



## South Coast Air Quality Management District

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### **Draft Environmental Impact Report (DEIR) for the Proposed Puente Hills Intermodal Facility Project**

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 in the Final EIR. The proposed project is a 24-hour per day operation and at full implementation will result in approximately 180 truck trips with two trains arriving and departing the facility daily resulting in significant construction and operational emissions. Because this facility has the potential to significantly impact nearby communities, it is critical that the Lead Agency properly quantify the potential impacts and implement all feasible mitigation measures.

The SCAQMD recommends that the Lead Agency avoid idling locomotives close to sensitive land uses. Based on the Draft EIR, the proposed project will result in two to four 4,000 horsepower locomotives idling next to residences and other sensitive land uses. The Draft EIR states that locomotive engines will idle within 15 feet of the property line of the Gladstone residences, substantially closer than the 1000-foot distance recommended by the California Air Resources Board for siting railyards next to sensitive land uses.

The SCAQMD staff is concerned that the Draft EIR may have underestimated diesel particulate emissions from locomotives and therefore underestimated the potential cancer risk to neighbors surrounding the proposed project. The SCAQMD staff is concerned that the number of locomotives used in the analysis were underestimated. The Health Risk Assessment states that LACSD and UPRR Operations and Engineering staff concluded that “the waste-by-rail trains involves the use of up to four road power locomotives.” However, the health risk assessment states that “emissions associated with long-haul locomotives were quantified using two of the four engines in the vicinity of PHIMF. In addition, the SCAQMD staff recommends that the Health Risk Analysis only assume adopted emission standards as it is too speculative to rely proposed future standards such as EPA’s proposed rulemaking for controlling locomotive emissions.

Lastly, the Draft EIR lacks implementation of all feasible mitigation measures. The lead agency is not permitted by CEQA to approve a project with significant environmental impacts without incorporating into the project approval feasible mitigation measures within the authority of the lead agency. (Public Resources Code §21080(a)(1)(finding that changes “have been required in, or incorporated into, the project which mitigate or avoid significant effects...”). Attachment I includes detailed comments regarding the air quality and health risk assessment analysis and recommended mitigation measures.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final Environmental Impact Report. Thank you for the opportunity to comment. If you have any questions or would like to discuss our comments, please call Robert Gottschalk at (909) 396-2456.

Sincerely

Susan Nakamura  
Planning & Rules Manager  
Planning, Rule Development & Area Sources

Attachment

SN:EE:BG

LAC071226-02  
Control Number

**Attachment I****Air Quality Analysis - Operational Emissions****Impact 5.2-2 – Thresholds of Significance –Health Risk Analysis (page 5.2-30)**

1. In the Draft EIR under Impact 5.2-2 on page 5.2-30, the lead agency states “*Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1403. . .*” The correct SCAQMD rule reference is Rule 1401. In addition, in Table 5.2-13, SCAQMD Toxic Air Contaminants Incremental Risk Thresholds, the reference is to Maximum Incremental Cancer Risk. This should be changed to Maximum Individual Cancer Risk.

**Impact 5.2-4 – Haul Trucks (page 5.2-36)**

2. In the Draft EIR under Impact 5.2-4 on page 5.2-36, the lead agency analyzed 182 truck trips per day based on an initial build-out/operating scenario of 4000 tons/day (TPD) of municipal solid waste (MSW) processed through the IMF in 2011 and 2012. The text states that hostler trucks will be in use 109 hours per day, with a total of 45.5 hours spent on-site. However, it is not clear from the text whether emissions from the hostler trucks are calculated based on 109 hours per day or 45.5 hours per day. This should be qualified in the text in the Final EIR.

In addition, LACSD should provide assurances that the fleet of vehicles used to transport waste containers from locations other than the Puente Hills Material Recovery Facility (PHMRF) during the full build out phase of the project will meet the EMFAC emission factors that were used to quantify emissions and estimate the excess cancer risk from the project. If LACSD is not able to provide such assurances, the emissions analysis and health risk assessment should be modified to assume that emissions are representative of current fleets.

**Impact 5.2-4 – Main-Line Locomotive Emissions (page 5.2-37)**

3. The lead agency’s analysis of locomotive emissions was limited to the 40.7 mile round trip distance to and from the Pomona Switch, based on the rationale that emissions beyond the Pomona Switch were accounted for in the Mesquite Regional Landfill (MRL) EIR. However, the analysis for the PHIMF must account for the cumulative emissions from all trains that occur as a result of the project and travel within the South Coast Air Basin. Therefore, the emissions and health risk analysis should be amended to recognize all emissions to and from the Mesquite Regional Landfill.
4. The project analysis assumes emissions from Tier 2 compliant locomotives upon initial operations in 2011, followed by 5%/yr turnover to Tier 3 compliant locomotives through 2014, and a 5%/yr turnover to Tier 4 compliant locomotives in 2015 and beyond. The analysis takes credit for future-year emission reductions from Tier 3 and Tier 4 standards that have not yet been adopted, and for locomotives meeting those standards that are not

yet commercially available. SCAQMD staff supports the goal of replacing older, Tier 2-compliant locomotives with locomotives that will meet Tier 3 and Tier 4 standards. However, the final locomotive standards have not yet been adopted. Therefore, SCAQMD staff recommends that either:

- a. the EIR assumes locomotives meeting only Tier 2 standards for each exposure period (i.e. 9, 30, 40 and 70 years); or
- b. that the Conditional Use Permit (CUP) issued by the City of Industry include a permit condition regarding locomotives meeting Tier 3 and Tier 4 standards that ensures that a sufficient number of trains allowed to enter the project premises will meet Tier 3 and Tier 4 standards by the dates assumed in the emissions and health risk analysis.

#### **Impact 5.2-4 – Container Handlers (page 5.2-38)**

5. The lead agency has assumed 2 hours of operation per day under an operating scenario from 2011-2012 and 4 hours per day at full build out. This assumption seems too low and inconsistent with the number of lifts projected. The final EIR should provide additional information to substantiate the assumptions.

#### **Impact 5.2-5 – Construction Impacts (page 5.2-41)**

6. The SCAQMD staff recommends that construction equipment that is commercially available meeting the lowest emission standards be used during construction, and that such construction equipment not be less clean than Tier 3 emission standards with the highest level VDEC system installed for PM control. Idling should be limited to 5 minutes.

#### **Impact 5.2-7 Odors (page 5.2-51)**

7. In the Draft EIR, the lead agency's analysis only recognizes odors from heavy diesel equipment during construction and operation, but minimizes the impact of odors during operations from containers of municipal solid waste (MSW), with the rationale that leak proof containers are unvented during transport. However, SCAQMD staff feels that the potential for odors still exists. The CEQA analysis should recognize the potential for odors from MSW at the PHIMF in spite of the leak proof containers and precautions taken during transport and loading operations.
8. On page 5.2-51), the lead agency states, in part “. . . *under the Local Enforcement Agency (LEA) permit . . . containers would not be allowed to remain on-site for up to 96 hours.*” This is probably not what was intended.

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

#### **Section 3.5 Summary of On-Site Emissions (page C2-25)**

9. Diesel equipment assumptions -
- a. 2 RTGs, operate 14.6 hrs/day in 2011/12, 29.2 hrs/day at full build out. The text should qualify this assumption.
  - b. Switch locomotive, operating 6 hrs/day at full build out. Switcher(s) will be repowered after 20 years and will meet Tier 4 standards. The text should qualify the assumption of 6 hours/day operation for the switcher locomotives.
  - c. Inbound and outbound trains – The emissions and health risk analysis assumed that 2 out of 4 inbound and outbound locomotives would idle for a maximum of 15 minutes, based on the requirements of the Railroad MOU. The text states “*The CARB Railroad Statewide Agreement establishes a maximum of 15 minutes of idle time for locomotives within California*”. However, under the MOU, anti-idling devices are required only on “intrastate locomotives based in California.” Intrastate locomotives represent only small subset of locomotives operating in California (i.e., about 10% of all locomotives). It is SCAQMD staff’s understanding that locomotives hauling waste to the Mesquite Regional Landfill will not be dedicated to intrastate operations. If this understanding is correct, an estimated 90% of these locomotives will not be equipped with anti-idling devices. The Statewide Railroad MOU includes a provision for idling in excess of 60 minutes for interstate locomotives. However, there are many exceptions to this provision. In addition , there is no assurance that even the agreed upon idling scenarios will be limited to 1 hour, since the Statewide MOU contains exemptions for self-determined “essential” idling, and since CARB enforcement staff cannot feasibly enforce more than a small portion of idling events. Therefore, SCAQMD staff recommends that either:
    - analysis of emissions and health risk from idling of inbound and outbound locomotives be based on a more conservative estimate; at least 60 minutes of idling time per idling event, to account for actual operation conditions; or
    - that the Conditional Use Permit (CUP) issued by the City of Industry include a permit condition that requires all locomotives that enter the project premises be equipped with anti-idling devices, properly operated and set to 15 minutes.

#### **Section 4.2 Long Haul Locomotive Emission Rates (page C2-31)**

10. In the Draft EIR, the lead agency’s project analysis assumes Tier 2 compliant emissions upon operation in 2011, followed by 5%/yr turnover to Tier 3 through 2014, and 5%/yr turnover to Tier 4 in 2015 and beyond. The assumption of Tier 2-compliant locomotives in 2011 is based on the Statewide Railroad MOU. However, the MOU allows the railroads to demonstrate, on average, that their locomotive fleet of line-hauls and switchers meet a Tier 2 emission factor. Because the technology for switch locomotives is advancing faster than technologies for line-haul locomotives, and railroads are purchasing switch locomotives that improve on Tier 2 emission factors, the SCAQMD

staff expects that there will be line-haul locomotives that will not achieve the Tier 2 emission factors. Therefore, SCAQMD staff recommends that either:

- the DEIR not assume that all line-haul locomotives will meet Tier 2 emission factors. SCAQMD staff will work with the lead agency and/or LACSD to establish the correct emission factor for 2011 and beyond; or
- that the Conditional Use Permit (CUP) issued by the City of Industry include a permit condition that requires all locomotives that enter the project premises meet Tier 2 standards upon commencement of operations at the PHIMF.

In addition, the analysis takes credit for future-year emission reductions from Tier 3 and Tier 4 standards that have not yet been adopted and for locomotives meeting those standards that are not yet commercial available. Since we do not yet know the final locomotive standards, SCAQMD staff recommends that an additional, more conservative analysis be included in the EIR that assumes locomotives will meet Tier 2 standards for each exposure period (i.e. 9, 30, 40 and 70 years). In addition, the outcome of SCAQMD staff's recommendations with regard to Impact 5.2-4: Main-Line Locomotive Engines (pg 5.2-37) should be used to calculate health risks associated with line haul locomotives.

11. On page C2-31), the lead agency states, "*Emissions associated with long-haul locomotives were quantified using two of the four engines in the vicinity of the PHIMF. Based on preliminary discussions between the LACSD and UPRR Operations and Engineering staff, the proposed operational scheme for the waste-by-rail trains involves the use of up to four road power locomotives . . . based on the need for the fully loaded waste-by-rail trains to match speeds with typical intermodal trains from the Los Angeles/Long Beach Ports, . . .*". SCAQMD staff feels this analysis is not health conservative, since there are no assurances that only two locomotives will be operating during the inbound or outbound legs. Therefore, SCAQMD staff recommends that either:
- analysis of emissions and health risk from inbound and outbound locomotives be based on the more conservative assumption that all 4 locomotives will be operating; or
  - that the Conditional Use Permit (CUP) issued by the City of Industry include a permit condition that limits operation of inbound and outbound locomotives to a maximum of 2 locomotives per train.

#### **Section 4.2 Local Meteorological Conditions (C2-33)**

12. The analysis used met data from the Pico Rivera Monitoring Station. Use of this data set would result in ground level concentrations approximately 6% lower than use of met data from the Walnut met station. In general, the data set used to approximate meteorological conditions should be determined by the similarity of the wind rose in addition to proximity.

#### **Section 7.2 Diesel Particulate Matter (DPM) Mitigation Measures (page C2-56)**

13. The lead agency's analysis concludes that mitigation measures are not required, since the proposed project does not result in a significant air quality impact. However, SCAQMD staff believes that if more conservative assumptions are made with regard to DPM emissions (i.e. assuming inbound and outbound locomotives idle for 60 minutes per idling event vs. 15 minutes, assuming Tier 2 emissions throughout the entire analysis period, etc.), the cancer risk may exceed the significance threshold at Pellissier Village, where the estimated impacts were calculated at 7 in a million using less conservative assumptions. In the event that the lead agency's revised air quality analysis will result in a significant impact for cancer risk from diesel exhaust particulate emissions from the project-related truck and train traffic travel, truck and train queuing and idling occurring in and around the proposed site, mitigation measures should be adopted and incorporated into the Final EIR by the lead agency. The California Air Resources Board has classified the particulate portion of diesel exhaust emissions as carcinogenic and if there is a substantial amount of heavy-duty diesel truck and train trips at this site, which will emit particulate emissions from trucks and trains queuing and idling, these mitigation measures may be warranted. This is particularly relevant since the proposed project is within ¼-mile of an existing residential area (Pellissier Village and Gladstone) located north of the proposed site and Everest College located east of the proposed site. The SCAQMD has developed a methodology for estimating cancer risks from mobile sources in a document entitled Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions. This document can be downloaded from AQMD's CEQA web pages at the following URL: [http://www.aqmd.gov/ceqa/handbook/mobile\\_toxic/diesel\\_analysis.doc](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/diesel_analysis.doc). The HRA Guidance document also contains a list of mitigation measures that can be used to mitigate diesel exhaust emissions. The SCAQMD recommends that the lead agency consider the following mitigation measures from the HRA Guidance document for incorporation into the proposed project and the Final EIR, if applicable and feasible:

#### *Truck Idling Facilities*

- Provide a minimum buffer zone of 300 meters between truck traffic and sensitive receptors;
- Re-route truck traffic by adding direct off-ramps for the truck traffic or by restricting truck traffic on certain sensitive routes;
- Improve traffic flow by signal synchronization;
- Enforce truck parking restrictions;
- Develop park and ride programs;
- Restrict truck idling;
- Restrict operation to "clean" trucks;
- Electrify service equipment at facility;
- Provide electrical hook-ups for trucks that need to cool their load;
- Electrify auxiliary power units;

- Use “clean” street sweepers;
- Pave roads and road shoulders;
- Provide onsite services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria service, automated teller machines, etc;
- Require or provide incentives to use low-sulfur diesel fuel with particulate traps; and
- Conduct air quality monitoring at sensitive receptors.

### *Train Idling*

- Change Railroad Operating Practices - Reducing idle time would definitely reduce DPM emissions. Locomotives that are not in use generally idle. Locomotive manufacturers indicate that engines could be shut-down and restarted when ambient temperatures are above 50°F, which is nearly always the case in southern California.
- Idle Reduction Technologies - The rail industry has developed and designed a new Auxiliary Power Unit (APU) system that provides power during idling conditions and shuts down the main locomotive engine. Installing APU system reduces locomotive PM emissions by 84 percent. Significant reduction in diesel fuel consumption also results when the main locomotive engine is shuts down automatically by the APU system.
- Research and Development of New Engine Technologies - Modifying fuel injectors which includes fuel injection pressure, fuel spray pattern, injection rate and timing has been found to reduce emissions from locomotive diesel engines. Development of low NO<sub>x</sub> locomotive engine is based on similar principle used in low NO<sub>x</sub> engines for stationary power industry. Retardation of fuel injection can achieve significant NO<sub>x</sub> emission reductions.

### **Construction Mitigation Measures**

14. The lead agency has determined on pages 5.2-35, 5.2-36 and 5.2-42 that construction air quality impacts will exceed the SCAQMD’s daily significance threshold for oxides of nitrogen (NO<sub>x</sub>), PM10 and PM2.5. Additional mitigation measures for consideration by the lead agency for off- and on-road engines and fugitive dust can be found at [http://www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html) . The SCAQMD recommends that the lead agency also consider adding the following mitigation measures to further reduce NO<sub>x</sub>, PM10 and PM2.5 fugitive dust impacts from the project, if applicable and feasible:

#### Recommended Additional Mitigation Measures:

- Prohibit truck idling in excess of five minutes;
- Use emulsified diesel fuels; and equip construction equipment with oxidation catalysts, particulate traps, or other verified/certified technologies, etc.;



- 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;
- Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation;
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and
- Reroute construction trucks away from congested streets or sensitive receptor areas. Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation.

### **Operational Mitigation Measures**

#### **Mitigation for Impact 5.2-4 – Main-Line Locomotive Engines (page 5.2-37)**

15. For Main-Line Locomotive Engines, the SCAQMD staff recommends that the Conditional Use Permit (CUP) issued by the City of Industry includes permit conditions restricting access to the Puente Hills Intermodal Facility (PHIMF) to only line-haul locomotives that meet the cleanest possible technology, including:
  - Locomotives that use ultra-low sulfur fuel; and
  - Locomotives that are equipped with properly operated anti-idling devices set to 15 minutes; and
  - Locomotives that meet Tier 3 and Tier 4 emission standards, respectively, when those standards become effective.

#### **Mitigation for Impact 5.2-4 – Rubber-Tired Gantry (RTG) Cranes (page 5.2-38)**

16. For the RTG Cranes described in the Draft EIR, the SCAQMD staff recommends that Los Angeles County Sanitation District (LACSD) require the use of electric rail-mounted container gantry cranes in lieu of the diesel powered cranes currently proposed for the PHIMF, since they are commercially available at the present time.

#### **Mitigation for Impact 5.2-4 – Hostler Trucks (page 5.2-39)**

17. The SCAQMD staff urges the lead agency to require the use of electric hostler trucks to transport municipal solid waste (MSW) containers from the PHMRF to the PHIMF, if such trucks are commercially available upon commencement of the project.

#### **Mitigation for Impact 5.2-7 Odors (page 5.2-51)**

18. Although the PHIMF is not subject to the requirements of Rule 410, Odors from Transfer Stations and Material Recovery Facilities, SCAQMD staff suggests that LACSD develop

a plan, similar to an Odor Management Plan required under Rule 410, which addresses odors during transport and loading operations. The plan should commit to mitigation measures that would be taken in the event that odors occur. In addition, the plan should include a housekeeping element to ensure odors do not occur as a result of poor housekeeping activities. Finally, LACSD should provide a sign, conforming to the size and location requirements in Rule 410, that directs complainants to a contact telephone number through which to lodge complaints related to odors and excessive noise.

**Mitigation for Section 1.1.2 Project Design Features (page C2-10)**

19. PDF-1: LACSD will purchase either diesel-electric hybrid locomotives or multi-engine genset locomotives for switching operations. SCAQMD staff recommends that all multi-engine gensets be retrofitted with diesel particulate filters (DPF) to reduce particulate matter.
20. PDF-7: LACSD will use forklifts powered by liquefied petroleum gas (LPG). SCAQMD staff recommends that all forklifts used at the PHIMF meet, at a minimum, the 2010 Large Spark Ignition (LSI) engine standards.
21. In Draft EIR, the lead agency's estimates show that operational emissions from NO<sub>x</sub> will exceed the SCAQMD daily significance threshold of 55 pounds per day in Tables 5.2-21 and 5.2-22 on pages 5.2-40 and 5.2-41. The lead agency has recommended mitigation measures in Appendix C-1: Air Quality Study (Site Operations – Full Operations Year 2013 unnumbered page under Table 12 - Year 2013 Daily Net Operational Emissions) described in the project traffic study, i.e., “traffic lane improvements and signalization” to reduce emissions. It is unclear from the discussion on page 5.2-56 under Impact 5.2-4 which specific measures from the traffic study are intended as mitigation measures for the project's operational air quality impacts. It is recommended that the lead agency identify the specific traffic lane improvements and signalization from the traffic study that are to be included as mitigation measures for the proposed project and incorporate those measures into Impact 5.2-4 under mitigation measures for operational emissions in the Final EIR.