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September 13, 2013

Kristin Vahl Pollot
City of Pittsburg
Planning Department
65 Civic Avenue
Pittsburg, CA 94565

Subject: WesPac Pittsburg Energy Infrastructure Project Recirculated DEIR

Dear Ms. Pollot,

Bay Area Air Quality Management District (District) staff has reviewed the City of Pittsburg's Recirculated Draft Environmental Impact Report (RDEIR) prepared for the proposed modernization and reactivation of an existing oil storage and transfer facility. We understand the project site is 134 acres and includes refurbishing up to 16 oil storage tanks, reactivating a marine terminal, repairing pipeline connections, and adding a new rail loading facility to transport oil to nearby refineries. This project will require an Authority to Construct and a Permit to Operate issued by the District. We submit the following comments as a Responsible Agency under CEQA (§15096) regarding the air quality analysis.

Construction Analysis

The RDEIR states that construction activities would result in potentially significant impacts for nitrogen oxides (NOx). Staff supports the inclusion of **Mitigation Measure AQ-1** which includes a variety of standard measures that the District recommends all construction projects incorporate to reduce fugitive dust from construction activities and diesel exhaust from off-road equipment. However, **AQ-1** will not reduce impacts below the significance level, and therefore, staff recommends the City incorporate additional feasible measures that reduce NOx emissions. This includes:

- Prohibit diesel generators where access to the electrical grid is available
- Require electrification of motors, pumps, and other power tools whenever feasible
- Require the use of biodiesel or other alternative fuels in generators, construction equipment, and/or off-road vehicles
- Minimize the idling time of diesel powered construction equipment to two minutes

Mitigation Measure AQ-2 specifies that the construction contractor is required to supply equipment with Tier II engines or newer when possible. If this equipment is not available, the contractor is only required to provide documentation that Tier II or newer engines are not available. However, if the project does not use Tier II or newer engines on all equipment, the toxic air contaminant (TAC) analysis will have underestimated public health impacts from construction activity. TAC emissions and concentrations may then result in potentially significant impacts. Staff recommends amending **AQ-2** to require all equipment meet at least the Tier II engine standard or use equipment fitted with diesel particulate filters where Tier II engines are not available.

Health Risk Assessments

Health risk assessments (HRAs) were prepared to evaluate potential health effects associated with the construction and operation of the proposed project. This includes estimated concentrations of fine particulate matter (PM_{2.5}) and TAC emissions from construction activities, marine vessels, harbor craft, marine terminal equipment, storage tanks, the rail loading facility, locomotives, and other project components. Staff reviewed the HRAs and based on the comments below recommends that additional modeling be conducted to more accurately assess potential impacts.

The HRA prepared for construction activity appears to underestimate PM_{2.5} concentrations and increased cancer risks. Construction emissions from Phase 1 appear to be modeled separately from Phase 2 despite the two phases overlapping 7 months, and it appears that a 1/3 reduction to a load factor was applied to generators. Staff recommends estimating the maximum emission increase that accounts for the phase overlap and model the highest concentration of emissions during a continuous 12 month period. In addition, staff believes the reduction to load factors may be appropriate for off-road vehicles but not off-road equipment. Staff recommends that the analysis not reduce the assumed load factors, or explain why it is appropriate.

Staff is unable to verify the potential health risks estimated for sensitive receptors near the marine terminal and south of the rail loading facility because emissions were modeled as segmented volume sources and the receptor spacing was too coarse. Staff recommends:

- Model emissions as a continuous volume source for the entire distance of travel
- Justify the assumed release heights for tugboats as being the same as marine vessels
- Extend the 25 meter receptor grid 1,000 feet beyond the rail loading facility boundaries
- Estimate increased cancer risk and PM_{2.5} emission concentrations along each grid point
- Include a map identifying the location of potentially impacted sensitive receptors
- Provide the dispersion modeling output files in Appendix C

Operational Criteria Pollutant Analysis & Mitigation

A permit application will be required for this project. The District will verify the emission estimates and determine compliance with applicable District permit requirements. However, to ensure full disclosure in the RDEIR of potential air pollution from this project, staff recommends that the FEIR include estimates of emissions (including hydrogen sulfide and other TAC compounds based on the type of crude oil being delivered to the project) from all emission sources associated with petroleum facilities, such as fugitive components, storage tanks and thermal oxidizers. To do so, staff recommends the City use industry specific methodologies and emission factors developed by the California Air Resources Board (CARB).

Staff supports the inclusion of **Mitigation Measure AQ-3** which requires NO_x and ROG emissions from operational activities to be fully offset. However, staff recommends that the City require the project proponent to seek emission reductions on-site prior to purchasing emission reduction credits. This could include dock electrification of the marine terminal to further reduce emissions from ships running auxiliary engines for power generation. This would also service to reduce PM_{2.5} concentrations and TAC exposure to nearby sensitive receptors.

Marine Vessel & Locomotive Emissions Estimates

It appears that the RDEIR underestimates emissions associated with ships and locomotive activities. The air quality analysis for tugboat engines utilizes Model Years 2007 and 2016 emission factors developed by CARB for commercial harbor craft emission inventories. However, the anticipated service-life of a tugboat engine is 20+ years and available information indicates an average fleet engine of a model year 1994. Similarly, the analysis assumes the current locomotive fleet meets Tier 2 engine standards and will meet Tier 4 engine standards by the year 2027. However, the vast majority of the existing fleet consists of Tier 0 or Tier 1 engines that have service-life expectancies of about 30 years. It should also be noted that the locomotive fleet turnover rate is approximately 1% per year. Staff recommends:

- Estimate emissions from tugboats using emission factors based on current fleet information that reflects the useful life of tugboat engines provided by CARB. Available at <http://www.arb.ca.gov/msei/chc-appendix-b-emission-estimates-ver02-27-2012.pdf>
- Estimate emissions from locomotives using annually projected reductions provided by the US EPA's analysis on national locomotive regulatory standards. The analysis is available at <http://www.regulations.gov/contentStreamer?objectId=09000064803f34cc&disposition=attachm&contentType=pdf>, see table 3-91

According to staff's estimate, rail trip lengths appear to be underestimated by 6 miles using BNSF's on-line rail inquiry tool: <http://www.bnsf.com/bnsf.was6/RailMiles/RMCentralController>. Emission estimates from rail activity may be underestimated and therefore require the project to purchase additional emission reduction credits to fully mitigate potentially significant air quality impacts. Staff recommends the RDEIR detail the basis for estimating rail trip lengths used to estimate locomotive emissions.

District staff is available to assist the City in addressing these comments. If you have any questions, please do not hesitate to contact Ian Peterson, Environmental Planner II, at (415) 749-4783 or at ipeterson@baaqmd.gov.

Sincerely,



for Jean Roggenkamp
Deputy Air Pollution Control Officer

Attachment

cc: BAAQMD Director John Gioia
BAAQMD Director David Hudson
BAAQMD Director Mary Piepho
BAAQMD Director Mark Ross