



South Coast Air Quality Management District

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Draft Environmental Impact Report (Draft EIR) for the Proposed Stratford Ranch Industrial Project (SCH. NO. 2012011037)

The South Coast Air Quality Management District (AQMD) 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 construction of a high-cube warehouse distribution facility consisting of two buildings totaling 1,712,568 square feet. The size of the two buildings will be 936,000 and 776,880 square feet, respectively, including approximately 40,000 square feet of office space with about 172 total loading dock doors. Soil disturbance will include a net import of approximately 394,600 cubic yards of soil. Operations at the proposed industrial park will include approximately 304 heavy duty trucks operating 24 hours per day and 7 days per week. Construction is planned to begin in 2013 and with buildout by year 2015. In the Air Quality Section, the lead agency quantified the project's construction and operation air quality impacts and found that those impacts exceeded the AQMD's recommended significance thresholds.

Based on its review of the Draft EIR and appendices, the AQMD staff has included concerns in the attached comments about the air quality and health effects analyses. Since our basin's air quality exceeds federal and state air quality standards, as mentioned in the Draft EIR, staff has also recommended additional mitigation measures to reduce project long-term impacts that present numerous health risks to those living and working here. The AQMD staff appreciates that the project therefore includes mitigation measures that have the potential to reduce emissions including building energy efficiency measures, carpooling programs, and encouragement of alternative fueled vehicles. However, the project's air quality impacts remain substantially above AQMD thresholds after mitigation. The AQMD staff therefore recommends that the lead agency consider

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all mitigation measures to reduce long-term project air quality impacts to the furthest extent feasible.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The AQMD 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,

A handwritten signature in black ink that reads "Ian V. MacMillan". The signature is written in a cursive, slightly slanted style.

Ian MacMillan
Program Supervisor, Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment
IM:GM

RVC120731-05
Control Number

Operational Mitigation Measures

1. AQMD staff commends the lead agency for encouraging the use of alternatively fueled technologies to reduce long-term significant impacts from NOx. To further reduce those impacts, the following change to a measure proposed by the lead agency and additional mitigation measures are recommended for consideration in addition to the measures proposed starting on page 4.3-52 of the Draft EIR. The AQMD staff recognizes that these measures are not without challenges. For example, requiring warehouse tenants to place engine technology restrictions on their vendors presents unique challenges. Further, requiring standards for one development and not another can yield competitive inequalities. The AQMD staff therefore encourages the lead agency to work with our agency to develop a common set of measures that are enforceable and that reduce emissions to the maximum extent feasible for the many warehouse projects under consideration in the city.

Recommended change:

MM 4.3.6.2E The proposed project proponent and its contractors shall ensure that all building tenants shall utilize only electric service yard trucks ~~and (hostlers), pallet jacks, forklifts, and other onsite equipment etc.~~ Electric-powered equipment shall also be ~~encouraged~~ required instead of gasoline-powered equipment, if technically feasible.

Some recommended measures could include:

- Requiring the installation of sufficient alternative fueling infrastructure (e.g., electric charging, CNG/LNG, hydrogen, etc.) for trucks on-site or within close proximity to the site to facilitate the use of these technologies
- Providing a phase-in schedule and goals for the introduction of zero or near-zero technology trucks (e.g., 10% by 2020, 20% by 2025, etc.) that visit warehouses
- Prohibiting the placement of loading docks or major truck routes within 500 feet of sensitive receptors

Should any of these measures be found infeasible, other measures should be considered that will reduce air quality impacts. The measures listed below have been used by other lead agencies including the City of Banning¹, Riverside County², City of San Bernardino³, and the San Pedro Bay Ports⁴, among others.

- At project start, all heavy duty trucks entering the property must meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025.

¹ Banning Business Park <http://banning.ca.us/archives/30/July%2013,%202010%20City%20Council%20Agenda.pdf>

² Mira Loma Commerce Center http://www.rctlma.org/online/content/conditions_of_approval.aspx?PERMITNO=pp17788

³ Palm/Industrial Distribution Center <http://www.ci.san-bernardino.ca.us/civica/filebank/blobload.asp?BlobID=11793>

⁴ Clean Trucks Program <http://www.cleanairactionplan.org/cleantrucks/>

- If any of the above clean truck requirement is infeasible, a phase-in schedule should be put forth that will feasibly achieve emission reductions as soon as possible, and faster than existing regulations. Should an alternative schedule be found necessary, the AQMD staff should be consulted prior to approving the schedule.
- The facility operator will maintain a log of all trucks entering the facility to ensure that on average, the daily truck fleet meets the quantities and emission standards listed in the Draft EIR. This log should be available for inspection by city staff at any time.
- Prohibit all vehicles from idling in excess of five minutes, both on warehouse property and on streets in the General Plan Amendment area.
- The facility operator will ensure that onsite staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies [for example, by requiring attendance at CARB approved courses (such as the free, one-day Course #512)].
- 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 additional impacts through CEQA prior to allowing this higher activity level.
- Require at least a portion of the fleet to utilize alternative fueled technologies.
- At a minimum, require tenants upon occupancy that do not already operate 2007 and newer trucks to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, or other similar funds. Should funds be awarded, the tenant should also be required to accept and use them.
- 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.
- Restrict overnight parking in residential areas. Establish overnight parking within the warehouse/distribution center where trucks can rest overnight.
- Due to the large roof area associated with this project, consider installing solar roof panels to reduce emissions from fossil fuel based electrical generating technologies providing electrical power to the project site. At a minimum, buildings should be designed to allow the installation of solar panels at a later date.
- Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.
- Establish area(s) within the facility for repair needs.
- Post signs outside of the facility providing a phone number where neighbors can call if there is a specific issue.
- Have truck routes clearly marked with trailblazer signs, so trucks will not enter residential areas.
- Identify or develop secure locations outside of residential neighborhoods where truckers that live in the community can park their truck, such as a Park & Ride.
- Provide food options, fueling, truck repair and or convenience store on-site to minimize the need for trucks to traverse through surrounding neighborhoods.
- Improve traffic flow by signal synchronization.

- Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.
- 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.

Air Quality Analyses – Operations/Health Effects

Use of Non-Default Trip Rates

2. In the air quality analysis, the lead agency estimated project air quality impacts using the California Emissions Estimator Model (CalEEMod) land use software using a non-default trip rate of 1.44 trips per 1,000 square feet of building area for the land use high-cube warehouse (Land Use Code 152). For the HRA, a rate of 1.9 trips per thousand square feet was used. Based on the review of Appendix E (Technical Source Documentation) in the CalEEMod User's Guide and absent a occupant-specific traffic study, a most conservative, reasonable worst-case trip rate would be the default overall trip rate of 2.59 trips per 1,000 square feet. In order to avoid underestimating the number of project trips, the AQMD staff recommends that the lead agency re-evaluate air quality impacts using the default 2.59 trip rate as described in Appendix E of the CalEEMod User's Guide. The AQMD staff believes that the 2.59 trip rate is also more applicable to project-specific analyses. The 1.44 trip rate is a less conservative rate and should be used only for multiple warehouse projects where greater than 10 warehouse facilities are being evaluated. The 1.44 trip rate would be used, for example, to estimate impacts for a general plan.

Vehicle Fleet Mixture Percentage in Regional Emissions Analysis

3. The lead agency also used a non-standard vehicle fleet mixture to estimate on-road truck emissions based on values recommended in the Fontana Truck Study (August 2003). The Fontana study includes data for 2-axle, 3-axle, and 4+ axle trucks. Although EMFAC2007 also includes emission factors based on truck size, the splits are based however on vehicle weight, not axle. For the regional criteria pollutant calculations, the Draft EIR assumes that 2-axle and 3-axle trucks correspond to EMFAC2007 LDT1, LDT2 and MDV vehicle classifications. LDT1, LDT2 and MDV are for pickup trucks and sport utility vehicles, which are not typical of the higher emitting 2-axle and 3-axle trucks that would make deliveries at a warehouse. Based on guidance in Appendix E in the CalEEMod User Guide, 2-axle trucks should use the LHD1 classification and 3-axle trucks should use MHD in the Final EIR. These same classifications should also be used for the HRA.

Since the recommended percentage of trucks shown in the Appendix E (40 percent) is higher than what is assumed in the regional emissions analysis with CalEEMod (20 percent, with no more than 12 percent tractor trailers), this results in a potentially significant underestimation of trucks that could use this facility on a peak day. For example, the Draft EIR assumes approximately 513 truck trips per day while the default CalEEMod parameters yield 1,774 trucks per day. As diesel trucks have

significantly higher emissions of NO_x and PM compared to light duty vehicles, this difference in truck counts could result in a significant underestimation of air quality impacts. AQMD staff notes that the HRA in the Draft EIR assumes approximately 40 percent trucks.

The AQMD staff therefore recommends that the operations regional emissions analysis be revised in the Final EIR to reflect the CalEEMod User's Guide default trip rate and the recommended warehouse vehicle fleet mixture. If the trip rate used in the Draft EIR's air quality analysis remains unchanged in the Final EIR, then the lead agency should either provide additional project-specific information justifying the lower rate, or a condition that limits the number of trucks to what was analyzed in the Draft EIR.

Use of Passenger Car Equivalent to Calculate Air Quality Impacts

4. The air quality analysis appears to use passenger car equivalent (PCE) trip counts in some portions, and actual trip counts in others. This discrepancy should be corrected in the Final EIR.

On-Site Truck Idling Emissions

5. On page 4.3-40 in the Air Quality Section, the lead agency appears to have used only ten minutes of idling in the emissions estimate used for the health risk assessment. Although state regulations only allow five minutes of idling at any one time, trucks may idle for five minute periods several time on-site (e.g., queuing to enter the site, at the loading dock, exiting the site, etc.). Therefore, the SCAQMD recommended default for idling is 15 minutes on-site. If less than 15 minute of idling is used in the HRA, a mitigation measure should be added that requires the project proponent enforce the idling time used in the health risk assessment.

CalEEMod Land-Use Input

6. In the CalEEMod land use modeling inputs, the lead agency used the Unrefrigerated Warehouse – No Rail input to estimate short- and long-term air quality impacts. This means that potential impacts from truck refrigerated units were not included in the draft analyses (air quality, health affect impacts, etc. The lead agency, however, has included Mitigation Measure 4.3.62A on page 4.3-52, which includes the installation of electrical connections for a majority of trailer spaces to accommodate refrigerated storage at the proposed site. Since the modeling did not consider air quality impacts from non-refrigerated warehouse types of trucks and appurtenances (e.g., transportation refrigeration units, TRUs) sources, the AQMD recommends that project operations be limited to the non-refrigerated warehouse types of trucks and associated TRU equipment analyzed in the Draft EIR or provide sufficient infrastructure to accommodate all TRU trucks that are anticipated to visit the site. Otherwise the lead agency should commit to re-evaluating project impacts through CEQA prior to allowing this higher activity. In addition, refrigerated warehouses

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have higher electrical needs, and GHG emissions will be higher than prescribed currently in the Draft EIR.