CalEEMod to reflect the number of trucks estimated using the ITE recommended truck trip rate for the chosen land usage. The transportation/traffic section and air quality analysis indicate that the Fontana Study fleet mixture percentages were used in the air quality and related analysis to determine the number and types of project truck trips. The 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. In order to avoid underestimating project operational and related air quality and health effect impacts, the Air Quality Analysis, HRA and Final MND should be

[1] Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, Volume 2 (2012), High-Cube Warehouse Distribution Center (152), Page 267.
[2] *Ibid*, Page 273.

revised using the following truck percentages: LHD2 = 0.0645, MHD = 0.0865, HHD = 0.2300. SCAQMD staff therefore recommends revising the CalEEMod and other applicable analyses reflecting the vehicle category percentages associated with the ITE 0.64 truck trip rate. Otherwise, the number of project trucks and associated air quality and health impacts could be underestimated.

Health Risk Assessment (HRA) Analysis

3. The SCAQMD staff is concerned that the Health Risk Assessment (HRA) has underestimated the cancer risk from the proposed project. In the HRA, the Lead Agency used the AERMOD dispersion model to estimate DPM concentrations from the diesel vehicles generated by the proposed project and used the 2015 revised OEHHA guidelines to estimate the health risks to sensitive receptors in the project vicinity. The SCAQMD staff recommends that the Lead Agency revise the HRA based on the following comments, which are intended to assist the Lead Agency in assessing the potential cancer risk attributable to the proposed project.

   a) 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.

   b) On-site idling was modeled as a single volume source. On-site idling sources should span the entire docking area. The SCAQMD staff recommends that the Lead Agency revise the HRA using a line volume source that spans the entire docking area and include 15 minutes of idling to ensure that impacts are properly analyzed.

   c) On-site travel emissions are not accounted for in the HRA. By not including on-site travel emissions, the Lead Agency likely underestimated health risks. The SCAQMD staff recommends that the Lead Agency revise the HRA using a series of volume sources to account for the on-site travel emissions.

   d) In the file "Thrifty Truck Emissions.xls: Table Annual Emission Factors 25" the Lead Agency used emission rates for model year 2014 and newer. Since the project's operational year is 2016, emission rates should include 2014 and older trucks. The SCAQMD staff recommends incorporating older trucks into the emissions rate calculation or incorporate mitigation measures limiting trucks to model year 2014 or newer.

   e) In the file "Thrifty Truck Emissions.xls: Annual Emission Factors Idle" the Lead Agency used emission rates for model year 2010 and newer. Since the project's operational year is 2016, emission rates should include 2010 and older trucks. The SCAQMD staff recommends incorporating older trucks into the emissions rate calculation or incorporate mitigation measures limiting trucks to model year 2010 or newer.

   f) All truck routes terminate in residential neighborhoods. Truck routes should be modeled from the project site to where the trucks enter the freeway. The SCAQMD staff

recommends that the Lead Agency revise the model using appropriate source placement as well additional grid receptors extending to the freeway.

g) The HRA analysis involved the use of a 50-meter spacing receptor grid over the existing residences and schools. However, as modeled, the receptor grid may miss potential peak concentration locations along the property boundaries. The SCAQMD staff recommends that the Lead Agency revise the model and start the grid at the property boundaries to ensure potential maximum concentrations are identified.

Furthermore, the Lead Agency did not include residential receptors located on the west side of Linden Ave. between Orange St. and Slover Ave. The SCAQMD staff recommends that the Lead Agency revise the model and include additional receptors to ensure potential maximum concentrations are identified and disclosed.

h) The 2015 revised OEHHA guidelines acknowledge that children are more susceptible to the exposure to air toxics and have revised the way cancer risks are estimated to take this into account. Since the emissions from the project generated trucks get cleaner with time due to existing regulations, it would not be appropriate to average out the emissions over the 30-year exposure duration since this would underestimate the health risks to children who would be exposed to higher DPM concentrations during the early years of project operation. Therefore, SCAQMD staff recommends that the DPM emissions for each year of operation be applied to each of the corresponding age bins (i.e. emissions from Year 1 of project operation should be used to estimate cancer risks to the third trimester to 0 year age bin; Year 1 and 2 of project operation should be used to estimate the cancer risks to the 0 to 2 years age bins; and so on).

Operational Mitigation Measures – Mobile Sources

4. Should the Lead Agency determine after further analyses that project impacts will exceed SCAQMD recommended significance thresholds, the following mitigation measures are recommended to assist the Lead Agency in reducing such significant impacts from mobile source operations in addition to the mitigation measures included in the MND starting on page 21 and 75. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and/or operation to minimize any significant impacts. In the event that the proposed project generates significant adverse air quality impacts, information on potential mitigation measures as guidance to the Lead Agency are available on the SCAQMD CEQA Air Quality Handbook website.[3] Examples of potential mitigation measures for the Lead Agency to consider may include the following:

a) 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.

[3] http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook .

b) Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
c) Limit the daily number of trucks allowed at the facility to levels analyzed in the Final 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 land use or higher activity level.
d) Provide electric vehicle (EV) Charging Stations (see the discussion below under "f." regarding EV charging stations).
e) 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.
f) 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.4 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.
g) 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.
h) Design the warehouse/distribution center such that entrances and exits are such that trucks are not traversing past neighbors or other sensitive receptors.
i) 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.
j) Design the warehouse/distribution center to ensure that truck traffic within the facility is located away from the property line(s) closest to its residential or sensitive receptor neighbors.

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

k) Restrict overnight parking in residential areas.
l) Establish overnight parking within the warehouse/distribution center where trucks can rest overnight.
m) Establish area(s) within the facility for repair needs.
n) Develop, adopt and enforce truck routes both in and out of city, and in and out of facilities.
o) Have truck routes clearly marked with trailblazer signs, so trucks will not enter residential areas.