UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF THE
REGIONAL ADMINISTRATOR

December 4, 2006

Mark A. Prescott
USCG Deepwater Ports Standards Division (G-PSO-5)
U.S. Coast Guard Headquarters
2100 Second Street, SW
Washington, DC 20593-0001

RE: USCG Final Environmental Impact Statement/Environmental Impact Report for the Neptune LNG Deepwater Port License Application, DOT Docket Number: USCG-2004-22611, CEQ# 20060451

Dear Mr. Prescott:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA or Agency) has reviewed the U. S. Coast Guard's (USCG) Final Environmental Impact Statement (FEIS) for the Neptune Liquefied Natural Gas (LNG) Deepwater Port proposed in Massachusetts Bay.

The FEIS details the Neptune proposal to construct and operate a deepwater port to import liquefied natural gas (LNG) to New England. The proposed port would be located in federal waters of Massachusetts Bay approximately 22 miles northeast of Boston, Massachusetts, and 7 miles south-southeast of Gloucester, Massachusetts. The deepwater port would consist of two subsea unloading buoys that would connect to a 10.1 mile, 24-inch-diameter pipeline that would deliver natural gas to the existing subsea Hubline pipeline which connects to shore. LNG would arrive at the port in Shuttle Regasification Vessels and would then be vaporized to natural gas using a shipboard closed-loop process. Following vaporization the natural gas would be transferred from the vessel through the unloading buoys to the proposed pipeline. The proposed port would be located in federal waters. Neptune proposes to begin construction in 2009 and begin service by the end of that year.

In addition to our environmental review role in this case, EPA is responsible for administering applicable provisions of the Clean Air Act and Clean Water Act. EPA also has cooperated with the Maritime Administration (MARAD) and the USCG in preparing this FEIS to fulfill all of the federal licensing agencies' NEPA compliance responsibilities. EPA has also assisted the USCG and MARAD, the lead agencies, in consultations that federal licensing and permitting agencies are required to conduct with the National Oceanographic and Atmospheric Administration (NOAA) under the

Endangered Species Act, National Marine Sanctuaries Act, Marine Mammal Protection Act, and Magnuson-Stevens Act. EPA is currently reviewing applications filed by Neptune for permits under the Clean Air Act and Clean Water Act and expects to make draft permits available for public review and comment.

The Neptune proposal is one of two proposed LNG deepwater ports currently under review by this office, the Northeast Gateway LNG deepwater port being the other. As we have indicated in the past, EPA recognizes that New Englands air quality has benefited greatly from the increased use of natural gas for electricity generation. EPA also recognizes the need to bring additional natural gas supplies into New England to meet growing energy demand and to maintain the environmental benefits gained over the last ten years. We continue to believe that a well-sited LNG facility, that provides a new supply of natural gas to the region in an environmentally-responsible manner, can make a substantial contribution to maintaining our recent air quality gains.

We appreciate the efforts of the USCG and its consultants to respond to our comments on the Draft EIS and interim FEIS. Based on our review of the FEIS, EPA has no environmental objection to the FEIS. We will continue to work closely with the USCG and the applicant on air and water permits for the project. The enclosure to this letter contains several additional comments that we believe can be addressed in the Record of Decision and the remainder of the licensing process for the project. We continue to encourage the USCG to work closely with NOAA to minimize and mitigate any adverse impacts to marine organisms during the construction and operation of the Neptune port.

Thank you for the opportunity to offer comments on the FEIS for the Neptune project. Please feel free to contact Timothy Timmermann of the Office of Environmental Review at (617) 918-1025 if you have any questions about these comments.

Sincerely,

Robert W. Varney
Regional Administrator

Enclosure

Additional Comments on the Neptune Deepwater Port FEIS

Generally, the FEIS addresses air and water quality impacts and compliance with the Clean Air Act (CAA) and Clean Water Act (CWA) consistent with EPA's prior comments. EPA does have clarifying comments to offer on the subject of the conformity determination and miscellaneous issues under the CAA.

General Conformity under the Clean Air Act

Section 176(c) of the CAA prohibits federal entities from taking actions in nonattainment or maintenance areas which do not conform to the applicable implementation plan for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). A conformity analysis is required for federal actions associated with the Neptune Port because the Deepwater Port Act (DPA) provides that a port is generally subject to the law applicable in the nearest adjacent coastal state, which in this case is the Massachusetts nonattainment SIP. The project emissions of concern are direct and indirect emissions occurring onshore in the 8-hour ozone nonattainment area (such as emissions from deliveries for construction), emissions in Massachusetts' state territorial waters (adjacent to the designated nonattainment area), and emissions within the safety area (500 meters around the loading buoys). A general conformity determination is required "for each pollutant where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed" specified thresholds. 40 C.F.R. § 93.153(b).

Emission calculations

Table 3 on page G-64 of the Draft General Conformity determination (Appendix G) indicates that project emissions in calendar year 2009 will exceed the applicability threshold for NOx (100 tons per year (tpy) for a moderate ozone nonattainment area in an ozone transport region) due to the combination of construction and operational emissions. The calendar year 2009 project emissions subject to general conformity are currently calculated as 119 tons of NOx. Based on a review of the documentation explaining how these emissions estimates were derived, especially how emissions for the various classes of construction equipment were apportioned geographically,[1] EPA requests that two points be clarified on the record prior to finalizing the conformity determination and determining that it meets the requirements of 40 C.F.R. § 93.159(b). The support documentation apportions vessel emissions between "time in state waters" and "time in federal waters." It is not clear how this allocation accounts for the emissions from vessels when they are operating within the two 500 meter safety areas in federal waters. The safety area emissions should be included in the conformity analysis because these areas are part of the deepwater port. It is EPA's view that the analysis should also explain whether there are any onshore indirect emissions from the construction of the project that should be included in the conformity analysis.

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[1] This documentation was available at the time the FEIS was published for public comment. See 40 C.F.R. § 93.156(a).

Emission Offsets

EPA understands that USCG and MARAD intend to demonstrate conformity by requiring the applicant to fully offset calendar year 2009 NOx emissions through the purchase of discrete emission reduction credits (ERCs) and/or New Source Review (NSR) offsets (rate-based ERC's) equivalent in time, location and quantity to the emissions from the project in 2009. It appears that operational NOx emissions in calendar year 2010 and beyond (67.6 tpy) would not need to be offset because they are below the applicable conformity threshold. EPA has examined the documentation specifically identifying the source of emissions offsets that will be used to demonstrate conformity for the project,[2] and has consulted with the Massachusetts Department of Environmental Protection (MDEP) concerning the methodology described for converting banked offsets into discrete emission reduction credits (ERCs) for the 2009 calendar year. The emissions offsets methodology described in the documentation appears to comply with the requirements of 40 C.F.R. §§ 93.152 and 93.158(a)(2). EPA believes that the final conformity determination will require a commitment from Neptune to convert the banked offsets into discrete ERCs that qualify for use in 2009. EPA notes that MDEP must approve that conversion of the banked offsets prior to construction of the project.

For General Conformity determinations based on offsets, the regulations require that these offsets be enforceable at both the state and federal levels. *See* 40 C.F.R. §§ 93.152, 93.158(a)(2). The DPA license can be used to enforce the offset commitments on which the general conformity determination will rely. EPA recommends that MARAD include any necessary conditions of the conformity determination in the Record of Decision (ROD) and include these conditions in the DPA license, consistent with the written commitments the applicant has provided to support the conformity determination. EPA looks forward to continuing its assistance to USCG in its preparation of the final General Conformity determinations.

Implementing the General Conformity Determination

Section 176(c) of the CAA requires EPA to evaluate independently the applicability of General Conformity in connection with our issuance of a Clean Air Act Preconstruction Permit and a CWA National Pollution Discharge Elimination System (NPDES) permit for the Neptune Port. Under 40 C.F.R. § 93.154, EPA may choose to adopt the analysis of USCG's and MARAD's conformity determination as the basis for our own conformity determination. Other Cooperating Federal Agencies including the Federal Energy Regulatory Commission (FERC) and the U.S. Army Corps of Engineers (ACOE) may also need to make independent general conformity determinations. EPA recommends that USCG and MARAD facilitate the conformity process by including all these cooperating agencies in the USCG and MARAD conformity determination process.

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[2] That documentation was available at the time the FEIS was published for public comment. See 40 C.F.R. § 93.156(a).

Port Access for Compliance Inspections

As EPA moves forward with its air permitting responsibilities for Neptune, the Agency will need access to the port vessels to conduct compliance inspections in order to confirm compliance with air emission limits. Preliminary conversations with the USCG in Boston have indicated that the USCG will assist EPA with such access, including opportunities for transport to and from the port such that EPA compliance inspections could be conducted concurrent with USCG activities. EPA commits to working with the USCG to coordinate any EPA inspection trips to the vessels while at port with USCG inspections of the port. In addition, EPA recommends that the ROD and the resulting DPA license specifically provide that the port operator grant access to EPA inspectors who present Agency credentials to allow for inspections on and in the vessels to determine compliance with EPA-issued environmental permits. To that end, we are providing the following draft language which parallels the accessibility language we expect to include in EPA-issued air permits. EPA recommends that this language be included in the ROD and the DPA license.

> The [permittee] shall allow all authorized representatives of the Administrator of the U.S. Environmental Protection Agency, upon presentation of credentials, to enter upon or through any premises of [the permittee], including vessels and other facilities and areas where records required under this permit are kept. The [permittee] shall allow such authorized representatives, at reasonable times, to access and copy any records that must be kept under this permit, to inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit, and to sample or monitor substances or parameters for the purpose of assuring compliance with this permit.

Specific Comments

Impact Analyses (Volume I)

Page ES-23. It appears that the project will now include the placement of acoustic detection buoys during the construction period (calendar year 2009). The emissions from the placement of these buoys should be accounted for as indirect emissions in the conformity determination for 2009.

Page 3-103, under "New Source Review": Note that a title V operating permit may not be required if Neptune is a minor source under the CAA.

Appendix G, Page 11, mixing height: EPA suggested using an alternative to Holzworths method that uses fixed mixing heights of 100, 300 and 500 meters for modeling operations emissions. The FEIS used the EPA-recommended alternative for construction emissions modeling. The FEIS explains that the results of that modeling indicated that the Holzworth method was more conservative. Based on this conclusion, the FEIS used the Holzworth method for the operations emissions modeling. This analysis of ambient air impacts appears to be sufficient for the purposes of satisfying the more general

requirement under NEPA to explain the project's environmental impacts. But the applicant should be sure to address the mixing height issue, consistent with EPA modeling guidance, in the modeling supporting its application to EPA for air permits under the CAA.

Air Quality Information (Volume III, Appendix G)

Page G-2, last paragraph: According to USCG's Draft General Conformity determination, mobile source emissions comprise the majority of the NOx emissions during calendar year 2009 that exceed the General Conformity *de minimis* threshold of 100 tpy. As such, in the third sentence it would be more accurate to say that annual operational emissions of NOx and VOC are below the General Conformity *de minimis* emissions thresholds.

Page G-4, 1st full paragraph – The FEIS states that mobile source emissions "are not subject to modeling under the stationary source permitting regulations." As EPA noted in comments on the DEIS, although mobile source emissions are not counted for purposes of determining NSR/PSD applicability and measuring PSD increment consumption (only stationary emissions will be subject to the terms and conditions of an EPA-issued preconstruction permit), mobile source emissions do affect ambient air pollutant concentrations and are considered in NAAQS modeling. EPA will consider these mobile source emissions as part of the NAAQS modeling analysis for the preconstruction permit.

Draft Conformity Determination (Volume III, Appendix G)

Page G-64, Tables 2 and 3 do not identify the correct VOC threshold. Massachusetts is part of the Ozone Transport Region; therefore, the applicable VOC threshold for General Conformity purposes is 50 tpy. *See* 40 C.F.R. 93.153(b).

Page G-66: Note that the CAA preconstruction permit will govern only emissions from stationary activities at the port and will not address all the requirements of General Conformity.