UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 21, 2004

Lieutenant Ken Kusano
U.S. Coast Guard (G-MSO-5)
2100 Second Street, SW
Washington, DC 20593-0001

Subject: Draft Environmental Impact Statement (DEIS) for the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port, Ventura and Los Angeles Counties, California (CEQ #040511)

Dear Lieutenant Kusano:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act (CAA).

As regulated under the Deepwater Port Act (DPA), BHP Billiton LNG International, Inc., is proposing to build a deepwater port approximately 14 miles off the coast of Ventura County. The project includes the construction and operation of a new offshore LNG floating storage and regasification unit (FSRU), offshore and onshore pipelines, and related onshore facilities.

As the FSRU would be moored in federal waters, EPA has permitting responsibilities under the CAA and the Clean Water Act (CWA). Under the CAA, EPA has authority to issue an Air Permit for Authority to Construct (ATC) and a Title V Operating Permit. The ATC Permit will include Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR) requirements. Under the CWA, EPA has authority to issue a National Pollutant Discharge Elimination System (NPDES) permit for waters discharged from the FSRU. EPA has been working cooperatively with the Coast Guard, state agencies, and county air districts to assure that permitting requirements are clearly understood.

In addition, as the DPA declares deepwater ports to be "new sources" under the CWA, the issuance of a NPDES permit by EPA triggers our NEPA compliance responsibilities (40 CFR Part 6). It is our intent to issue a Record of Decision (ROD) for the NPDES permit based, in part, on the information contained in the Final EIS (FEIS) for this project.

Due to our permitting responsibilities, EPA is a Cooperating Agency in the NEPA process. Accordingly, we have played an active role in providing comments to the Coast Guard as this project has progressed. Previous correspondence includes a completeness review of the Cabrillo Port Deepwater Port application (September 23, 2003), clarification of additional information needed for air permitting (June 10, 2004), scoping comments in response to the Notice of Intent for the project (March 31, 2004), and comments on the Coast Guard's Administrative DEIS (October 8, 2004).

Based on our review, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). A *Summary of EPA Rating Definitions* is enclosed. We have environmental concerns about impacts to air quality, the analysis for General Conformity, and the availability of emission reduction credits. We request that additional information be provided on the potential impacts and risks from emergency/accidental releases of LNG or natural gas. Furthermore, we are requesting additional information on several NPDES permitting issues (especially where there are inconsistencies between the DEIS and the NPDES permit application), impacts to waters of the U.S., the applicability of the Marine Protection, Research and Sanctuaries Act (MPRSA) and the Safe Drinking Water Act (SDWA). Please see the enclosed Detailed Comments for a description of these concerns and our recommendations.

EPA attended both public hearings for this DEIS held in Oxnard, California, on November 30, 2004. We commend the Coast Guard, Maritime Administration, and the California State Lands Commission for conducting an effective and informative meeting. We note that many speakers expressed concerns about potential hazards and risks from the proposed FSRU and gas transmission line. In our detailed comments, we recommend that the lead agencies provide information on the Independent Risk Assessment in comparison to other similar LNG risk studies. We also request that the applicability of CAA Section 112(r) regarding accidental releases of extremely hazardous substances from stationary sources, be more fully addressed in the Final EIS. EPA will continue working with the Coast Guard to determine CAA Section 112(r) applicability to the Cabrillo LNG Deepwater Port.

We appreciate the opportunity to review this DEIS and look forward to continuing as a Cooperating Agency in the NEPA process. When the Final EIS is released for public review, please send three copies to the address above (mail code: CMD-2). If you have any questions, please contact me or David P. Schmidt, the lead reviewer for this project. David can be reached at 415-972-3792 or schmidt.davidp@epa.gov.

Sincerely,

Original signed by

Enrique Manzanilla, Director
Cross Media Division

Enclosures:

EPA's Detailed Comments
Summary of EPA Rating Definitions

cc: Michael Ferris, U.S. Maritime Administration
Cy Oggins, California State Lands Commission
Michael Villagas, Ventura County Air Pollution Control District
Mohsen Nazemi, South Coast Air Quality Management District
Mark Durham, US Army Corps of Engineers
Jonathan Bishop, Los Angeles Regional Water Quality Control Board
Chuck Damm, California Coastal Commission

Construction Impacts to Air Quality

The DEIS discusses emissions generated during onshore construction, and quantifies those emissions (Section 4.6.4.2 and Table 4.6-2). The document does not discuss whether those construction-related emissions can be reduced, as EPA previously recommended in our scoping comments.

> **Recommendation**: The Final EIS (FEIS) should address mitigation of construction-related emissions of criteria air pollutants and hazardous air pollutants (air toxics). The FEIS should include commitments to adopt a "*Construction Emissions Mitigation Plan*" and to work with the local air pollution control districts to implement specific measures contained in the Plan. Mitigation measures should include the following commitments:
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> - Reducing emissions of diesel particulate matter (DPM) and other air pollutants by using particle traps and other technological or operational methods.
> - Ensuring that diesel-powered construction equipment is properly tuned and maintained, and shut off when not in direct use.
> - Prohibiting engine tampering to increase horsepower.
> - Locating diesel engines, motors, and equipment as far as possible from residential areas and sensitive receptors (schools, daycare centers, and hospitals).
> - Requiring low sulfur diesel fuel (<15 parts per million), if available.
> - Reducing construction-related trips of workers and equipment, including trucks.
> - Leasing or buying newer, cleaner equipment (1996 or newer model), using a minimum of 75 percent of the equipment's total horsepower.
> - Using engine types such as electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations.

Operational Impacts to Air Quality

Clean Air Act - General Conformity

The DEIS discusses federal General Conformity (GC) requirements under the CAA and identifies various air impacts associated with the project that could be subject to the GC requirements (Section 4.6.4). In early December 2004, EPA and other agencies received -- and are currently reviewing -- a preliminary draft GC determination developed by the Coast Guard. The GC determination will address air pollutants that are emitted in either the Ventura County or the South Coast Air Basin non-attainment or maintenance areas. We note that not all air pollutant emissions which are reasonably foreseeable consequences of the project need to be included in the GC analysis. For example, emissions which are addressed by the Authority to Construct (ATC) Permit do not need to be included in the GC analysis.

Recommendation: The FEIS should identify all air emissions which are foreseeable consequences of the project. The FEIS should also distinguish air emissions that are included in the inventory for the General Conformity Analyses, and the ATC Permit. The document should clearly identify emissions that are excluded from the GC analysis, and provide the basis for the exclusion. The FEIS should also clarify in Section 4.6 that separate Conformity Analyses will be performed for Ventura and Los Angeles counties, and the basis for doing so. The status of those analyses should be addressed in the FEIS.

Emissions Reduction Credits and Cumulative Impacts

The DEIS discusses that, under the Ventura County Air Pollution Control District's (APCD) new source review (NSR) rules, the project applicant must provide offsets for emissions of reactive organic compounds (ROC) and nitrogen oxides (NO_X) from Cabrillo Port. The Ventura County APCD's NSR rules also require that the emission reduction credits (ERCs) for offsetting ROC and NOx be provided at a tradeoff ratio of 1.3:1 (ERCs:emissions). Further, certain vessel emissions must be included when calculating emissions from the Cabrillo Port, and the amount of ERCs that must be obtained. BHP Billiton has committed to obtain the necessary ERCs within a time frame consistent with the project permitting schedule. However, it should be noted that currently, both in Ventura County and the South Coast Air Quality Management District (AQMD), there is a general shortage of traditional ERCs in the open market. For future major proposed sources requiring offsets pursuant to the Ventura County APCD's NSR rules, applicants may need to research innovative ways of offsetting emissions and creating emissions credits. This is a cumulative impact (40 CFR 1508.7) of this project that is not discussed in the DEIS.

Recommendation: The FEIS should include a discussion of the availability of ERCs in the Ventura County APCD and the South Coast AQMD. The potential impact of limited availability of ERCs for major proposed sources listed in Table 4.20-1 (Summary of Proposed and Current Projects in the Area of the Applicant's Proposed Project) should be discussed. In its discussion of mitigation measure MM AIR-2b (NSR Offset Requirement), the FEIS should also state that the Applicant has committed to obtain the necessary ERCs within a time frame consistent with the project permitting schedule.

Emissions from Oceangoing Vessels

Emissions from oceangoing vessels continue to be a large source of air pollution in Southern California. To address this concern, EPA has initiated the *West Coast Diesel Emission Reduction Collaborative* to combine and focus the collective efforts of state, local and federal agencies, and business and nongovernmental organizations to reduce emissions from all sources of diesel, including those of ports and the shipping industry.

The LNG vessels, assist tugs, crew boats, and supply boats associated with this project will add to the ship emissions in Southern California. The ATC Permit will reflect Ventura County NSR Rule requirements which mandate offsets for emissions within District Waters from

the assist tugs, crew boats, and supply boats (LNG vessels are not expected to enter District Waters). Both the DEIS and the Applicant's air permit application indicate the LNG vessels will be fueled by natural gas, and the fuel to be used by assist tugs, crew boats, and supply boats will be California Diesel fuel. While mitigation measure AMM AIR-4a (p. 4.6-16) states that new supply and support vessels will use EPA-compliant engines, it does not reflect the commitments described above.

> **Recommendation**: The FEIS should include a revised mitigation measure AMM AIR-4a that clarifies the commitment made elsewhere by the Applicant that LNG vessels will use natural gas, and that other vessels will use California Diesel fuel. We encourage the Coast Guard and the Applicant to do whatever is possible to minimize the emissions from the LNG vessels (and other vessels), such as using the cleanest engines and low sulfur fuel.

Impacts from Emergency/Accidental Releases

Clean Air Act (CAA) - Section 112(r) Requirements

Section 112(r) of the CAA establishes requirements for the prevention and mitigation of accidental releases of extremely hazardous substances from stationary sources. CAA Section 112(r)(1), the General Duty Clause, directs owners and operators of stationary sources having any amount of an extremely hazardous substance to identify hazards that may result from accidental releases, to design and maintain a safe facility, and to minimize the consequences of releases when they occur. CAA Section112(r)(7), through its implementing regulations found at 40 CFR Part 68, requires owners or operators of stationary sources that have more than a "threshold quantity" of a "regulated substance" in a process to develop a Risk Management Program (RMP). Part 68 lists over 100 extremely hazardous substances as "regulated substance[s]" and specifies a "threshold quantity" for each of those substances.

Table 4.2.6-2 of the DEIS (p. 4.2-50) indicates the CAA Section 112(r) RMP requirements are not applicable to this project because the natural gas pipelines are not a stationary source and there are no major uses on the Floating Storage and Regasification Unit (FSRU) of extremely hazardous substances as defined under the Emergency Planning and Community Right-to-Know Act (EPCRA). However, other aspects of the facility (other than the pipelines) could qualify as a stationary source for purposes of the RMP requirements. Also, the regulated substances for purposes of CAA Section112(r)(7) and its implementing regulations are found at 40 CFR Section 68.130. The EPCRA list of substances is not applicable. Further, the General Duty Clause of CAA Section112(r)(1) applies to any extremely hazardous substance, not just substances listed at 40 CFR Section 68.130.

At the present time, EPA is reviewing the applicability of CAA Section112(r)(1) and the Part 68 regulations to the FSRU, and will continue coordinating with the Coast Guard on this issue.

Recommendation: The FEIS should contain a corrected Table 4.2.6-2 that cites and applies the correct standard for determining the applicability of CAA Section112(r) to the FSRU. The FEIS should include additional information on the applicability of CAA Section 112(r), as provided by EPA.

Public Safety Hazards and Risk Analysis

As part of the preparation of this DEIS, the lead agencies commissioned a team of experts to prepare a site-specific evaluation of the design concept and security plans of the proposed Cabrillo Deepwater Port. An Independent Risk Assessment (IRA) was produced that evaluated public safety issues surrounding the FSRU and the onshore pipeline. Based on both the scoping meetings and the public hearings for the DEIS, concern about public safety due to potential pipeline failure or terrorist attack of the FSRU has proven to be one of the most controversial aspects of this project.

While the results of the IRA described in the DEIS provide valuable site-specific information on safety risks, the public has expressed concerns about the validity of the reported results. This is due, in part, to comparisons with other LNG risk studies for different projects and situations that produced results much different than the IRA for this project. Two such sites include the 1977 Environmental Impact Report (EIR) produced for the Oxnard City Council for a previously proposed LNG facility, and a 2004 study developed for the Federal Energy Regulatory Commission (FERC).[1] The DEIS does not address the previous studies. Such a discussion could provide valuable information that would help the public and decision-makers understand the differences between this project's IRA and previous studies.

Recommendation: The FEIS should compare the assumptions, methodology, modeling, and results of this project's IRA with risk and safety studies perform for other LNG onshore and offshore facilities, including the assessments prepared for the Oxnard City Council and FERC.

Accidental Onshore Releases

The DEIS addresses emissions from an accident during onshore operations (p. 4.6-20). Impact AIR-6 states that in the event of a pipeline accident, petroleum products could temporarily be exposed to the atmosphere, causing emissions of volatile organic compounds (VOCs). As natural gas has no significant VOC content, this is designated as a Class III impact and no mitigation measures are proposed. The DEIS does not discuss that a pipeline accident could result in fire and the generation of compounds formed during a fire.

Recommendation: The FEIS should discuss the impacts of an onshore pipeline fire resulting from an accident, and the airborne contaminants that could be formed from such

[1] Consequence Assessment Methods for Incidents Involving Releases from Liquefied Natural Gas Carriers, ABSG Consulting Inc. (2004).

a fire. Mitigation measures should be proposed to address environmental and public health impacts from these emissions. Such measures could include emergency public notification protocols, coordination with local emergency first responders, and air quality monitoring procedures.

National Pollutant Discharge Elimination System (NPDES) Permitting

The DEIS states that sanitary wastes from the FSRU would be treated aboard the FSRU. The generated sludge would be containerized for subsequent transfer to shore for disposal, and the liquid part would be discharged to the ocean in accordance with the FSRU's NPDES permit (p. 2-50). This conflicts with information submitted to EPA in the Applicant's NPDES permit application, which states that all sanitary wastes would be containerized and sent to shore. In addition, Impact WAT-8 (p. 4.18-29), which addresses treated discharges, indicates that treated sanitary waste would be discharged, contrary to the NPDES permit application.

Recommendation: The FEIS should clarify the treatment and disposal of sanitary wastes, and be consistent throughout the document. All discrepancies between the DEIS and NPDES permit application should be resolved in the FEIS.

The DEIS states that all rainwater and deck washdown water would flow through deck drains to an oil/water separator before being discharged to the ocean. Bilge water would also be treated in the oil/water separator to meet discharge requirements (p. 2-51). Although the DEIS does not provide an estimate of the amount of water that will be discharged in this manner, the NPDES permit application indicates 1.73 million gallons per year of discharge for an average rain year. In addition, the bilge water which is mentioned in the DEIS as a discharge was not listed in the NPDES permit application.

Recommendation: The FEIS should provide an estimate of the volume of rainwater runoff that will be discharged from the FSRU. Also, the FEIS should describe the nature and volume of bilge water that may be discharged (if any) from the FSRU.

The DEIS references "oily deck drainage" produced on the FSRU (p. 4.18-29), but does not elaborate on the deck equipment, incidents, and other sources that may result in a potential release of oil to the deck of the FSRU. In addition, the DEIS indicates that the oily deck drainage discharge volume is approximately 12,900 gallons per day (apparently a daily average) (p. 4.18-29). From information submitted in the NPDES permit application, EPA understands this to be the volume resulting from a large storm (two-year, 24-hour event for the area). It appears the permit application and the DEIS may be inconsistent.

Recommendation: The FEIS should clarify what is meant by "oily deck drainage," and specify sources that would potentially contribute to that discharge. Also, the FEIS should clarify how the discharge volume of oily deck drainage was calculated.

The DEIS states, "Some discharges from the FSRU would not be regulated. These include the excess water from the submerged combustion vaporizers and ballast water." (p. 4.18-30). These discharges are regulated by the NPDES permit issued by EPA. Although the permit requirement for the submerged combustion vaporizers is correctly stated elsewhere in the document (e.g., p. 2-49), the DEIS does not indicate that ballast water is also regulated by the NPDES permit.

Based on the information in the NPDES permit application, EPA intends to issue a permit for the following discharges: (1) submerged combustion vaporizer water, (2) deck drainage, (3) gray water, (4) desalination unit wastes, (5) non-contact cooling water, (6) ballast water, and (7) fire control system test water.

> **Recommendation:** The identification of water discharges from the FSRU that will be subject to the NPDES permit issued by EPA should match the list described above, and should be consistently identified throughout the FEIS.

Impacts to Waters of the United States

The DEIS indicates that a jurisdictional delineation of waters of the United States, including special aquatic sites, has been completed but not validated by the U.S. Army Corps of Engineers (p. 4.8-11). This delineation is not included in the DEIS, but the document indicates the presence of 26 wetland/surface water features in the proposed project area. The DEIS states seven of these features have characteristics that indicate they are likely to be determined by the Corps of Engineers to be jurisdictional waters and/or wetlands of the United States.

The DEIS provides general information on measures to avoid or minimize impacts to water features during the installation of the pipelines (p. 2-46). These measures include use of Horizontal Directional Drilling (HDD) and suspension of the pipeline in bridge structures. The DEIS states that one measure to be employed to minimize direct impacts to dry or minor water courses would be open-cut-trenching. However, the DEIS does not include sufficient information to demonstrate how this proposed technique would be the least environmentally damaging method for pipeline installation across these types of waterways. The DEIS defers the selection of methods to cross water resources areas to the Clean Water Act (CWA) Section 404 permitting process (p. 4.8-11).

The DEIS includes general statements on the types of aquatic systems within the proposed project right-of-way. However, the information provided in the DEIS on aquatic resources is not sufficient for an assessment of how the proposed project or any of the alternatives could affect the acreage, values, or functions of these aquatic resources.

> **Recommendations:** The FEIS should include the following information to address project-related impacts to aquatic resources:

(1) The draft jurisdictional delineation maps that are pending validation by the U.S. Army Corps of Engineers;

(2) For each identified aquatic resource within the proposed project right-of-way, a description of the type of aquatic resource and the values and functions associated with this specific aquatic feature, and the acreage of this feature within the right-of-way;

(3) While the DEIS states that "specific water-crossing methods would be determined in consultation with appropriate regulatory agencies during the permitting process" (page 4.8-1), the FEIS should disclose the Applicant's preferred water crossing method for each location and the range of alternative crossing methods that could be employed at the location. The method that results in the least environmental damage or impact to each specific aquatic resource location should be identified. Additionally, for each location where an aquatic resource could potentially be affected by the proposed project, provide a description of the type of activity that would result in the impact, provide a list of potential avoidance and minimization measures that can be employed at this specific site, and estimate the acreage of the jurisdictional area potentially affected by the project.

The DEIS states that, for purposes of mitigation, "Impacts on wetlands or waters of the United States that provide habitat for special status plant species shall be avoided, minimized or reduced …" by a series of identified mitigation measures (Section 4.8, emphasis added). The CWA Section 404 (b)(1) Guidelines (40 CFR Part 230) provide that all waters of the United States must be avoided, and impacts minimized and offset, regardless of the appearance of special status species. For special aquatic sites, including jurisdictional wetlands, the Guidelines include a rebuttable presumption that there is a less damaging alternative that avoids discharges of fill material to these special aquatic resource sites.

Recommendation: The FEIS should revise the reference to special status species as the basis for avoiding or minimizing impacts to aquatic resources, and afford full protection to waters and wetlands of the United States as required by the 404(b)(1) Guidelines.

Installation of the pipeline, either by HDD or trenching, will result in the creation of excavated materials. In the case of HDD, the DEIS states that drilling muds would also be used. For the shore crossing HDD activity, the DEIS states that a drilling fluids confinement pit would be constructed, which by the dimensions listed, would confine approximately 11 cubic yards of drilling materials (p. 2-40). The DEIS does not include a discussion of the management of drilling muds or whether the confinement pit is of sufficient size to handle all drilling fluids. Additionally, the DEIS does not address how all excavated materials from the HDD operation would be handled or the disposal location(s) of these materials.

Recommendation: The FEIS should include the specific details for the handling, transport and disposal of all materials, including drilling muds, created from the HDD

operations. The FEIS should document that no excavated material would be stored or disposed of within waters of the United States. A discussion on the ultimate disposal location(s) for all excavated materials from the proposed project should be included in the FEIS.

The DEIS states that sediments at the offshore horizontal drill exit holes were collected and analyzed for potential contamination and that no contamination was detected (p. 4.18-1). No data are presented to substantiate this statement.

Recommendation: All sediment quality data should be included as an appendix to the FEIS to allow independent review and determination of the contaminant levels of dredged or drilled materials.

Marine Protection, Research and Sanctuaries Act of 1972 Applicability

The proposed project is located in open ocean waters subject to regulation under the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA). While the description of the actions associated with the proposed project provided in the DEIS do not appear to include the transport and disposal of materials requiring permits issued under Section 102 of MPRSA, the DEIS is silent on this issue. The DEIS does not address the project's compliance with MPRSA (e.g., page 1-18, Section 1.5).

Recommendation: The FEIS should include a determination of whether the proposed project includes the transport or disposal of materials that would be subject to regulation under Section 102 of MPRSA.

The DEIS indicates that four offshore alternative sites were eliminated from further consideration as they were located within the Channel Islands National Park (page 3-17) and the Channel Islands National Marine Sanctuary (CINMS), and unlikely to be determined to be consistent with the intended uses of these areas. The DEIS (e.g., Figure ES-3, Figure 1.0-1) indicates that the proposed action may occur within the boundaries of the CINMS. The DEIS does not address whether the proposed offshore facility location is consistent with any restrictions on use within the CINMS.

Recommendation: The FEIS should include a discussion on any use restrictions included in the designation language for the CINMS and the consistency of the proposed project with the CINMS.

Safe Drinking Water Act Applicability

The DEIS states that two seawater desalination units powered by waste heat recovery from the power generator engines will produce potable water. The Applicant also plans to use water from the submerged combustion vaporizer (SCV) units to supplement desalination. The SCV water will be treated using ultraviolet light, microfiltration, and activated charcoal filtration

to treat the water to drinking standards (p. 2-50). The document also states that the normal operations crew will number about 30 persons, and the deckhouse will have facilities to accommodate a permanent crew of up to 50.

The federal Safe Drinking Water Act (SDWA) and regulations promulgated pursuant to that Act (40 CFR Part 141) define a *public water system (PWS)* as a system that provides water for human consumption that regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Accordingly, it appears that the FSRU would be considered a PWS. The DEIS does not address this issue.

> **Recommendation**: The FEIS should discuss the classification and regulation of the FSRU as a PWS under the Safe Drinking Water Act. It should make a preliminary determination as to the PWS-type of the facility (i.e., community, non-transient non-community or transient non-community), and provide sufficient detailed information to support that classification.

Cumulative Impacts to Environmental Justice Communities

The DEIS states that the Crystal Energy project would include pipelines that also traverse the City of Oxnard, Ventura County, and the City of Santa Clarita (Section 4.20.3.18). This is the only other project referenced in this section that addresses the cumulative impacts affecting the environmental justice community.

There are other past, present, and reasonably foreseeable future projects or actions that may contribute to cumulative impacts to the environmental justice community. *Cumulative risk*, as defined by EPA, is "the cumulative risks from aggregate exposure to multiple agents for stressors." Examples of possible sources of stress include the existing gas pipeline network, abandoned hazardous waste sites, power plants and other permitted facilities, and urban runoff. The most common indicators of environmental sources of stress and the likelihood of exposure to those stresses include:

- the number of environmentally regulated facilities within a community;
- the proximity of those facilities to the majority of the community's population and the proximity of special groups within the community (e.g., schools) to multiple stresses,
- and behavioral factors that could affect exposure of the community, such as subsistence fishing and gardening.

EPA has developed a framework that identifies the elements of a cumulative risk assessment process and offers a structure to conduct a cumulative risk assessment (Toolkit for Assessing Allegations of Environmental Injustice, November 2004). We can provide a copy of this document upon request.

> **Recommendation**: The FEIS should include an expanded evaluation of potential cumulative risks to the environmental justice community. EPA offers its assistance to the Coast Guard in conducting further analyses of cumulative risk impacts.

Mitigation Measures

The DEIS discusses direct and indirect impact analysis under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and defines four categories of impacts (Classes I - IV). A Class III impact is considered to be an adverse impact that does not exceed an issue's significance criterion (significance criteria are defined for each resource in Chapter 4, Environmental Analysis).

NEPA requires that mitigation measures be discussed for all impacts, even those that by themselves would not be considered significant.[2] However, there are 15 Class III impacts among 10 resources analyzed in Chapter 4 that do not have any mitigation measures proposed for them. The 10 resources are Aesthetics (1), Air Quality (1), Biological Resources - Marine (4), Geological Resources (1), Hazardous Materials (1), Noise (1), Recreation (1), Socioeconomics (3), Transportation (1), and Water Quality and Sediments (1).

> **Recommendation:** The FEIS should discuss mitigation measures for all adverse impacts disclosed in Chapter 4, including the 15 Class III impacts that have no measures proposed in the DEIS.

Consultation with Federal Agencies

The DEIS recognizes that Section 7 of the Endangered Species Act (ESA) requires consultation with U.S. Fish and Wildlife Service (FWS) and National Oceanic and Atmospheric Administrations (NOAA) Fisheries to assure that federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species, or result in the destruction or adverse modification of critical habitat (p. 4.8-47). While referenced in Section 4.8 (Biological Resources - Terrestrial), this requirement is not discussed in Section 4.7 (Biological Resources - Marine), where it would also apply. In addition, the DEIS does not indicate which of the lead agencies for this project will be the lead federal agency for Section 7 consultation.

The DEIS also provides information on the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), and discusses the potential impact of the project to Essential Fish Habitat (EFH) designated under that statute (p. 4.7-8). However, it does not provide information on the consultation process with NOAA Fisheries that is required when federal actions may adversely affect EFH.

> **Recommendation**: The FEIS should describe the consultation process that will occur pursuant to the ESA and the MSFCMA, and indicate which federal agency will take the lead in the consultations. Section 4.7 of the FEIS should also cite the consultation requirements of the ESA.

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[2] See 40 CFR 1502.16(h), Section 1505.2(c), and CEQ Forty Questions No. 19(b). See also EPA's comment on "Mitigation and Pollution Prevention" in our March 31, 2004, scoping letter on the project's Notice of Intent.

SUMMARY OF EPA RATING DEFINITIONS [1]

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACTS OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impact that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

[1] From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."