Air Resources Board

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Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

August 18, 2016

Mr. Larry Hofreiter
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101

Dear Mr. Hofreiter:

Thank you for providing the California Air Resources Board (ARB) the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Tenth Avenue Marine Terminal (TAMT) Redevelopment Plan (proposed Plan). This proposed Plan provides an opportunity to create a terminal that promotes the use of the cleanest technologies and practices available during both the construction phase and full project build-out.

ARB reviewed the TAMT Notice of Preparation (NOP) and provided comments to the San Diego Unified Port District (Port) in a letter dated, October 22, 2015. ARB expressed concerns regarding the localized cancer risk likely to occur due to the increase in diesel particulate matter (PM) from the construction and long-term operation of the facility. To address these concerns, ARB recommended actions to support the development, demonstration, and deployment of zero and near-zero emission technology at the TAMT.

We commend the Port for including a number of features that begin to mitigate the air quality and health impacts from the proposed project. These features include 100-foot rail-mounted electrical cranes, electrical utility improvements, additional ocean going vessel shorepower capabilities, adding electrical cargo handling equipment (CHE) at each node, increasing the target requirement for the Vessel Speed Reduction Program, and implementation of an annual Technology Review Program and a Sustainable Leasing Program.

However, the increase in cargo throughput from baseline conditions to 2035 is substantial. The long-term operation of diesel vehicles and equipment will have significant impacts in the region, especially given the proximity to residences and sensitive receptors. Therefore, to ensure that all feasible mitigation is implemented to

reduce these significant impacts, ARB recommends the Port adopt the additional mitigation measures and recommendations set forth below.

Background

The proposed Plan replaces the existing 2008 Maritime Business Plan using an updated review of existing cargo throughput and a market forecast to 2035. The proposed Plan occupies 96 acres along the San Diego Bay near downtown San Diego and the Barrio Logan Community. Surrounding land uses near the TAMT include many sensitive receptors: Cesar Chavez Park, Perkins Elementary School, and Mercado Head Start Preschool, as well as the residences, schools, childcare facilities, and healthcare facilities along the truck routes that would be used by the additional trucks entering and leaving the TAMT. The Barrio Logan Community is among the worst five percent in the State for cumulative pollution burden, according to the California Environmental Protection Agency.[1]

The proposed Plan identifies five operating nodes that include dry bulk, liquid bulk, refrigerated container, multi-purpose general cargo and the Central Gate Facility. The DEIR results in an increase throughput of 5,109,971 metric tons over baseline, based on the "worst case" scenario. The DEIR also assesses the maximum individual cancer risk to residents in the neighboring residential community from the TAMT emissions. Results of this risk assessment are a net increase of 132 chances in a million with the proposed mitigation measures.

Recommendations

The majority of the localized cancer risk for the TAMT is attributable to the increase in diesel PM from the long-term operation of the facility, specifically the increase in vessel hoteling, transit, and CHE. Additionally, the DEIR estimates a net increase in fugitive PM at the dry bulk node from 106 tons per year to 1,000 tons per year at full build out. Consequently, ARB staff recommends the following to reduce these emissions:

1) The DEIR estimates that annual throughput at the dry bulk terminal will increase from 289,864 metric tons, at baseline conditions, to 2,650,000 metric tons, by full buildout. Table 4.2.18 indicates that bulk loading/unloading operations of bauxite, concrete, and soda ash, results in 5,343 pounds per day of fugitive PM emissions over baseline conditions. Given this increase in fugitive PM emissions from the bulk operations, incorporate new mitigation measures that will significantly reduce the fugitive PM emissions. The Port should consult with the San Diego

[1] Office of Environmental Health Hazard Assessment, "CalEnviro Screen Version 2.0," November, 10, 2014, <http://oehha.ca.gov/ej/ces2.html>, accessed April 30, 2015.

Air Pollution Control District to identify the best available control technologies and strategies in developing related mitigation measures.

2) Although the DEIR includes some features that begin to mitigate the air quality and health impacts from the proposed project, as recommend in our NOP comment letter and given the health and air quality impacts, ARB suggests further incorporating more zero and near-zero emission technologies that are commercially available now and by full build-out in 2035. While the project includes some zero emission equipment, such as electric yard trucks and rail-mounted electric gantry cranes, other technologies that are available today should be incorporated in the project. These technologies include battery or fuel cell electric forklifts, and battery electric, fuel cell, or hybrid medium and heavy-duty on-road vehicles. ARB's Technology and Fuels Assessments provide information on the current and projected development of mobile source technologies and fuels, including current and anticipated costs at widespread deployment. The assessments can be found at http://www.arb.ca.gov/msprog/tech/tech.htm.

3) Mitigation Measure (MM)-AQ-3 requires 80 percent compliance of ARB's At-Berth Regulation by 2020. This is already required under the regulation. Therefore, given the projected increase in operations and associated emissions by the proposed project, this mitigation measure should instead require 100 percent shorepower for all vessels or incorporate other technologies, such as emissions capture and control systems, to maximize emission reductions from all vessels. Additionally, hybrid technologies have shown success at achieving emission reductions in certain tugs based on duty, engine size, and location. Consider incorporating hybrid tugs at TAMT, if feasible for the application. ARB is available to provide assistance in implementing this recommendation.

4) MM-AQ-6 includes implementing one electric yard truck at each node by 2020. To further address the health risk and associated emissions from the proposed project, this mitigation measure should be expanded to require purchase of zero and near-zero technologies, when available and where feasible, for all new purchases, as well as replacements due to attrition, as operations begin at each node but no later than January 1, 2020. In addition, consider incorporating hybrid straddle carriers and electric rubber tired gantry cranes (RTGs) or hybrid RTGs, if feasible for the application. ARB is available to provide assistance in implementing this recommendation.

5) The San Diego Air Pollution Control District implements the Proposition 1B: Goods Movement Emission Reduction Program to reduce air pollution emissions

and health risk from diesel exhaust. Consider incorporating a collaborative process for tenants and the Port to apply for funding to support zero-emission technologies of freight related diesel equipment technologies, including commercial harbor craft and CHE. ARB is available to provide assistance in implementing this recommendation.

6) MM-AQ-7 and MM-AQ-8 require a Periodic Technology Review and Sustainable Leasing Program, respectively. These mitigation measures should be modified to implement and plan accordingly for the necessary infrastructure to successfully implement these mitigation measures that will support the zero emission and near-zero emission technology vehicles and equipment that will be operating at full build-out. This includes physical, energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.

7) ARB recognizes the Dole Refrigeration Facility Rack project was analyzed under a separate EIR and that this project includes sufficient plug-in capabilities for the projected transport refrigerated unit throughput related to Dole operations. However, the Port should ensure existing and future tenants are compliant now and in the future with ARB's Transport Refrigeration Regulation. If not already implemented, incorporate operating practices that eliminate the amount of time that a transport refrigeration system powered by a fossil-fueled internal combustion engine can operate utilizing the combustion system while at the TAMT. Use of zero emission all-electric plug-in transport refrigeration systems, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration is encouraged.

8) As part of the proposed project design, an electronic gate access system should be installed at the existing centralized common gate. An electronic gate access system should also be installed at the proposed alternative gate scenario, if the Port pursues this concept. This will allow for more efficient movement through the gate and will improve compliance with current regulations and programs for on-road trucks.

9) MM-AQ-1 identifies use of diesel oxidative catalysts (DOCs) or diesel particulate filters on construction related equipment. Reference to DOCs should be removed, as cleaner equipment, which would obviate the need for DOCs, is available. ARB suggests expanding this mitigation measure by requiring all off-road vehicles and equipment brought onsite meet Tier 4 engine standards. If Tier 4 is not available, the off-road equipment should meet Tier 3 engine standards. For heavy-duty on-road trucks, require that all medium-heavy and

heavy-heavy duty trucks, including any alternative fuel vehicles, meet or exceed 2010 emission standards.

10) To ensure fleets are compliant with ARB's heavy-duty diesel regulations during construction activities, consider requiring that fleet owners submit certificates of compliance, issued by ARB, for both on-road and off-road equipment, as well as proof of compliance with ARB's Periodic Smoke Inspection Program prior to entering any TAMT construction site. ARB is available to provide assistance in implementing this recommendation.

11) To ensure current and future tenants are in compliance and maintain compliance with all current air quality regulations for on-road trucks including ARB's Heavy-Duty Greenhouse Gas Regulation and Truck and Bus Regulation, consider incorporating related contractual language into tenant leasing agreements. ARB is available to provide assistance in implementing this recommendation.

12) The project includes an "Alternative Gate Concept" that will reduce traffic impacts near the existing Central Gate Facility. While this may reduce congestion near the existing gate, this would move truck traffic out of the terminal and on to Harbor Drive, and closer to the Perkins Elementary School. The DEIR indicates that there have been no preliminary studies or other technical work that evaluates the operational feasibility of implementing the Alternative Gate Concept. Therefore, if the Port proceeds with this Alternative Gate Concept, given the potential significant impacts to the sensitive receptors near Harbor Drive, including the occupants of the Perkins Elementary School, the Port should analyze potential for increased health risk impacts at the elementary school. If necessary, mitigation measures should be developed that implement best practices for reducing near-road pollution exposure at schools. Further information on best practices is available at https://www.epa.gov/sites/production/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf.

13) MM TRA-3 identifies a traffic study will be conducted and if necessary, preparation of a Traffic Demand Management Plan (TDMP), prior to construction activities. Should a TDMP be needed, this should be developed in consultation with the local community. The TDMP should ensure traffic circulation associated with construction and operational activities are diverted away from surrounding communities.

Closing

ARB recognizes the critical role the proposed Plan will play in keeping the Port competitive well into the future. The scale of the proposed Plan provides the City of San Diego and the Port an opportunity to set a benchmark for environmental leadership for freight transport in California while expanding economic opportunities.

ARB staff appreciates the opportunity to comment on the DEIR for the proposed Plan. We are pleased to provide assistance for successful implementation and deployment of a state-of-the-art facility that serves the region's distribution and air quality needs, while protecting public health.

If you would like to learn more about ARB's freight related work, please see our Sustainable Freight: Pathways to Zero and Near-Zero Emissions Discussion Document at http://www.arb.ca.gov/gmp/sfti/sfti.htm.

If you have questions, please contact Robbie Morris, Air Pollution Specialist, Freight Transport Branch, at (916) 327-0006 or Robbie.Morris@arb.ca.gov.

Sincerely,

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