Our Vision Clean Air

Santa Barbara County
Air Pollution Control District

August 2, 2006

Ms. Amy Zimpfer
Associate Director
EPA Region 9, AIR-3
75 Hawthorne Street
San Francisco, CA 94105

RE: Comments on EPA's Proposed Authority to Construct – Cabrillo Port Clean Air Act Permit No. LNG-VT-2006-01

Dear Ms. Zimpfer:

The Santa Barbara County Air Pollution Control District appreciates the opportunity to provide these comments on EPA's proposed Clean Air Act permit for the Cabrillo Port LNG project that is intended to be located approximately 14 miles offshore Ventura County, California. Santa Barbara and Ventura Counties are adjacent to each other and, along with San Luis Obispo County and offshore waters, comprise the South-Central Coast Air Basin. If approved and built as proposed, significant emissions from this project will occur in this basin. We have several concerns regarding the proposed permit and the associated Statement of Basis, which are provided below.

REGULATORY PROGRAM

Notwithstanding this proposed LNG facility's substantial emission profile, EPA proposes to regulate the project as a "minor" source not subject to either NSR or PSD on the basis that the project is analogous to being located on one of the Channel Islands in Ventura County Air Pollution Control District's (VCAPCD or Ventura) jurisdiction. We believe this is incorrect. Clearly, the project is not to be located on either San Nicholas or Anacapa Island, and so should not enjoy an NSR exemption created only for relatively small equipment items that might be installed there in association with military operations. We believe the clearest interpretation of air pollution regulatory applicability is that VCAPCD's New Source Review program should apply to this project.

Further, EPA not only inappropriately exempts the project from NSR requirements, but also asserts that the project is not subject to PSD requirements, since the project is not a "fuel conversion plant," and its calculated emissions do not exceed 250 tons per year that would otherwise subject it to PSD regulation. We respectfully disagree with both elements of this conclusion, as we stated in our May 11, 2006 comments on the revised DEIR (SCH# 2004021107, comments incorporated herein by reference). First, the very purpose of the FSRU

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is to re-gasify the delivered LNG by enacting a process change through the application of heat to the cold product. In fact, the FSRU will have close to a billion Btu of heating capacity to make this process change. By EPA's own definition, this makes the FSRU a fuel conversion plant. Second, the proposed permit fails to quantify accurately the total stationary source emissions in accordance with VCAPCD's rules. When the LNG carrier emissions and associated vessel emissions from loading and unloading of cargo are properly accounted (as Ventura's rule requires), the stationary source emissions clearly exceed the 100 ton threshold that triggers PSD.

Finally, as we have noted in past comments on this project, its proposed location 14 miles south of the Ventura County coastline is immediately upwind of the Ventura County and South Coast air districts, both of which are federal and state designated ozone non-attainment areas. Why this project (and its considerable ozone precursor emissions) is not subject to the more rigorous air pollution control program that Ventura's rulebook appears to require is not clear.

EQUIPMENT CONTROLS

The submerged combustion vaporizer emission limits for NOx (20 ppm) and CO (100 ppm) in the proposed permit are intended to represent Best Available Control Technology. However, BACT for similar combustion units is considered to be 5 ppm (NOx) with ammonia injection, and 50 ppm (CO). These are achievable emission levels that would markedly reduce the project's NOx and CO emissions, and the proposed permit should incorporate these requirements.

EMISSIONS MITIGATION

The project proponent's original commitment to operate all vessels essentially on natural gas at all times was laudable, in that it would advance and demonstrate low-emissions ship propulsion technology, an issue critical to California's health and economic well-being. However, the proponent appears to have withdrawn this commitment and the proposed project no longer assumes that all vessels will operate at all times on essentially 100% natural gas. Instead, each LNG delivery vessel will switch over from an unspecified liquid fuel to gas-fueled operation at the 25 NM marker offshore California, operate on "boil-off gas" while making the 12-mile run to the FSRU and offloading its cargo, and then switch back to the liquid fuel at the 25 NM marker on its outbound journey. Given this dilution of the original commitment, it is all the more important to properly quantify the stationary source emissions and ensure that the mitigations to which the project proponent is committing fully address the real emissions increases from the project, and that the mitigations occur in the region where the emissions will occur. We continue to believe that the project's total ozone precursor emissions from operation should be mitigated to at least a 1:1 basis. The vessel retrofits described in the proposed permit do not accomplish this.

"Hot" Gas and Conformity

We are also concerned about the importation of "hot gas" into the Southern California region. We support the South Coast Air Quality Management District's position that General Conformity (CAA Sec 176(c)) applies to all project elements, and that the proposed permit should contain an enforceable upper limit of 1360 Wobbe Index on the LNG that is imported by this project. In addition, the proposed permit's emission calculations assume that all project components will operate on natural gas at or below this heating value, but the proposed permit contains no apparent heating value limits to ensure that higher NOx emissions are not realized from project components.

Vessel Availability

The proposed project intends to use assist vessels (supply, crew, tug) that are fueled on 99% natural gas/1% diesel mix at all times, and to use LNG carriers that run on this mixture when within 25 NM of the California coast. We are concerned that the full array of vessels, whether new or retrofitted to meet this intention, will not be available at the time the project is expected to begin operations. However, the proposed permit assumes that all promised natural-gas fired vessels are available, and the project-generated emissions that are shown in the permit are considerably lower than they would be if diesel fuel were used instead. To address this, the proposed permit should require a demonstration prior to start-up that sufficient natural-gas fired vessels are available to meet this important underlying assumption about the project. If, in fact, the project is allowed to initiate operations without the cleaner-fueled vessels, then the emission calculations and the permit itself will be seriously flawed.

Cold Stacking

The environmental review document for the BHP Billiton project discusses "cold stacking," that is, the routing under certain conditions of uncombusted natural gas up a pipe and away from the FSRU. We could find no discussion of this equipment or operation in the proposed permit, nor was there any apparent consideration of the emissions from this activity. We note that, during upset conditions on petroleum production platforms operating in the offshore environment, produced gas is routed to flares with auto-ignite capability, and these flares are considered essential safety equipment.

Engine Array

The proposed permit contains no description of the engine array in the LNG delivery vessels and this obviously affects the calculation of the project's stationary source emissions. Do these vessels have auxiliary generators in addition to the main engines? If so, their emissions should be properly accounted and the proposed permit should be revised accordingly.

CALIFORNIA COASTAL WATERS

EPA has determined that the applicable air pollution regulatory program for this project is that of Ventura County Air Pollution Control District. Ventura's rulebook incorporates the term, "*California Coastal Waters adjacent to the district*" in its definition of stationary source (Rule 26.1), and further states what emissions from marine vessels are to be accounted when such emissions occur in such waters. Yet, despite EPA's determination that the Ventura rulebook applies to this project, the proposed permit in large part ignores the boundaries of *California Coastal Waters adjacent to the (Ventura) district* for purposes of emissions quantification and mitigation. In the proposed permit, LNG carriers "switch over" to natural gas fuel when within 25 NM of the California coast, notwithstanding the California Coastal Waters boundary for Ventura (as well as South Coast AQMD and our agency) is considerably further offshore.

Thank you for the opportunity to comment on the draft permit. We also incorporate herein by reference all previous comments and submittals our agency has provided regarding the BHP Billiton project. If you have questions or require additional information regarding our input, please contact me at your convenience.

Sincerely,

Peter Cantle, Manager
Engineering & Compliance Division

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