



South Coast Air Quality Management District

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Draft Environmental Impact Report (DEIR) for the Proposed Pier B On-Dock Rail Support Facility Project (SCH No. 2009081079)

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 Environmental Impact Report (Final EIR).

The proposed project would modernize and increase on-dock rail capacity at Pier B. This is an important strategy for transitioning to an environmentally sustainable freight transport system by promoting the shift to containers moved by rail at on-dock facilities, which is preferable to the use of trucks to move containers to near- or off-dock facilities.

In the project description, the Lead Agency proposes to redevelop and expand the existing Pier B On-Dock Rail Yard area providing ‘for additional railcar storage and staging capacity, including rail tracks for locomotive fueling and railcar repair to accommodate more efficient assembly of cargo trains up to 10,000 feet long¹’. The proposed project² also includes “realignment of Pier B Street, closure of the existing 9th Street grade crossing, and removal of existing ramps to and from the Shoemaker Bridge.³” Finally, utility and other infrastructure work are also included to support the proposed redevelopment construction. The proposed project seeks to relieve existing train congestion that currently can block through rail traffic while trains are being assembled/disassembled. The proposed changes in the Pier B Rail Yard will also allow for longer-length trains, which will then require fewer trips by local light-duty switching locomotives to assemble/disassemble the different trains. The proposed project will be constructed in three phases⁴ over an approximate 86-month period with overlap between construction Phases 1 and 2. The Pier B Rail Yard will continue to operate during construction, so overlapping construction and operation emissions were evaluated in the DEIR minus the baseline emissions from existing operations. At full operational capacity in 2035,⁵ approximately 17 trains would depart the yard each day, an increase of 10 trains from the existing configuration.⁶ Construction related traffic will include approximately 3,172 daily trips.⁷

¹ POLB Project Description from the January 26, 2017 Amended Notice of Completion.

² DEIR Chapter 1, Project Description, Page 1-1 The Proposed Project is the 12th Street Alternative.

³ *Ibid*, See Footnote No. 1

⁴ DEIR, Section 3.2 Air Quality and Health Risk. At the time of analysis: Years 1-4 correspond to Phase 1 and 2 (Years Including Fall 2016 – 2019) and Years 5-8 correspond to Phase 3 (Years 2020 – 2023).

⁵ DEIR, Project Description, page 1-23.

⁶ DEIR, Project Description, Table 1.8-1 page 1-24 for the 12th Street Alternative (Proposed Project).

⁷ DEIR, Traffic Impact Analysis Report (Cambridge Systematics, December 2016), page B-40, 3.2 Construction Trips, Table 11: Construction Trips (Two-Way) including autos and trucks.

Based on the DEIR analyses, the proposed project will cause significant impacts after mitigation for the overlapping construction and operation activities during construction Phases 1 and 2 in 2016 – 2019, as well as construction Phase 3 in Year 2020 - 2023. The proposed project's regional emissions impacts⁸ under CEQA will remain significant after mitigation for CO and NOx for all construction phases and VOC⁹ during Phase 3. Construction and operation impacts will also cause exceedances of the significance thresholds for the localized impacts¹⁰ from NO₂ during all construction phases. The proposed project's mitigated maximum cancer risk (MICR) is 8.7 in 1 million for residential receptors and the mitigated cancer burden of 0.27 are below significance thresholds. However, after a review of the DEIR's air quality and health risk analyses and supporting technical documents, SCAQMD staff has concerns about the air quality analysis and health risk assessment in the DEIR, which have likely led to an under-estimation of the project's impacts.

First, the DEIR improperly credits the proposed project with emission reductions in air quality and health risks that will occur independent of the proposed project due to adopted state and federal rules and regulations. Second, the modeling performed for this project used improper parameters and outdated meteorological data. These have likely led to an under-estimation of the project's air quality and health risk impacts in the DEIR and additional mitigation should be included to reduce impacts. Additional details are included in the attachment. The attachment also includes a discussion of recommended changes to an existing mitigation measure for air quality which the Lead Agency should implement.

Pursuant to Public Resources Code Section 21092.5, the SCAQMD staff requests that the Lead Agency provide SCAQMD with written responses to all comments contained herein prior to the certification 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. If you have any questions regarding this letter, please contact me at jwong1@aqmd.gov or Lijin Sun, Program Supervisor, CEQA IGR, at lsun@aqmd.gov.

Sincerely,



Jillian Wong, Ph.D.
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Attachment
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Control Number

⁸ DEIR, Regional: Section 3.2 Air Quality and Health Risk, Overlapping emissions and the use of operational thresholds discussion on page 3.2-35 (unmitigated) and 3.2-36 (mitigated). Emissions: Table 3.2-10 Peak Daily Criteria Pollutant Emissions – Construction and Operation Overlap Mitigated Proposed Project. Phases 1 & 2, Significant for CO and NOx; Phase 3 Significant for VOC, CO and NOx, see discussion page 3.2-35.

⁹ DEIR, Air Quality Section, Page 3.2-35, Paragraph four includes comparing overlapping VOC emissions with SCAQMD operational threshold of significance.

¹⁰ *Ibid*, Localized Construction With Mitigation: Table 3.2-15 and Table 3.2-17 (NO₂ for 1-hour federal and state, and annual) for Construction Phases 1 & 2. Table 3.2-17, page 3.2-44 for Localized Construction With Mitigation (NO₂ for 1-hour federal, state, and annual) for Construction With Mitigation for Construction Phase 3.

ATTACHMENT

CEQA Baseline

1. The DEIR should include a realistic baseline which accurately reflects the improvements in air quality and health risks that will occur, independent of the proposed project. The Notice of Preparation (NOP) for the proposed project was released in 2009. The Lead Agency chose a CEQA baseline year of 2012 for determination of air quality impacts from criteria pollutants and health risks. For analysis of Air Quality Impacts and Health Risk Assessment (HRA), this baseline is held constant (i.e. using emission rates from 2012) and compared to future years under the proposed project (i.e. using emission rates from future years). This approach using a comparison between the proposed project's impacts in future years (using emission rates from those years) and a 2012 baseline (using emission rates from 2012) improperly credits the proposed project with emission reductions in air quality and health risks that will occur independent of the proposed project due to adopted state and federal rules and regulations, since these rules and regulations are expected to improve air quality and lower health risks, even in the absence of the proposed project. Therefore, the SCAQMD staff believes that the proposed project may have underestimated the true impacts attributable to the proposed project's activities. In *Neighbors for Smart Rail v. Exposition Metro Line Construction (2013) 57 Cal.4th 439*, the California Supreme Court held that using a future baseline is proper in some cases. The purpose of CEQA is to disclose environmental impacts from the proposed project to the public and decision makers in order to provide the public and decision makers with the actual changes to the environment from the activities involved in the proposed project. By taking credit for future emission reductions from existing air quality rules and regulations, the proposed project's air quality and health risk impacts are underestimated. Therefore, the SCAQMD staff recommends that the Lead Agency revise the air quality and health risk analyses to include a comparison between the build-out year with the proposed project (using the emission rates from the build-out year) and the build-out year without the proposed project (also using the same emission rates from the build-out year) and use this analysis to determine the level of significance for the proposed project. By using a consistent emission rate for the analysis, the air quality and health risk impacts of the project will be accurately disclosed (i.e. impacts based on the change in activity due to the proposed project).

Air Dispersion Modeling Parameters

2. Some of the receptors were placed within the volume source exclusion zone, which means that concentration results might be erroneous. The SCAQMD staff recommends that the Lead Agency remodel volume sources according to the SCAQMD's Health Risk Assessment Guidance¹¹ and U.S. EPA's Guidance¹². One option would be to model each lane of traffic with smaller individual volume sources to reduce the exclusion zone radius.
3. The Lead Agency used differing Locomotive Moving – Day and Night release heights in their source parameters (Day – 5.6 meters and Night – 14.6 meters). Section A2.3 Dispersion Model Selection

¹¹ "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis" accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

¹²U.S. EPA. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas. Appendix J. Section J.3.3. Page J-4. December 2010. Accessed at: https://www3.epa.gov/ttn/naaqs/aqmguidance/collection/cp2/20101201_otaq_epa-420_b-10-040_transport_conform_hot-spot_analysis_appx.pdf

and Inputs states that the “amount of plume rise differs between daytime and nighttime because of differences in atmospheric conditions.” Changes in atmospheric conditions are already accounted for within AERMOD. By using higher nighttime release heights, the Lead Agency has likely underestimated health risks. The Lead Agency should revise the HRA to use the same release heights for daytime and nighttime and re-evaluate the health risks.

4. Appendix A2 of the DEIR states that 2006-2007 meteorological data from the Superblock station was used for dispersion modeling for both criteria pollutants and toxic air contaminants (TACs). The Lead Agency used AERMET version 12345 to process the Superblock meteorological data. Additionally, lines 10-15 of Page 3.2-51 state that background concentration data is collected from the Superblock monitoring station over the last three years (2013-2015). The U.S. EPA recommends that for on-site meteorological data, the most recent five-year data be used for the purposes of air dispersion modeling. Therefore, the SCAQMD staff recommends that the Lead Agency update the meteorological data with the latest five years of available data and use AERMET version 16216 (or the most recent version available at the time of analysis) to process the data. Updates and improvements to AERMET may also affect the air dispersion modeling results. Alternatively, the SCAQMD staff has prepared AERMOD-ready meteorological data which could be used by the Lead Agency in its air quality analysis. The meteorological data is available for download at SCAQMD’s website¹³.
5. The SCAQMD has developed the localized significance methodology to assist the Lead Agencies in performing localized air quality analyses. According to this methodology, site-specific meteorological data may be used with the concurrence from SCAQMD. However, the meteorological data used in the DEIR does not appear to have been reviewed or validated by the SCAQMD staff. The SCAQMD staff recommends that the Lead Agency provide SCAQMD with the meteorological data information for validation to ensure that the meteorological data was properly collected and processed in accordance with SCAQMD procedures. Alternatively, the Lead Agency could use the SCAQMD meteorological data collected at the Long Beach station¹⁴.

Morbidity and Mortality Methodology

6. On page 3.2-60 of the DEIR, the Lead Agency describes the methodology that was used to determine when a mortality and morbidity analysis would be conducted for the proposed Project. Mortality is a measure of the number of deaths in a population, scaled to the size of that population, per unit time. Morbidity refers to the number of individuals who have contracted a disease during a given time period (the incidence rate) or the number who currently have that disease (the prevalence rate), scaled to the size of the population. The DEIR determined that mortality and morbidity significance would be identified by air dispersion modeling where the incremental operational emissions would result in off-site 24-hour PM_{2.5} concentrations that exceed the SCAQMD significance criterion of 2.5 µg/m³.

The SCAQMD staff does not agree with using a screening threshold of an incremental increase of 2.5 µg/m³ for determining mortality and morbidity. The SCAQMD’s PM_{2.5} significance threshold of 2.5 µg/m³ was designed to determine the significance of localized impacts on nearby receptors, and was made consistent to existing permitting requirements under SCAQMD Rule 1303. The PM_{2.5} significance threshold of 2.5 µg/m³ was not intended to be used as a screening tool to further analyze

¹³ South Coast Air Quality Management District. Meteorological Data for AERMOD. Available at: <http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod>

¹⁴ *Ibid.*

mortality and morbidity impacts. The SCAQMD staff recommends that the Lead Agency revise the PM mortality analysis to use the methods described in CARB's 2008 guidance document¹⁵.

Technology Review

7. The DEIR includes Mitigation Measure (MM) AQ-3, which requires a review and implementation of new, feasible lower-emission technologies every five years. The SCAQMD staff believes that the Lead Agency should take this opportunity to aggressively deploy the lowest emission technologies possible. This deployment should include those technologies that are "capable of being accomplished in a successful manner within a reasonable period of time" (Public Resources Code §21061.1), such as zero and near-zero emission technologies that are expected to be available in the life of the project. As such, for a phased project where there will be an overlap between construction and operation such as this, the SCAQMD staff recommends that the Lead Agency assess equipment availability, equipment fleet mixtures, and best available emissions control devices every two years. Additionally, to ensure that the biennial technology review is enforceable during operation, the SCAQMD staff recommends that the Lead Agency require all of the lease or development agreements to include the biennial technology review. Furthermore, when a new emission control technology is found feasible and would substantially reduce air emissions, but the Lead Agency declines to implement such technology, a subsequent EIR shall be prepared (CEQA Guidelines Section 15162(a)(3)(C)). The SCAQMD staff recommended revisions to the MM AQ-3 are below:

MM AQ-3: POLB will implement a Special Condition (see Section 6.3.2) for Periodic Biennial Technology Review as a mandatory condition in a lease or development agreement. To promote new emission control technologies, every 5 2 years following the Project approval date, the Port shall conduct a review of new air quality technological advancements. These technologies would be evaluated based on operational feasibility, technical feasibility, and cost effectiveness and financial feasibility for application in the Pier B Rail Yard. If a technology is determined to be feasible in terms of financial, technical, and operational feasibility, the Port shall implement such technology, subject to the requirements as set forth in the CEQA Guidelines Section 15162(a)(3)(C).

¹⁵ Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California. October 24, 2008. Accessed at: <http://www.arb.ca.gov/research/health/pm-mort/PMmortalityreportFINALR10-24-08.pdf>