



# South Coast Air Quality Management District

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## **Draft Environmental Impact Report (Draft EIR) for the Proposed Duke Warehouse at Perris Boulevard and Markham Street Project (SCH No.: 2017081059)**

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 EIR.

### SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to construct an approximately 1.2 million square feet of high-cube warehouse/distribution building with unknown occupants on 55 acres (Proposed Project). Based on a review of aerial photographs, SCAQMD staff found that the Proposed Project is surrounded by vacant lands and industrial and commercial uses. The nearest sensitive receptors are existing residences located approximately 137 meters (449 feet) southwest of the Proposed Project<sup>1</sup>. Construction is expected to take approximately one year beginning no earlier than October 2018<sup>2</sup>.

### SCAQMD Staff's Summary of Air Quality and Health Risk Assessment Analyses

In the Air Quality Section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to SCAQMD's recommended regional and localized air quality CEQA daily significance thresholds. After incorporating Mitigation Measures Air 9, which requires compliance with SCAQMD Rule 1113, construction emissions would be less than significant<sup>3</sup>. Long-term mitigated operational emissions will be below SCAQMD's significance thresholds, except for NO<sub>x</sub><sup>4</sup>. In addition, the Lead Agency conducted a health risk assessment (HRA) and found that the highest estimated excess cancer risk to sensitive receptors is 3.8 in one million, which is below SCAQMD's CEQA significance threshold of 10 in one million for cancer risk<sup>5</sup>.

### SCAQMD's 2016 Air Quality Management Plan

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)<sup>6</sup>, which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NO<sub>x</sub>) emissions in 2023 and an additional 55 percent NO<sub>x</sub> reduction beyond 2031 levels for ozone attainment.

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<sup>1</sup> Draft EIR. Page 5-32.

<sup>2</sup> Draft EIR. Page 5-29.

<sup>3</sup> Draft EIR. Page 5-31.

<sup>4</sup> *Ibid.*

<sup>5</sup> Draft EIR. Page 5-39.

<sup>6</sup> South Coast Air Quality Management District. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

General Comments

SCAQMD staff has reviewed the Air Quality and HRA analyses in the Draft EIR and has comments on the HRA modeling parameters. Please see the attachment for more information. Additionally, as described in the 2016 AQMP, to achieve NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to NOx emissions. Therefore, SCAQMD staff recommends changes to Mitigation Measures Air 6 and Air 13 to further reduce NOx emissions during construction and operation. These recommended changes are consistent with the California Air Resources Board's Comment 4) and Comment 5) on the Notice of Preparation of a Draft EIR for the Proposed Project, dated February 24, 2017<sup>7</sup>. Finally, the attachment includes SCAQMD staff's recommendation to include a discussion on SCAQMD Rule 403(e) in the Final EIR.

Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), SCAQMD staff requests that the Lead Agency provide SCAQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. In addition, issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful or useful to decision makers and the public who are interested in the Proposed Project.

SCAQMD staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov) if you have any questions regarding the enclosed comments.

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment  
LS/SW  
RVC180131-02  
Control Number

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<sup>7</sup> Draft EIR. Appendix A2, *Written Comments Received in Response to the NOP*. February 24, 2017. Accessed at: <http://www.cityofperris.org/departments/development/duke-markham/Appendix%20A.2%20Written%20Comments%20Recieved%20in%20Response%20to%20the%20NOP.pdf>.

## ATTACHMENT

### **Overall Comment on Air Quality and Health Risk Assessment Analyses**

1. The Lead Agency proposes to construct and operate an approximately 1.2 million square feet of high-cube warehouse/distribution building. Occupants are unknown at the time the Draft EIR is circulated for public review. Because future occupants of the Proposed Project are unknown, it is reasonably foreseeable that the Proposed Project could be utilized as a cold storage warehouse.

Here, there is an inconsistency regarding whether the Proposed Project will include refrigerated units. Transport refrigeration units (TRUs) are commonly in-use at cold storage warehouses. Based on a review of the CalEEMod worksheet in Appendix B.1, *Air Quality-GHG Analysis*, SCAQMD staff found that the “unrefrigerated warehouse-no rail” land use was selected. However, Mitigation Measure (MM) Air 12 suggests that the Proposed Project may include and allow TRUs since it requires installation of electrical hookups at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them<sup>8</sup>. Therefore, SCAQMD staff recommends that the Lead Agency clarify if TRUs will be used during the Proposed Project’s operation in the Final EIR. If using TRUs is reasonably foreseeable, and to conservatively analyze the worst-case impact scenario, SCAQMD staff recommends that the Lead Agency revise the air quality and the HRA to calculate and disclose operational emissions from NO<sub>x</sub> and diesel toxic particulate matter from TRUs in the Final EIR, unless the Lead Agency expressly restricts the use of the Proposed Project as a cold storage warehouse as a restricted conditional use.

### **Health Risk Assessment (HRA)**

2. The SCAQMD meteorological (MET) dataset (2007-2011) was used in the HRA. This dataset has been replaced with a new MET dataset (2010-2016). Using the old MET dataset may have led to an under-estimation of the health risks from the Proposed Project. Therefore, SCAQMD staff recommends that the Lead Agency revise the HRA in the Final EIR by using the most recent MET dataset (2010-2016) from the Perris Station that is available on SCAQMD’s website<sup>9</sup>.
3. The number of truck trips in the Transportation and Traffic Section in the Draft EIR was not consistent with that in the HRA technical appendix. Table 5.8-G, *Project Trip Generation in PCE*, in the Draft EIR showed the Proposed Project would generate 1,280 truck trips daily, while Table 3, *Average Daily Truck Traffic*, in Appendix B2, *Health Risk Assessment*, showed that the maximum average daily traffic from trucks is 532. Therefore, SCAQMD staff recommends that the Lead Agency clarify the number of trucks trips in the Final EIR and, if necessary, update the HRA analysis based on one number of truck trips consistent throughout the document.
4. Trucks idling emissions were estimated based on 15 minutes of idling time to serve as a conservative estimation of impacts from idling emissions. However, the modeled emission rate for truck idling emissions was calculated based on a division by the total number of seconds in an entire day (24 hours or 1440 minutes or 86,400 seconds) instead of the total number of seconds over a 15-minute duration. Dividing 15 minutes by the total number of seconds in an entire day may have resulted in lower than the actual emission rate in the model input and led to an under-estimation of concentrations and risks. Therefore, SCAQMD staff recommends that the Lead Agency revise the emission rate for truck idling emissions in the model input.

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<sup>8</sup> Draft EIR. Page 1-24.

<sup>9</sup> South Coast Air Quality Management District. The AERMOD-ready Meteorological Data for Riverside Airport Station is available at: <http://www.aqmd.gov/docs/default-source/air-quality/meteorological-data/aermod-ready-meteorological-data/table-1-meteorological-sites/2017/PerrisADJU.zip>.

5. On-site idling was modeled as line volume source with higher plume height and width. This approach is not appropriate because it may have likely increased dispersion and led to an under-estimation of ground level concentrations. Therefore, the point source option with the actual plume height and stack parameter settings should be used in the AERMOD, or the Lead Agency provides justification for the use of line volume source in the Final EIR.
6. The truck routes were not consistent. Based on a review of Figure 5.8-9, *Project Truck Traffic Distribution*, in the Draft EIR, SCAQMD staff found that 100% of trucks would be travelling on Perry Street to Redlands Avenue then to Harley Knox Boulevard. However, in the HRA analysis, it was assumed that half of the trucks would travel on Perry Street and the other half would travel on Markham Street. Therefore, it is recommended that the Lead Agency clarify the truck routes in the Final EIR and, if necessary, update the HRA analysis based on one set of truck routes that is consistent throughout the document, or provide justification to explain why different truck routes should be used in the HRA analysis.
7. On Page 15 of Appendix B2, *Health Risk Assessment*, 230 L/kg-day was used for the Daily Breathing Rate (DBR) for workers. However, in the “MICR Receptors” tab in the “MICR Calculation” spreadsheet, a different DBR value of 149 L/kg-day was used for calculating cancer risks for workers. Since the two DBR values were not consistent, it is recommended that the Lead Agency update the HRA analysis based on one DBR value or provide justification to explain why two different DBR values should be used for calculating cancer risks for workers.
8. The building downwash effect was not included in the AERMOD. The building downwash is the effect that wind flowing over or around buildings has on plumes released from nearby stacks. Buildings create a cavity of recirculating winds in the area near the buildings, and these building cavities cause increased vertical dispersion of plumes emitted from stacks on or near the buildings. In addition, building downwash often leads to elevated concentrations downwind of the affected stacks. Since the Proposed Project would include operation of a 1,189,860-square-foot warehouse building, the building downwash effect should be used in the air dispersion model; or the Lead Agency should provide justification for not including the building downwash effect in the Final EIR.

### **Recommended Changes to Existing Mitigation Measures Air 6 and Air 13**

9. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse impacts. SCAQMD staff recommends that the Lead Agency incorporate the following changes to existing Mitigation Measures Air 6 and Air 13 in the Final EIR to further NO<sub>x</sub> emissions during construction and operation. For more information on potential mitigation measures as guidance to the Lead Agency, please visit SCAQMD’s CEQA Air Quality Handbook website<sup>10</sup>.

#### **Mitigation Measure Air 6**

- a) Mitigation Measure Air 6 requires the developer of each implementing development project to require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or US EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNO<sub>x</sub> unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be

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<sup>10</sup> South Coast Air Quality Management District. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

SCAQMD staff recommends that the Lead Agency include the following changes: To further reduce NOx emissions during construction, SCAQMD staff recommends that the Lead Agency require all off road diesel-powered construction equipment greater than 50 horsepower (hp) meet or exceed the Tier 4 emission standards, where available. In the event that construction equipment cannot meet the Tier 4 engine certification, the developer must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Project, using cleaner vehicle fuel, and/or limiting the number of individual construction project phases occurring simultaneously.

### Mitigation Measure Air 13

- b) Mitigation Measure Air 13 is intended to support clean truck fleets and requires developer/successor-in-interest provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero- Emission Truck and Bus Voucher Incentive Project], and SOON[Surplus Off-Road Opt-in for NOX] funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants would be required to use those funds, if awarded.

Mitigation Measure 13 requires developer/successor-in-interest to provide building occupants and businesses with information. Pursuant to CEQA Guidelines Section 15126.4, mitigation measures are those capable of minimizing or reducing significant adverse impacts. Mitigation measures that are used to reduce significant adverse environmental impacts to the less than significant level in a CEQA document must be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines Section 15126.4(a)(2)). While it is important to share information about SCAQMD's Carl Moyer Program and the State's clean truck fleets programs, providing information alone does not mitigate or reduce emissions. Therefore, SCAQMD staff recommends that the Lead Agency incorporate the following revisions to Mitigation Measure Air 13, or provide additional information on how the provision of information required by this Mitigation Measure will reduce the Proposed Project's significant operational NOx emissions in the Final EIR: Require all diesel-fueled trucks accessing the Proposed Project meet the U.S. Environmental Protection Agency/California Air Resource Board truck engine standard for Model Year 2010 or better. In the event that that 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emissions requirements, at a minimum. Additionally, consider other measures such as incentives, phase-in schedules for clean trucks, etc.

**Additional Recommended New Mitigation Measures**

10. In addition to the recommended changes to existing Mitigation Measures Air 6 and Air 13, SCAQMD staff recommends that the Lead Agency review and incorporate the following mobile source-related mitigation measures in the Final EIR to further reduce NOx emissions during operation.
- a) Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
  - b) Provide electric vehicle (EV) Charging Stations (see the discussion below regarding EV charging stations).
  - c) 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 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS)<sup>11</sup>. 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, SCAQMD staff recommends the Lead Agency require the Proposed Project 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. 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.
  - d) Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Draft EIR. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Project's air quality impacts through CEQA prior to allowing this land use or higher activity level.

**Compliance with SCAQMD Rule 403(e)**

11. The Lead Agency included a discussion on general compliance with SCAQMD Rule 403 in the Draft EIR. Based on the project description, the Proposed Project is a large operation of approximately 55 acres (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin. The Lead Agency is required to comply with SCAQMD Rule 403(e) – Additional Requirements for Large Operations<sup>12</sup>, which includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class<sup>13</sup>. Therefore, SCAQMD recommends that the Lead Agency include a discussion to demonstrate specific compliance with SCAQMD Rule 403(e) in the Final EIR.

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<sup>11</sup> Southern California Association of Governments. 2016 RTP/SCS. Accessed at: <http://scagrtpscsc.net/Pages/FINAL2016RTPSCS.aspx>.

<sup>12</sup> South Coast Air Quality Management District. Rule 403. Last amended June 3, 2005. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-iv/rule-403.pdf>.

<sup>13</sup> South Coast Air Quality Management District Compliance and Enforcement Staff's contact information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at [dustcontrol@aqmd.gov](mailto:dustcontrol@aqmd.gov).