



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

November 2, 2015

Andrea Ouse, AICP
Community and Economic Development Director
City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590

Subject: Vallejo Marine Terminal and Orcem Project Draft EIR

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EXECUTIVE OFFICER/APCO

Dear Ms. Ouse,

Bay Area Air Quality Management District (Air District) staff has reviewed the City of Vallejo's (City's) Draft Environmental Impact Report (DEIR) prepared for the Vallejo Marine Terminal and Orcem Project (Project). Air District staff understands that the project involves the re-use of the former General Mills deep-water terminal and buildings, which closed in 2004 and has since remained vacant. Two developments are proposed for the site: the Vallejo Marine Terminal (VMT) and the Orcem Plant. The VMT would reestablish industrial uses on the site through construction of a deep-water terminal primarily focusing on the import and export of bulk and break-bulk commodities. The Orcem Plant would involve the construction of a production facility of ground granulated blast furnace slag. Bulk commodities will be shipped and received via ocean-going vessels, rail, trucks, and barges. The project will require an Authority to Construct and Permit to Operate issued by the Air District. Therefore, the Air District is a responsible agency as listed under CEQA (§15096) for stationary source emissions and a commenting agency on the remaining issues.

Air District staff has the following specific comments on the DEIR.

Air Quality

The DEIR finds that the proposed Project will result in significant and unavoidable air quality impacts in the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is currently designated as a non-attainment area for federal and state ozone and fine particulate matter (PM_{2.5}) ambient air quality standards. In addition, the U.S. EPA recently lowered the national ozone standard, further highlighting the need to reduce ozone precursor emissions in the region.

To address the significant and unavoidable air quality impacts for ozone precursor and particulate matter emissions from this Project, the City has proposed the following mitigation measure:

MM-3.2-1: After the calendar year at which 15 vessels arrive at the site, the project operators for the VMT facility and Orcem Plant shall retain a qualified air quality specialist to calculate and report annual emissions from trucks and on-site equipment to confirm that emissions are below 10 tons per year. This report shall be submitted to the City of Vallejo for review. At the time emissions exceed 10 tons per year, the project operators shall ensure that at least 75% of the trucks entering the site are model year 2010 or later. This measure shall be enforced until year 2023, when the Drayage Truck Regulation adopted by the California Air Resources Board will require 100% of trucks to be model year 2010 or newer.

The air quality analysis in the DEIR estimates that the “Combined Operations of VMT and Orcem” will result in over 64 tons per year of ozone precursors and approximately 7 tons per year of particulate matter from a variety of sources, such as industrial processes, marine vessels, on and off road mobile sources, and cargo handling equipment. Both of these facilities will require permits from the Air District which will require the installation of air pollution control devices and the offset of some of these emissions through the permitting process. However, the on-road trucks and off-road equipment associated with this Project are not regulated through the Air District permit program and will be responsible for about a third of all emissions estimated in the DEIR. There are feasible mitigation strategies available now that could be implemented by the Project to ensure that the air quality impacts are reduced from the start of operation at these facilities, as opposed to deferring mitigation to some time in the future. These include:

- Require all heavy duty diesel trucks used at either site to meet the 2010 or newer model year emission standards immediately;
- Require dock side electrification and require all ships to connect while at berth;
- Require the use of the highest tier engines available for all offroad equipment, trucks and cargo handling equipment or require electrification of the cargo handling equipment; and
- Prohibit the use of portable diesel generators for construction and operation. Electricity from the grid is available to the site.

Health Risk Modeling and Emissions Estimates

Air District staff has identified a number of issues related to the health risk assessment provided in the DEIR, including some of the emission estimates assumed in the analysis, which may require that the analysis be revised to more accurately estimate the potential impacts from this Project. Air District staff recommendations are listed below:

- Quantify the toxic content of the granulated blast furnace slag and ground granulated blast furnace slag and include this information in the revised health risk analysis.
- Estimate the emissions of crystalline silica, which is in gypsum and pozzolan, and include this information in the revised health risk analysis.
- Estimate the quantity of the toxic emissions from the handling of cement and include this information in the revised health risk analysis. Portland cement contains several toxic compounds (Ref. U.S. EPA AP-42, Chapter 11.12) listed in Table 2-5-1 of District Regulation 2, Rule 5.

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- Estimate the emissions from natural gas combustion dryers (“hot air generators”) and include this information in the revised health risk analysis.
 - Expand the modeling domain of the health risk assessment to include the three main transportation routes from the Project site to Interstate 80.
 - Estimate mobile source emissions for all travel associated with the Project expected in the San Francisco Bay Area Air Basin (SFBAAB) and include this information in the analysis in the DEIR. The DEIR currently estimates haul trip emissions for a distance of less than 0.5 mile and locomotive emissions for one mile.
 - The Port of Richmond is located 17 miles to the south of the Project and may serve as an alternative short term port for receipt of ships delivering raw materials to the Orcem Plant in the event that VMT is inoperable (page 2-17 of DEIR). Include emissions associated with this scenario in the Project’s overall emission estimates and in the analysis of project impacts.
 - Baseline emissions include the use of B20 blended diesel fuel for all on-site equipment (page 3.2-35 of DEIR). Estimate potential NOx emissions increases of about 2 percent from the use of B20 fuels (see http://www.afdc.energy.gov/vehicles/diesels_emissions.html), and include this information in Project’s overall emission estimates. Because use of this fuel is assumed in the analysis, Air District staff also recommends including the use of B20 blended diesel fuel as part of the conditions of approval for the Project.
 - Diesel particulate matter emissions from truck exhaust were calculated based on emissions factors from EMFAC2011 and weighted based on OEHHA’s age sensitivity factor. Estimate emissions from haul trucks using the latest EMFAC2014 model, incorporate all of the OEHHA updated screening values related to breathing rate, exposure duration, and the amount of time at home, and include this information in the DEIR.
 - The VMT will receive dry bulk commodities, which could include coal for export. Clarify if coal will be received at the VMT, and if so, include the potential fugitive emissions of coal dust in the Project’s emission estimates and health risk assessment.
 - It does not appear that a cumulative local pollutant health risk screening analysis has been performed for this Project. Estimate all emissions from nearby sources within 1000 feet of the project site, including, but not limited to: emissions from existing stationary sources, rail service, ferry terminals, and major roadways, and include this information in the cumulative local pollutant health risk screening analysis.

November 2, 2015

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- If the revised health risk assessment and revised emission estimates identify new significant air quality impacts or higher emissions than estimated in the DEIR, Air District staff can assist in identifying additional mitigation measures for the Project to implement.

Air District staff is available to assist City staff in addressing these comments. If you have any questions, please contact Josh Pollak, Environmental Planner, at 415-749-8435 or jpollak@baaqmd.gov.

Sincerely,



Jean Roggenkamp
Deputy Executive Officer

cc: BAAQMD Board Member James Spering