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September 1, 2011

Bill Wycko
Environmental Review Officer
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: The 34th America's Cup and James R. Herman Cruise Terminal and Northeast Wharf Plaza Draft Environmental Impact Report

Dear Mr. Bill Wycko:

Bay Area Air Quality Management District (District) staff has reviewed your agency's Draft Environmental Impact Report (DEIR) which addresses two related projects: (1) the 34th America's Cup (AC34), and (2) the James R. Herman Cruise Terminal and Northeast Wharf Plaza (Cruise Terminal). We understand that AC34 will take place in the summer and fall of 2012 and 2013, and that the Cruise Terminal consists of the development of a new primary passenger cruise terminal at Pier 27 (which will replace the current primary cruise terminal at Pier 35). Pier 27 will house one of the primary AC34 venues in 2013, the America's Cup Village and is also the site proposed by the Port of San Francisco (Port) for the development of the Cruise Terminal project. According to the DEIR, the shore-side electrical power installation that was supported by funding from the District and put into place by the Port at Pier 27 in 2010 will be decommissioned due to construction of the Cruise Terminal and AC34-related activities, and is assumed to be unavailable in 2012 and 2013 (pg. AQ.1-3).

District staff has the following specific comments on the Project's environmental analysis.

Shore-side Power Decommission

The operational analysis for AC34 in the DEIR accounted for cruise ship hoteling emissions resulting from the removal of the shore-side power system installed at Pier 27 in 2010. According to the DEIR (pg. AQ.1-3), shore-side power is assumed to be unavailable in 2012 and 2013. Average daily and maximum annual operational emissions from AC34 are displayed on pg. 5.8-33 of the DEIR. However, the operational emissions shown on pg. 5.8-33 only include emissions from the shore-side power decommissioning for 2013, rather than for both 2012 and 2013. In addition, as shown on pg. 5.8-33 of the DEIR, the maximum annual emissions for the shore-side power decommissioning are indicated to be 22 tons per year of criteria air pollutants. The DEIR does not clearly communicate how this estimate of emissions was calculated. According to the contract between the Port and the District for the $1.9 million grant provided to the Port in 2010 for installation of the shore-side power, the emissions and cost-effectiveness calculations which were utilized to determine the monetary value of the grant indicated that the shore-side power would reduce approximately 32 tons per year of criteria air pollutants. Accordingly, the DEIR

should utilize the District's calculation of 32 tons per year of criteria air pollutants for both 2012 and 2013 when analyzing the cruise ship hoteling emissions at Pier 27 in the operational analysis for AC34, or clearly explain and justify why a different estimate may be appropriate.

The DEIR also evaluated a project variant, the Pier 27 Shed Variant, in which construction of the Pier 27 cruise terminal would not be completed until after the end of the 2014 cruise season, i.e., in late 2013 through 2014. As such, shore-side power would not be available at Pier 27 for 3 years (pg. 5.8-54 of the DEIR). However, the estimated emissions for the Pier 27 Shed Variant shown in Table 5.8-13 assumes the loss of shore-side power for only two years as a result of the delayed construction. The DEIR should estimate cruise ship emissions associated with the Pier 27 Shed Variant for three years because, as is stated on pg. 5.8-54 of the DEIR, shore-side power would not be available for three years (2012-2014) rather than two (2012-2013).

District staff recommends that the AC34 and Cruise Terminal projects do not decommission shore-side power for cruise ships at Pier 27 at any point in time. Decommissioning the shore-side power will not fulfill the objective of the contract between the Port of San Francisco and the District for the $1.9 million in AB923 funds granted by the District for electrification of the shore-side power to avoid cruise ship emissions. Additionally, criteria air pollutant emissions associated with the loss of shore-side power during the AC34 and Cruise Terminal projects will adversely impact local and regional air quality.

If the shore-side power is decommissioned, the emissions should be entirely off-set through the implementation of additional shore-side electrification projects at other piers in San Francisco, such as the dry dock at Pier 70 for military and cruise vessels, and Pier 94 (currently used by Canadian Shipping for gravel import). Such projects will assist the region in meeting health-based state and federal ambient air quality standards, as well as reduce greenhouse gas emissions.

Criteria Air Pollutant Emissions Analysis

According to the DEIR, emissions from operational activities associated with AC34 exceed the District's significance threshold for criteria air pollutants. The DEIR identified significant and unavoidable impacts from operational activities associated with AC34. Accordingly, all feasible mitigation measures should be implemented to reduce the emissions from this impact to the maximum extent feasible. The DEIR identifies one mitigation measure, **M-AQ-4: Emission Controls for Race-Sponsored Vessels**, which requires (as feasible) all contracts for race-sponsored vessels to meet U.S. EPA Tier 3 or better engine standards for marine diesel engines. However, according to the DEIR, the estimated criteria air pollutant emissions from race-sponsored vessels are less than 5% of the total estimated emissions from all sources of criteria air pollutants, which includes race support vessels, small private vessels, large private vessels, assist tugs, boat lifts, generators, helicopters, truck trips, and the shore-side power decommission. Therefore, any emission reductions from **M-AQ-4** would be minimal at best, as the mitigation measure only applies to less than 5% of the total estimated criteria air pollutant emissions.

The largest sources of criteria air pollutants include small private vessels and race support vessels, which together account for approximately 80% of all the estimated criteria air pollutant emissions associated with operational-related activities from AC34. Therefore, the City should require **M-AQ-4** be applied to all race sponsored and support vessels, for which Tier 3 or higher engines are commercially available. This requirement should be stipulated in all subsequent contracts with the event organizers.

For the remaining sources of emissions, such as private vessels, the AC34 and Cruise Terminal projects should be required to implement an offsite mitigation program to achieve additional criteria air pollutant emission reductions. An offsite mitigation program could be implemented by the City/County or through the District's Carl Moyer Memorial Air Quality Standards Attainment Program (CMP). If through the District's CMP program, the project applicant would provide funding for the emission reduction projects in an amount up to $16,640 per weighted ton of criteria pollutants [NOx + ROG + (20*PM)] above the District's significance thresholds. This is the current emission reduction project cost-effectiveness limit set by the California Air Resources Board (ARB) for the CMP. The actual costs needed to offset this project's emissions would be dependent on the types of projects funded. The range of costs could be anywhere from approximately $5,000 per weighted ton to the upper limit of $16,640 per weighted ton. An administrative fee of 5% would be paid by the project applicant to the District to implement the program. The funding could be used to fund a combination of the project types listed below:

- Projects eligible for funding under the CMP guidelines that are real, surplus, quantifiable, and enforceable; and
- Projects to replace older, high emitting, gasoline powered harbor craft (commercial and recreational) engines operating in the Bay Area with newer, cleaner, more efficient engines (2010 Clean Air Plan, Mobile Source Measure C-3), which would address the largest source of criteria air pollutant emissions in the AC34 project.

Offsite mitigation programs have been implemented throughout the State for CEQA purposes and are considered a feasible mitigation measure for this project by the District. The District would recommend the following mitigation measure be made a condition of approval for this project:

- The AC34 and Cruise Terminal projects shall implement an offsite mitigation program to substantially reduce the amount of criteria air pollutant emissions above the District's thresholds of significance. The applicant and the District shall work together to identify the total amount of emissions needed to be offset through the offsite mitigation program after taking into consideration any measures implemented by the applicant to reduce AC34's criteria air pollutant emissions. The applicant and the District will then agree on the amount of funding needed from the applicant to achieve these emission reductions through the types of projects listed above.

Risks and Hazards for New Sources and Receptors Analysis

Based on the analysis in the DEIR, the AC34 project would introduce new sources of toxic air contaminants (TAC) and PM2.5 that would adversely impact sensitive receptors (current and future residents within 1,000 feet of AC34 and the Cruise Terminal, and AC34 event spectators). The DEIR has identified significant and unavoidable impacts from AC34 to sensitive receptors from construction- and operational-related activities.

The DEIR included mitigation measures **M-AQ-2a** (which requires minimizing idling times of construction equipment; proper maintenance and tuning of equipment; and that on-road diesel trucks used to transport soils be year 2007 or newer), **M-AQ-2b** (which requires all off-road construction equipment to meet Tier 3 standards; and all diesel generators to meet Tier 4 emission standards, if feasible), **M-AQ-4** (which requires all contracts for race-sponsored spectator vehicles to stipulate that such vehicles meet US EPA Tier 3 or better engine standards, as feasible) and **M-AQ-5** (which requires that all diesel generators at AC34 event and viewing locations conform to a level of

performance equal to Tier 4 interim, or Tier 2/3 engine fitted with a Level 3 Verified Diesel Emissions Control, or use natural gas/gasoline-powered generators in lieu of diesel, as feasible).

The DEIR did not provide a receptor grid for determining the maximum exposed individual (MEI), the location(s) of the MEI, and the sources contributing to the risk and PM2.5 at the MEI. The DEIR does not clearly state what sources in what locations are contributing most to the impact at the MEI(s). Such information would help identify the most effective and efficient mitigation strategies. While the mitigation measures may reduce TAC and PM2.5 emissions in the AC34 project area, the "blanket" nature of the mitigation measures do not appear to target any specific location (or the sources of TAC/PM2.5 linked to the highest risk). We recommend directing the mitigation measures toward the sources that most significantly impact the MEI(s), which will not only be more effective in reducing the risks and hazards at the most impacted receptor(s), but will also be more cost-effective to implement. In addition, mitigation measures **M-AQ-2a** and **M-AQ-2b** are already required as state and federal mandates (as stated on pages 5.8-27 and 5.8-29 of the DEIR). Thus, the DEIR should have included the emissions reductions from the mitigation measures **M-AQ-2a** and **M-AQ-2b** when estimating the risks and hazards impacts. We recommend that the FEIR identify the location(s) of the MEI(s) in relation to the sources of the TACs/PM2.5, and that the FEIR identify additional feasible mitigation measures to reduce the impacts based on the sources causing the impact.

Due to the significant and immitigable impacts identified in the DEIR, the District recommends the following feasible mitigation measures be made conditions of approval for the AC34 project:

- Prohibit the use of diesel generators, and require equipment to plug-in to the existing utility;
- Provide propane tanks for generators equipped to operate on propane;
- Require the use of DPM filters on equipment where Tier 3 engines are not available; and
- Require the use of biodiesel or other alternative fuels in diesel generators, construction equipment and/or off-road vehicles.

Greenhouse Gas (GHG) Emissions Analysis

The DEIR assessed the consistency of the AC34 and Cruise Terminal projects with the City/County of San Francisco's *Strategies to Address GHG Emissions*. The DEIR found the AC34 and Cruise Terminal projects to be consistent with the *Strategies to Address GHG Emissions,* and therefore less than significant for operational-related GHG impacts. The City/County of San Francisco's Planning Department utilizes a "Compliance Checklist for Private Development Projects" (http://sf-planning.org/index.aspx?page=1886) to determine consistency with the *Strategies to Address GHG Emissions*. However, the "Compliance Checklist for Private Development Projects" includes a number of policies (for example, municipal green purchasing, regulation of diesel back-up generators, transit impact development fees, car sharing requirements, bicycling parking) that were not included nor assessed in the DEIR. Therefore, the DEIR does not provide a comprehensive analysis of all the City/County of San Francisco's *Strategies to Address GHG Emissions* to determine if the AC34 and Cruise Terminal projects are consistent and therefore impacts are less than significant. Staff recommends including all items as outlined in the "Compliance Checklist for Private Development Projects", regardless of whether the item is considered to be "Not Applicable" or "Project Does Not Comply". A discussion should be provided for those strategies that are marked "Not Applicable" or "Project Does Not Comply".

District staff is available to assist City staff in addressing these comments. If you have any questions, please contact Jackie Winkel, Environmental Planner, (415) 749-4933.

Sincerely,

Jean Roggenkamp
Deputy Air Pollution Control Officer

cc: BAAQMD Director John Avalos
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