February 7, 2007

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission (FERC)
888 First St., N.E., Room 1A
Washington, DC 20426

Dear Ms. Salas:

In response to Mr. J. Mark Robinson’s letter of January 11, 2007 to the Maryland Governor’s office, enclosed please find the State of Maryland’s Advisory Report to FERC on the AES Sparrows Point LNG application (Docket Number CP07-62-000).

The State of Maryland is adamantly opposed to the construction of any liquefied natural gas facility at Sparrows Point. As detailed in our report, we have very serious concerns regarding the safety of the proposed project, as well as its impacts to the State’s environment and economy. Specifically, we do not believe that the AES proposal meets the requirements of “remote siting”; adequately addresses threats posed by adjacent land uses; provides for the safe evacuation of the public in the event of an emergency; addresses the significant environmental impacts associated with dredging, air emissions, and pipeline construction; nor recognizes the economic impacts to the Port of Baltimore, commercial, and recreational activities on Chesapeake Bay.

For all these reasons, I urge FERC to recognize the serious negative impacts of this proposal to the State of Maryland, its citizens, environment and economy, and deny approval of this project.

Thank you for your consideration.

Sincerely,

Martin O’Malley
Governor
February 7, 2007

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission (FERC)
888 First St., N.E., Room 1A
Washington, DC 20426

RE: Docket Nos. CP07-62 & CP07-63 – Maryland State Advisory Report

Dear Ms. Salas:

In accordance with the provisions of the Energy Policy Act of 2005 (Title III, Subtitle B, Section 311), the Maryland Department of Natural Resources (DNR), acting through the Power Plant Research Program (PPRP), herewith transmits an “Advisory Report” to highlight State and Local concerns for the proposed AES Sparrows Point LNG project that was applied to FERC, under Docket No. CP07-62 (terminal) and Docket No. CP07-63 (pipeline), on January 8, 2007.

As you are aware, the Governor of the State of Maryland has designated PPRP, within DNR, as the contact for the State of Maryland on this matter. Accordingly, the comments provided herein reflect the comments of the State and Local agencies outlined within the attached report. Our comments are intended to assist FERC, the U.S. Army Corps of Engineers (ACOE), and the U.S. Coast Guard (USCG) to ensure that the overall evaluation of the proposed facility relative to potential impacts to all human and natural resources is integrated, comprehensive, complete and accurate. As such, the Advisory Report is inclusive of safety, environmental, and other concerns with the proposed project.

Please note that State of Maryland has produced the Advisory Report within 30 days of the application as requested in Section 3 of the Natural Gas Act. However, the State of Maryland filed a motion to FERC on February 1, 2007, requesting a two week extension to account for the transition of recent administration changes in Maryland. FERC denied this request for an extension on February 6, 2007. In order to comply with the 30-day deadline, many of the issues and concerns discussed in the report were based on materials submitted to FERC during the pre-filing process. The formal application was reviewed by the State of Maryland and comments were added or revised based on any new information presented in the application. However, it is important to note that given the short timeline, the State’s review of the formal application is still ongoing and additional issues or comments could be identified as the FERC licensing process proceeds.

* * * * *

Tawes State Office Building • 580 Taylor Avenue • Annapolis, Maryland 21401
410.260.8DNR or toll free in Maryland 877.620.8DNR • www.dnr.maryland.gov • TTY users call via Maryland Relay
Given its responsibility for protecting and managing the State’s natural resources, the Maryland DNR has a significant amount of information potentially relevant to the assessments to be performed by the FERC and USCG. Therefore, please consider us an informational resource, and do not hesitate to contact us if you need assistance in evaluating any of the issues related to this project.

Sincerely,

Richard I. McLean
Senior Project Manager

enclosure: State of Maryland Advisory Report

cc: Secretary Griffin, DNR
    Secretary Richardson, MDA
    Secretary Hall, MDP
    Secretary Bishop, DBED
    Secretary Porcari, MDOT
    Secretary Wilson, MDE
    Director Davis, MEA
State of Maryland
Advisory Report

A Response to the Proposed
AES Sparrows Point LNG Project

7 February 2007


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EXECUTIVE SUMMARY

On January 8, 2007 AES Sparrows Point LNG, LLC (AES) filed a formal application with the Federal Energy Regulatory Commission (FERC) to construct and operate a new Liquefied Natural Gas (LNG) import, storage, and regasification facility located at the former Sparrows Point shipyard in Baltimore County, Maryland.

The State of Maryland is opposed to this project. Former Governor Robert Ehrlich, Jr. and current Governor Martin O’Malley as well as County Executives (Baltimore, Cecil, and Harford Counties) have formally expressed opposition to this project to FERC. The State’s opposition to the project is rooted in a number of safety concerns. The safety or risk issues of principal concern are as follows:

- The AES Sparrows Point project does not meet the State of Maryland’s concept of “remote siting”. The proposed location of Sparrows Point in Baltimore County, Maryland is a populated, industrial area. The proposed facility will be developed on 80 acres of a 175-acre land parcel, resulting in a compressed facility footprint and very limited buffer area, especially in comparison to Maryland’s other LNG Terminal, Cove Point, which is sited on over 1,000 acres of site property.

- The terminal is located approximately one mile from the second largest blast furnace in the USA, Mittal Steel. The individual risk from the proposed LNG facility to a hypothetical steel worker is estimated to be on the order $5 \times 10^{-6}$ per year (or greater than one in a million frequency).

- A proposed ethanol production plant north of the terminal should be considered as an additional receptor and source of confinement for a vapor cloud and a potential source of ignition. The project is currently awaiting final permits and approvals to begin groundbreaking and construction. This project has been openly supported by the local community and would be operational within 12 months. The LNG facility would result in risks estimated to be greater than $10^{-6}$ per year (predominantly flash fire or vapor cloud explosion scenarios) to existing or proposed installations (e.g., the proposed ethanol plant) within approximately 850 yards of the facility boundary.
• The State of Maryland has determined that the proposed site layout creates unnecessary risks that require further evaluation (e.g., equipment orientation, tank containment, and jetty impacts).

• The existing roadway infrastructure for the proposed location has limited egress routes and is located on a peninsula, further limiting any potential expansions to existing roadways. Therefore, emergency response by surrounding communities and public services would be difficult.

In addition to the safety concerns noted above, the State of Maryland has other concerns with the project as well. Some of these other concerns are as follows:

• AES anticipates the need to dredge approximately 4 million cubic yards of material for the project. The application states the need to dispose 2.6 millions cubic yards of dredged materials at disposal sites yet to be determined. Alternative disposal options must be identified for the disposition of these materials, as disposal of this volume of material is very conceptual.

• An LNG facility may not be the best use of the Port of Baltimore in terms of economic development. Access to waterways would be impeded by the security zones surrounding LNG vessels. The impacts on the Port-related and recreational maritime industries that are currently so economically valuable to Maryland, would undoubtedly be affected.

• AES needs to identify the commitments to offset Nitrogen Oxide (NO\textsubscript{x}), Volatile Organic Compounds, and Sulfur Dioxide emission. In addition, the quantities of NO\textsubscript{x} emissions to be offset are very high and purchasing these offsets may be infeasible or very costly. AES should provide an analysis of such large quantities.

• The proposed ethanol production plant will occupy the parcel that the proposed project has designated as 20 acres of temporary construction storage.

• The State of Maryland has considerable concerns about how the pipeline will be secured, operated and managed within state-owned highway right-of-way and information regarding how the applicant intends to utilize state owned ROWs should be provided. The applicant’s plan for the right-of-ways appears to conflict with the State of Maryland’s plans for expansion and improvements to major highways including I-95, US 1, and MD 152.
- The law establishes a State review process within which all applicable State permits/approvals must be reviewed and processed as part of the Coast Facilities Review Act (CFRA) permit application. CFRA also requires Baltimore County to certify the proposed project complies with all local land use requirements. Currently, the State of Maryland is in the process of reviewing AES’s application received on January 9, 2007, for completeness in accordance with the requirements of CFRA.

- On January 16, 2007 Bill No. 9-07 was introduced into the Baltimore County Council prohibiting the establishment or expansion of a LNG facility in the Chesapeake Bay Critical Area of Baltimore County. The measure received final approval by the Council and was signed into law on February 5, 2007. The prohibition will be included in the Baltimore County Zoning Regulations.

Greater details regarding the concerns discussed above as well as additional concerns are presented throughout the balance of this Advisory Report.
1.0 INTRODUCTION AND BACKGROUND

1.1 RESPONSE TO APPLICATION

In March 2006, AES Sparrows Point LNG, LLC (AES) submitted a pre-filing application with the Federal Energy Regulatory Commission (FERC) to construct and operate a liquefied natural gas (LNG) terminal and associated pipeline located at Sparrows Point, Baltimore County, Maryland. Subsequently, AES continued the FERC application process by submitting 13 draft environmental resource reports to FERC that provide background information on the AES Sparrows Point LNG project. On January 8, 2007 AES filed its formal application with FERC under Docket No. CP07-62 (the terminal) and Docket No. CP07-63 (the pipeline). AES provided the Maryland State Agencies electronic and hard copies of the complete application including all 13 environmental resource reports.

In accordance with the provisions of the Energy Policy Act of 2005 (Title III, Subtitle B, Section 311), the Maryland State Agencies have the opportunity to prepare an “Advisory Report” to highlight concerns related to the subject project with respect to the application. Although the focus of this report is on State and local safety concerns, other potential impacts or concerns of the proposed project are also addressed. It is the intent of this Advisory Report to assure that the State’s concerns and interests are presented to FERC prior to the development of the Draft Environmental Impact Statement (DEIS) thereby allowing FERC to take these concerns into consideration in the development of the DEIS.

1.2 REGULATORY BACKGROUND

The Energy Policy Act of 2005 included the addition of language to the Natural Gas Act. Specifically, Section 3 of the Natural Gas Act has a new section under Section 717b-1, Chapter 15B of the United States Code (USC). Section 717b-1 codifies a portion of Section 3 of the Natural Gas Act, which addresses the siting, construction, expansion and operation of LNG terminals specifically dealing with state and local safety considerations related to LNG terminals. Section 717b-1(c) allows a state to provide an Advisory Report on safety considerations to FERC no later than 30 days after an application is filed with the Commission. Section 717b-1(b) outlines that the state and local safety considerations to be included, which are as follows:
(1) the kind and use of the facility;

(2) the existing and projected population and demographic characteristics of the location;

(3) the existing and proposed land use near the location;

(4) the natural and physical aspects of the location;

(5) the emergency response capabilities near the facility location; and

(6) the need to encourage remote siting.

These considerations were taken into account during the review process and any issues or concerns related to these considerations are discussed in Section 3 of this report.

1.3 STATE AND LOCAL AGENCIES

Pursuant to Section 311 of the Energy Policy Act of 2005 and Section 3, 15 USC §717b-1(b), of the Natural Gas Act, the Power Plant Research Program (PPRP) was designated by the State of Maryland Governor’s office to be the lead agency for the purpose of coordinating with FERC throughout the AES Sparrows Point LNG project. PPRP is a program within the Maryland Department of Natural Resources (DNR), which evaluates the siting of electric generating facilities and related energy issues on behalf of the State of Maryland.

Consistent with its role as the lead agency in coordinating with FERC on behalf of the State of Maryland for the AES Sparrows Point LNG project, PPRP is the lead agency in the development of this Advisory Report. However, the issues of concern provided within this report are not limited to the concerns of PPRP. The Maryland State and local agencies (herein referred to collectively as the “State of Maryland”) that have participated in the preparation of this report and that will continue to provide support throughout the AES Sparrows Point LNG project include the following:

- Baltimore County Government (BCG);
- Coastal States Organization (CSO);
- Harford County Government (HCG);
- Maryland Department of Agriculture (MDA);
- Maryland Department of the Environment (MDE);
Maryland Department of Business and Economic Development (DBED);
Maryland Department of Natural Resources (DNR);
Maryland Department of Planning (MDP);
Maryland Department of Transportation (MDOT);
Maryland Energy Administration (MEA); and the
Maryland Port Administration (MPA).

While the issues of concern expressed by Baltimore County government are contained in the body of this report, Baltimore County comments on the proposed project are also included in their entirety as Appendix A.

In addition to the agencies listed above, it is important to note the involvement of another organization that is participating in the AES Sparrows Point LNG Project review: The Baltimore County Liquefied Natural Gas Task Force (herein referred to as the “Task Force”). The Task Force was established by Senate Bill 996 during the 2006 Maryland General Assembly Session to study issues concerning the proposed AES Sparrows Point LNG Project.

Although the Task Force has not contributed to this Advisory Report, the Task Force has conducted its own independent review of the AES Sparrows Point LNG Project based on pre-filing materials submitted to FERC by AES (the complete application was not yet available to the Task Force at the time of issuance of their report). The Task Force Final Report, which includes findings and recommendations concerning the proposed project for FERC to consider, is included in its entirety as Appendix B to this Advisory Report. It is important to note the comments expressed within the Task Force Final Report are not necessarily endorsed by or incorporated into the findings of the State of Maryland.
AES proposes to construct and operate a new LNG import, storage, and regasification facility. The facility is proposed to be located on an approximately 80-acre parcel within the Sparrows Point Industrial Complex on Sparrows Point peninsula, east of the Port of Baltimore in Baltimore County, Maryland. Approximately 35-acres of this parcel is located in a near-shore riparian rights area. The facility would consist of a marine terminal, three on-shore storage tanks, the equipment to convert LNG to gas, and various support buildings and systems. The three storage tanks would each be 170-feet high and 270-feet in diameter with a capacity to store 42-million gallons (160,000 cubic meters) of LNG. In addition, an 88-mile pipeline would extend from the facility through Baltimore, Harford, and Cecil Counties, MD and Lancaster and Chester Counties, PA to a terminus near Eagle, PA. The pipeline would have a planned capacity of 1.5 billion standard cubic feet of natural gas per day (bscfd) and have an estimated total land requirement of 545.4 acres.

LNG would arrive at the AES terminal by ship and offloaded to three shore-side storage tanks, regasified to natural gas onsite, and the regasified natural gas transported to consumers by the pipeline. Operating at full capacity would require offloading a ship every two to three days. The facility would have a regasification capacity of 1.5 bscfd, with the potential to expand to 2.25 bscfd. Regasified natural gas would be delivered to markets in the Mid-Atlantic Region and northern portions of the South Atlantic Region via the pipeline.

In addition to the LNG facility, in its pre-application submission, AES proposed to build a Dredge Material Recycling Facility at Sparrows Point to process dredged sediment during the 18 to 24 month construction phase. This facility would dewater and stabilize dredged sediment into a form suitable for shipping off-site. The facility would occupy 5-acres of upland property adjacent to the LNG facility. As much as 4.0-million cubic yards of dredged material are estimated to be generated for recycling. Transport of the processed dredge material off-site would require 220 truck trips per day away from the site. AES is also considering construction of an approximately 300 megawatt (MW) natural gas-fired electricity generating station near the LNG facility.
This section of the Advisory Report presents the State of Maryland’s concerns regarding the major safety aspects of the proposed AES Sparrows Point LNG terminal. Due to the fact that the State of Maryland had only 30 days to submit this Advisory Report, many of the issues or concerns discussed herein are based on materials submitted to FERC during the pre-filing process. The formal application has been reviewed by the State of Maryland and comments have been added or revised based on any new information presented in the application. Per the “Confidentiality and Non-Disclosure Agreement” (signed in September 2006), the State of Maryland’s review included the examination of both privileged and Critical Energy Infrastructure Information (CEII) materials by selected staff. However, it is the intent and belief of the State of Maryland that the information and conclusions reached in this Advisory Report are considered public information and therefore do not compromise the signed agreement.

The State of Maryland prepared this Advisory Report by reviewing both pre-filing and application materials. However, it is important to note that the State’s review of the formal application is still ongoing and additional issues or comments could be identified as the FERC licensing process continues.

3.1 OVERALL CONCERNS

The State of Maryland has sponsored an independent risk study for the proposed project. There are no known current standards in the United States that evaluate maximum individual risk (i.e., accounting for a person’s presence at a given location). Therefore, other jurisdictions on an international basis were considered. In one case, the United Kingdom maximum individual risk to which members of the public can be exposed is 1 x 10⁻⁴ per year (or a one in 10,000 chance per year). The overall conclusions from the study are considered to lie within an “as low as reasonably practicable” (ALARP) region when both individual and societal risks are taken into consideration and matched against criteria from multiple international locations. This means that AES should demonstrate they have considered and implemented all reductions to risks in the design and construction of the facility that are not disproportionate to the costs of those measures.
According to the application, AES proposes that 20 acres of the proposed facility is designated as available for temporary construction storage. However, that site location is the parcel designated for a proposed ethanol production plant. The ethanol plant project is currently awaiting final permits and approvals to begin groundbreaking and construction. This project has been openly supported by the local community and would be operational within 12 months. The State of Maryland considers this discrepancy a concern as revisions to the site layout could change conclusions by the State of Maryland’s evaluation as well as the evaluations of AES and FERC.

The principal safety standard to which the AES Sparrows Point facility will be subject is the National Fire Protection Association (NFPA) Standard 59A. All NFPA 59A clauses pertinent to impoundment and channeling provisions for accidental releases of LNG appear to be met. However, it is important to note that the benefits of the proposed insulated collection/containment system would be significantly reduced or compromised if the release occurs during a precipitation and/or flooding event and the surface of the collection/containment system becomes wetted with water that is significantly warmer than the LNG.

3.2 ONSITE CONCERNS

Site Layout

The State of Maryland’s review of the proposed layout of the AES Sparrows Point LNG terminal indicates that onsite safety (in terms of occupied buildings and potential for escalation) may be of more concern than the risk to off-site populations. It appears that the current site layout does not make best use of the space available.

More specifically, NFPA 59A paragraph 4.4.2 states that a control center shall be located apart from or be protected from other LNG facilities so that it is operational during a controllable emergency.

The separation between the Security Building / Control Room and the high pressure methane metering unit has been identified as a possible issue. Consideration should be given to the relocation and reorientation of the Compressor Building, HP pump structure and HP vaporizers to facilitate the relocation of send-out metering away from the Security Building / Control Room. It is inherently safer to locate a full containment LNG storage tank 50 feet from an occupied building than a methane metering unit at 2000 psi.
**Tank Containment**

The LNG storage tanks are of full containment design (i.e., inner metal tank surrounded by a concrete outer tank designed to hold the entire tank contents in the event of an inner tank failure). The outer concrete tank is essentially a full height impounding wall with a very short separation from the inner tank. NFPA 59A paragraph 5.2.2.5 states that dikes and impounding walls shall meet the following requirements: “Where the outer shell of a double-wall tank complies with the requirements of 5.2.1.1, the dike shall be either the outer shell or as specified in 5.2.1.1.” and “Where the containment integrity of such an outer shell can be affected by an inner tank failure mode, an additional impounding area that otherwise satisfies the requirements of 5.2.1.1 shall be provided.”

In the event of an inner tank failure scenario having the potential to affect the containment integrity of the outer shell (e.g., an internal pump being dropped), and if the intention of paragraph 5.2.2.5 part 5 of NFPA 59A is to evaluate all possible failure scenarios, then the Sparrows Point design should allow for an additional impounding area (i.e., in addition to the proposed concrete outer tank) that otherwise satisfies the requirements of section 5.2.1.1.

**Jetty and other Marine Aspects**

The jetty arrangement at the terminal provides a clear advantage and disadvantage in terms of risk. There is a reduced likelihood of being struck by a passing vessel during offloading as the jetty does not extend significantly into the waterway. However, the disadvantage of the proposed configuration is that two ships at berth simultaneously gives rise to a semi-confined volume that can significantly increase the blast overpressure of a vapor cloud explosion should a significant release occur during offloading (the sea, jetty, and two ship sides would form a semi-confined volume in which methane could collect prior to ignition).

It is important to note that there could also be risks related to the movement of LNG carriers from the Atlantic Ocean through Chesapeake Bay but these evaluations are ongoing.

3.3 **OFF-SITE CONCERNS**

The terminal is located approximately one mile from the second largest blast furnace in the USA. In the extremely unlikely event of a large LNG release, this adjacent steel foundry, Mittal Steel, gives rise to sources of congestion and confinement for dispersing flammable gas (and the
accompanying possibility of a vapor cloud explosion) in addition to multiple direct and indirect ignition sources. The individual risk from the proposed LNG facility to a hypothetical steel worker is estimated to be on the order $5 \times 10^{-6}$ per year (or greater than one in a million frequency). This individual risk level is considered to lie in an ALARP when matched against criteria from multiple international locations.

Another potential concern is the neighboring proposed ethanol production plant north of the terminal. The LNG facility would result in risks estimated to be greater than $10^{-6}$ per year (predominantly flash fire or vapor cloud explosion scenarios) to any existing or proposed facilities (including the proposed ethanol production plant) that are within approximately 850 yards of the LNG facility boundary.

The nearest residential populations to the terminal are located approximately one mile from the site boundary. Based on the design of the impoundment and channeling system, it is expected that initiating events large enough to impact areas equal to or greater than one mile from the terminal are on the order of one in 100,000 chance per year (It is important to note that not all properties at a location one mile or greater from the terminal will have this level of risk, as several other variables, including wind direction, wind speed, atmospheric stability and ignition and harm probability all influence the impact footprint of events).

Of additional concern is if and how a pipeline would cross major grades or water ways when within the State right-of-way. Homeland Security has focused attention on pipelines on bridges as potential terrorist targets. The documentation to date has not focused on this issue and must. The Maryland State and Maryland Transportation Authority (MdTA) Police must be a part of the consideration and analysis of these issues and specifically to determine whether the Bay Bridge and/or the Key Bridge should be closed to traffic or require other restrictions when LNG tankers pass under or near them. The State of Maryland notes that water and land-side security and emergency management issues are not clear and must be addressed.

The State of Maryland believes it would be unwise to reduce the safety/security zone and it is prudent to extend it where reasonable. A security zone is needed around any LNG tanker moored at the proposed terminal. Steps are needed to establish or enhance warning processes and citizen/State employee communications at locations in the State including: the Bay Bridge, Francis Scott Key Bridge and associated facilities, and Sandy Point State Park. AES should provide the funding required to implement and operate such necessary infrastructure.
3.4 EMERGENCY RESPONSE

The State of Maryland has significant concerns with respect to emergency response resources and capabilities in the event of a significant LNG release. The primary concern relates to the ability to evacuate the immediate surrounding areas in the event of an emergency at the facility. Specifically, as the proposed site is located on a peninsula, the existing roadway infrastructure has limited ingress and egress points limiting potential roadways expansion options and impeding emergency response time. An additional concern is the fact that a significant portion of the surrounding population communicate in languages other than English, which could potentially lead to communication difficulties during an emergency. Furthermore, there are a substantial number of schools and religious establishments located in the immediate vicinity of the proposed facility, increasing the potential number of individuals present during an emergency evacuation.

In addition to concerns regarding egress during an emergency evacuation, the State of Maryland also has concerns regarding emergency response capability. Neither Baltimore County, the surrounding counties, nor the State of Maryland itself have sufficient equipment or trained staff to respond to an emergency situation at an LNG facility or ship. Currently, these emergency response capabilities do not exist, and the training and equipment necessary to adequately respond in an emergency situation would require significant capital expenditures and resource allocation by local and State governments.

3.5 REMOTE SITING

According to the Natural Gas Act, Remote Siting is a primary consideration in terms of safety. The State of Maryland’s interpretation of “Remote Siting” is that LNG terminals shall be preferentially placed in remotely populated areas and prohibited in densely populated areas.

The size of the land parcel where the Sparrows Point facility is proposed to be located is small in comparison to other LNG facilities, meaning that the potential for incident escalation is likely to be inherently higher than other similar capacity facilities. Table 3-1 below compares the proposed Sparrows Point facility with the only active LNG terminal in the State of Maryland: the Cove Point LNG Terminal located in Calvert County, Maryland. Sparrows Point is compared to Cove Point’s current conditions and the recently approved facility expansion (approved by FERC in 2006).
Table 3-1  Comparison of Maryland LNG Facilities

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<tr>
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<th>Cove Point Current</th>
<th>Cove Point Expansion</th>
<th>Sparrows Point Expected</th>
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<tbody>
<tr>
<td>LNG Tanks</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Total LNG Tank Storage (m$^3$)</td>
<td>375,000</td>
<td>695,000</td>
<td>480,000</td>
</tr>
<tr>
<td>Site Area (acres)</td>
<td>1,017</td>
<td>1,017</td>
<td>175</td>
</tr>
<tr>
<td>Developed Footprint (acres)</td>
<td>108</td>
<td>130</td>
<td>80</td>
</tr>
<tr>
<td>LNG Ship Traffic (ships/year)</td>
<td>90</td>
<td>200</td>
<td>130</td>
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</tbody>
</table>

Comparing the developed footprints of the existing Cove Point facility and the proposed Sparrows Point facility and the overall property size of both facilities, it is clear that the Cove Point LNG terminal is a better example of “remote siting”. The Sparrows Point location is proposed to be located in a densely populated, industrial area that the State of Maryland does not consider to be consistent with the intent of “remote siting”.


4.0 ENVIRONMENTAL CONCERNS

In addition to the safety concerns, it is important to consider other concerns related to the proposed facility. It is the obligation of the State of Maryland to ensure the proposed facility is acceptable relative to potential impacts to all human and natural resources. Accordingly, the State of Maryland is including in this Advisory Report environmental concerns relative to the proposed AES Sparrows Point LNG Project. The FERC process requires the applicant to prepare 13 Environmental Resource Reports as part of the pre-filing process and to include these reports with the application. To be consistent with the FERC licensing process, Resource Reports were considered when determining the environmental concerns outlined in this section and specific Resource Reports will be cited or referenced where appropriate.

4.1 WATER USE AND QUALITY

Dredging

LNG vessel characteristics need to be examined in reference to water draft requirements. According to the application, AES is anticipating a need to dredge up to 4 million cubic yards of Patapsco River sediment to accommodate the LNG ships. The current agreement between the site owner and the MPA is to accept up to 600,000 cubic yards into the Hart-Miller Island Dredge Materials Containment Facility (DMCF) through January 2007. The expected amount of dredging far exceeds the MPA’s ability to contain dredged materials. The AES application states the need to dispose of 2.6 million cubic yards of dredged materials at disposal sites yet to be determined. The amount of actual dredged material needs to be solidified as conflicting numbers and ranges are presented often. More importantly, reasonable, affordable, and viable alternative disposal options must be identified for the ultimate disposition of this excess material. The disposal of these sites will require review and approval by MDE.

AES correctly understands that MPA containment facilities will not be made available for this project. In addition, the proposed Masonville DMCF is expected to commence operation within this time frame, but in combination with MPA’s Cox Creek facility, will only be able to accommodate two-thirds of Baltimore Harbor’s existing average annual dredging requirements. AES proposes that the most cost effective way to dispose of this material is to process it on site and sell it as a beneficial re-
use material. Given the State of Maryland’s understanding of the high costs and low demand currently associated with this process, from extensive recent research on this topic, this plan does not appear viable. A market business plan needs to be developed to demonstrate the material recycling case and the viability of upland and ocean dumping need to be explored in much greater detail than what is currently presented in the Resource Reports.

Due to the inadequate annual capacity that the Cox Creek and proposed Masonville containment facilities provide, the completion of another DMCF project by no later than 2013 is paramount to meeting the Harbor’s dredging needs in the foreseeable future. As recommended by the Dredging Material Management Plan (DMMP) Harbor Team, and approved by the DMMP Executive Committee, the MPA is studying the feasibility of the next dredge material containment site to be at Sparrows Point. Toward this end, MPA is currently developing an environmental impact statement (EIS) for alternative plans to construct a DMCF on underutilized property within and around the property being proposed for the LNG project. This is the only site identified by the DMMP Harbor team that can meet both the 2013 deadline and the capacity needs. Originally, MPA proposed a 400 plus acre DMCF in the water just south of the Sparrows Point Peninsula. However, due to input from both the regulatory agencies and community/citizens groups, the MPA has concluded that a dredged material placement site at Sparrows Point, which would encompass an extensive amount of water bottom, is not the appropriate way to proceed. Thus, the MPA is working to configure and design a placement site at Sparrows Point that provides sufficient capacity to be economical, while also allowing for future terminal development.

Ultimately, it is anticipated that this facility will be converted to a marine terminal once it reaches its ultimate capacity for dredged material. For this reason, there are dike height limitations that serve to decrease the ultimate DMCF capacity. Therefore, nearly 500 acres would be required to provide the same capacity as the proposed water site. While the MPA has been focusing on the Southwest corner of the Sparrows Point peninsula, to provide sufficient capacity, a portion of the current Shipyard site is being evaluated as an area that could be incorporated into the dredge placement site and eventual marine terminal.

The Sparrows Point peninsula represents the last underutilized property of its kind and size in the Baltimore Harbor and therefore should be preserved for future use as a marine terminal. Over the course of this year, MPA should be finalizing its plans for the DMCF footprint and future terminal needs and will communicate how these needs would likely impact the AES proposal.
PCB Levels

AES tested sediments for contaminants in the areas proposed for dredging and found contamination of shallow and intermediate sediments by PAHs, several metals, and dioxins at some sites; no PCBs or pesticides were found with the methods used. Contaminant levels were consistent with other samples taken elsewhere in the Baltimore Harbor area. AES also performed elutriate tests, which give some indication of the amount of contaminants that may be released during the dredging process. Results of these tests showed that only lead and nickel concentrations exceeded the most restrictive of marine chronic water quality criteria, from a composite sample of 3 stations nearest the existing shipyard, some of which are no longer in the areas proposed for dredging. However, the PCB test method used is not sensitive enough to estimate PCB toxicity (see below); additional sediment and elutriate tests using congener-specific methods should be performed on samples collected in the area proposed for dredging.

Models and calculation techniques are available to estimate how much contaminated material might be released during the dredging process, based on the available analytical results; additional analysis for PCBs using more sensitive methods is needed at sites where dredging is proposed (see below). Techniques are also available for estimating how much contamination is being continuously released from the existing sediment in the absence of dredging. We believe this analysis should be done, to show the relative amount of contaminant release from existing sediments which is occurring in the absence of dredging and how much may occur as part of the dredging process. Results may show whether removal of contaminated sediments from the marine environment using an environmentally sensitive method would reduce mobilization of contaminants into the environment. Once the contaminants are removed by dredging, they will no longer be leaching into the water column or biomagnified by benthic organisms living in the sediments. These long-term effects need to be balanced against the short-term effects of contaminant release which may occur as part of the dredging process.

According to Resource Report 2, the test method used (8081A) to determine PCB levels in the sediment provided only minimal quantification of PCB levels since all samples were below the detection levels. Therefore, this test method is inappropriate to characterize the environmental conditions. During dredging, PCBs contained in up to 4.0 million cubic yards of sediment would be re-exposed to the aquatic environment. Since large amounts of sediment are involved, even low concentrations can have a significant effect on the environment. MDE uses test method 1668A, which has a more appropriate detection level.
Test method 8081A evaluates Aroclors rather than congeners. This is significant because it makes calculations of toxicity nearly impossible. It should be demonstrated that water column PCB concentrations would not exceed toxicity criteria during dredging. Benthic organisms and fish exposures to PCB are important due the high bioconcentration factor of PCBs.

Based upon the above concerns, it is the recommendation of the State of Maryland that:

- Total PCB and congener specific concentrations should be quantified in at least 90% of the samples or it should be demonstrated by the applicant that feasible technology does not exist to do so;

- Total amount of PCBs removed from Baltimore Harbor should be quantified based on volume weighted concentrations (e.g., shallow, intermediate, and deep) measured and the amount of sediment to be removed;

- A comparison of the concentration in currently exposed surface sediment (pre-dredging) to the newly exposed sediment concentrations (post-dredging), including vertical surfaces, should be provided;

- An area-weighted exposure comparison (pre-dredging versus post-dredging) should be provided; and

- The dredging comparisons recommended in this section should be made on a Harbor-wide basis (e.g., exposure surface as a percentage of the total Harbor exposure surface).

**Permitting**

The applicant discusses construction activities such as trenching, de-watering, and backfilling in Resource Report 2 (Section 2.3.6). It is important to note that construction dewatering in Maryland could require a permit to appropriate and use waters of the state if it exceeds 10,000 gallons per day and 30 calendar days (COMAR 26.17.06.03).

According to Resource Report 2 (Section 2.4.5.1), "Testing will be performed using water withdrawn from nearby streams or municipal supplies, primarily the Susquehanna River..." Additionally, Sections 2.4.5.2 and 2.4.9.2 also discuss withdrawal of surface water from the Patapsco River estuary for the purpose of hydrostatic testing of the LNG
tank. About 28 million gallons would be needed for each tank and the proposed withdrawal rate is about 25.6 million gallons per day (mgd), so it would take a little over a day of pumping to fill each tank. It is important to note that any withdrawal from a Maryland water body will require an appropriation permit from MDE in accordance with COMAR 26.17.06.

AES discusses minimizing fishery impacts of this withdrawal and mentions the Water Appropriations Permit under COMAR 26.17.06 and COMAR 26.08.03 regarding cooling water intake and discharge regulations. The latter regulation is only applicable to cooling water intake and discharge, which the AES intake is not. In addition, this regulation has been superseded by recent Environmental Protection Agency (EPA) rules on cooling water intake structures under section 316(b) of the Clean Water Act (40 CFR Parts 9, 122 et al. for new facilities). Nevertheless, it is the State of Maryland’s contention that the requirements under this rule should apply to the AES intake, specifically that the through-screen intake velocity be restricted to 0.5 ft/s. In addition, design and construction technologies or operational measures must be selected and implemented to minimize impingement mortality and minimize entrainment of entrainable life stages of fish and shellfish if any of the conditions are met as specified in the EPA 316(b) rule for new facilities. These conditions would be made part of the Water Appropriations Permit required by COMAR 26.17.06.

4.2 FISH, WILDLIFE, AND VEGETATION

LNG vessel traffic in the upper Bay and particularly in the project vicinity, will affect historically available and projected commercial and recreational water uses. The vicinity has many marinas, private docks and a well-established and growing community of recreational boaters. The area also supports a viable community of commercial watermen (crabbers, clammers, oyster and finfishermen) reliant upon access to historically utilized fishing grounds. The marine exclusion zones that will certainly be imposed by the US Coast Guard to ensure the safety of the LNG-laden vessels will negatively impact recreational boaters.

Resource Report 3 (Section 3.3.3.1) describes a biological assessment of the proposed terminal site and approach channel area. One specific site evaluated is the proposed pier area which would be demolished and the statement is made that only a minimal number of species use this area as habitat. However, this is incorrect, as Tables 11, 12 and 13 in Appendix 3A show. There were 17 benthic species found in the sediments in and around the terminal area in June and 11 in the October samples; there
were 16 epibenthic species found in the pier areas. Additional statements regarding positive impacts to the benthic community that may result from pier demolition are speculative at best and probably incorrect. Much of the existing pier habitat will be removed with its demolition and it is not clear what type of habitat will be created in its place.

AES reported the occurrence of zebra mussels (*Dreissena polymorpha*). However, this is in error as this species occurs in freshwater and has not been documented to occur in waters with salinity greater than 1-2 ppt; salinity in the Baltimore Harbor area frequently exceeds this amount by several ppt. In addition, Appendix 3A which lists the organisms found in the Sparrows Point area, does not list this species. Thus, statements in this section regarding the positive impacts associated with removal of zebra mussels are incorrect, as they do not occur in this area.

Elsewhere in Section 3.3.3.1, AES discusses the potential for dredging to allow water low in dissolved oxygen (D.O.) to reach the approach channel and terminal site by connecting them to the main channel of the Patapsco River estuary. AES states that any decreases in water quality would be unlikely to affect existing biological communities since what is present in the area is adapted to the poor existing conditions. However, the proposed area for channel deepening has a good assemblage of Macoma clams as shown in Appendix 3A, in the June samples but only 1 Macoma was found in the October samples; benthic samples were collected in areas that are presently 30 feet deep or less, while the proposed dredged channel would be 45 feet deep. D.O. values in October, measured when the benthic samples were collected, were well above adequate levels for them. It is unclear whether the decrease in Macoma and other benthic species between the June and October samples was due to poor water quality conditions over the summer. However, D.O. levels at a station 40 feet deep near the main shipping channel were below 1 mg/l from June through September 2006 as reported by DNR. Thus it remains unknown whether dredging would allow water low in D.O. to enter the approach channel and terminal area and thus impede re-establishment of the Macoma beds and other invertebrates; fish habitat could also be affected. The State of Maryland recommends that D.O. measurements in the area proposed for dredging along with measurements of D.O. levels in the adjacent shipping channel are needed during July through September for D.O.-related conclusions to be reached. If results show a potential D.O. impact due to dredging, mitigation may be necessary.

Any disturbances to threatened or endangered species or species in need of conservation habitats that are inside the Critical Area require coordination with the Department of Natural Resources Wildlife and Heritage Division. Any clearing in designated Forest Interior Dwelling
Bird (FID) habitat will require mitigation in the form of the creation of new FIDs habitat. Coordination on FIDs disturbance and mitigation is required as the project moves forward.

### 4.3 CULTURAL RESOURCES

The Sparrows Point Shipyard Historic District is recommended as being eligible for listing on the National Register of Historic Places under criteria A and C and, thus, the District may be affected by the proposed LNG project. Federal and state preservation laws require responsible governmental agencies to examine the impact of their undertakings on significant cultural resources and to take steps to avoid, reduce or mitigate any adverse effects. These laws will apply to the construction and operation of the LNG facility on the Sparrows Point Shipyard Historic District if it is designated a National Historic District.

### 4.4 SOCIOECONOMICS

**Marine Impacts**

The Sparrows Point Shipyard is a valuable industrial property. The use of this property as an LNG terminal may not be the best use in terms of typical economic development because it would preclude future maximal job creation and tax benefits to the state and local jurisdiction. With the LNG plant in place, the City of Baltimore and State would lose the option to restart shipbuilding in this area. Several companies have already expressed interest in the graving docks and facilities of the Sparrows Point Shipyard for ship construction and oil rig construction and repair.

The impact of security zones constraining LNG vessel frequency within the Port of Baltimore will impede the free movement of vessel traffic and could create travel delays and congestion problems that could lead to economic losses at the Port. Such results could cause the loss of business and result in loss of jobs, both immediate and long term. More specifically, access to waterways would be impeded by a security zone for large LNG vessels, and the Port-related and recreational maritime industries that are currently so economically valuable to Maryland, would undoubtedly be affected in a negative way.

Currently, the State of Maryland has an uphill battle in attracting cruise lines and shipping lines to transit the entire length of the Chesapeake Bay to the Port of Baltimore. Because of the potential for vessel delay mentioned above, the proposed LNG terminal will give our existing and
prospective customers another “bargaining chip” while negotiating rates at our terminals, or worse, a reason to do business with other ports.

Further, as discussed in Section 4.2 of this report, LNG vessel traffic in the upper Bay will result in restrictions on commercial and recreational water uses. The fishing industry that is reliant upon access to historically utilized fishing grounds will be impacted. Prevention of commercial waterman from accessing prime fishery areas for significant periods of time will result in further hardships on the upper Bay commercial fishing industry.

*Land Impacts*

The economic impact analysis of the LNG facility and pipeline is adequate, although not completely quantified. However, the transportation impact portion of Resource Report 5 (Section 5.4.1.5) is incomplete. The Resource Report lacks a traffic impact study from construction worker traffic, particularly effects of traffic on highway interchanges and local intersections. Reference to former high employment at Bethlehem Steel on Sparrow’s Point during the 1950’s ignores changes to land use and transportation systems that have occurred in the area over the past 50 years.

Similarly, the traffic impact study needs to consider the additional truck traffic from construction and operation of the LNG facility. AES states that the PDM facility alone will generate 220 truck trips per day for 276 days per year.

The AES-commissioned study of real estate values in the area of the Cove Point LNG terminal in Calvert County, Maryland (Carson, 2006) is not included in the bibliography. A Google search revealed an undated affidavit from Carson on behalf of AES that casts doubt on the scientific value of his conclusions. Furthermore, it is not clear that observations from southern Calvert County are directly transferable to Baltimore neighborhoods.

Public services impacts (Section 5.4.2.4) mentions coordination with local fire, police and rescue services, explicitly in the context of response coverage in case of an accident or injury. AES also needs to coordinate with fire, police and rescue services to enable access to non-project emergencies when roads are temporarily closed by pipeline construction activities. This may be implied in Section 5.4.2.4, but needs to be articulated in one or more emergency services routing plans.
The major communities surrounding the proposed facility are Turner Station, Watersedge, and Carnegie Plats. Approximately 5,000 people live within these communities within 2 miles of the proposed facility. Turner Station is the nearest community (1.1 miles) and is eighty percent African-American. This community is economically distressed and any future impacts would be difficult to overcome.

4.5 LAND USE, RECREATIONAL, AND AESTHETICS

Terminal Concerns

As discussed in Section 3.1 of this Advisory Report, 20 acres of the proposed project site is proposed to be used for temporary construction storage but is located in a parcel designated for a proposed ethanol production plant.

The project is also located in an area that the State of Maryland has identified as an area to be retained for Industrial Port Use. The inclusion of a power plant on the LNG terminal site under consideration is more than likely to be considered an unwanted land use by local jurisdictions that have already agreed to the Port Land Use Commission’s recommendations.

Further, as discussed in Section 4.2 of this report, LNG vessel traffic in the upper Bay will result in restrictions to recreational water uses. Anticipated exclusion zones imposed by the US Coast Guard to ensure the safety of the LNG-laden vessels will negatively impact recreational boaters.

The physical location and layout of the facility and its berthing arrangement need to take into account current land uses and water-side needs of neighboring and contiguous properties. More specifically, as discussed in Section 4.1 of this Advisory Report, the MPA and US Army Corps of Engineers are nearing the completion of a feasibility study and commencing an EIS for the development of a DMCF within a study area that is contiguous to, and south of, the Baltimore Maritime Industries property on which the LNG site is being proposed. Demand for terminal expansion continues to intensify and it is MPA’s current plan for the entire land area immediately south of this property to become a future marine terminal.

The buildings at the terminal site will need to be outside the minimum 100-foot Chesapeake Bay Critical Area Buffer, unless there are components of the operations that are water-dependent and must be
located closer to the water. The Code of Maryland Regulations at 27.01.03.01 A-C provides the definition and reasons for structures to be considered water-dependent. It is the State of Maryland’s understanding that this portion of the shoreline is mapped as a Buffer Exemption Area by Baltimore County, and therefore, could be subject to reduced setbacks.

In Resource Report 8 (Section 8.5.4), Coastal Zone Management Areas, AES notes that LDA and IDA classifications or categories of land development areas allow for use such as the LNG Terminal as they are consistent with the existing development intensity. Although not mentioned in Resource Report 8, AES will be required to reduce storm water runoff at the LNG terminal site in the IDA to a level at least 10 percent below the load generated prior to development. Consequently, the applicant will be required to perform the 10 percent pollutant reduction calculations. This calculation may require a Best Management Practice to address phosphorus leaving the site. This removal requirement is in addition to the storm water management required by MDE and will be a consideration in MDE’s Federal Consistency determination for the project and its report and recommendation to the Board of Public Works on the Tidal Wetland License.

**Pipeline Concerns**

The State of Maryland is concerned with the use of highway rights-of-way for the pipeline. The use of highway rights-of-way is referenced by AES throughout the documents. The application calls for a right-of-way with an easement of approximately 75 feet wide. The easement will mostly consist of a 50-feet permanent Right-of-Way (ROW) and 25 feet of construction right-of-way. In areas where additional working width is necessary (e.g., stockpile topsoil in agricultural lands) the construction right-of-way would be expanded up to 50 feet to accommodate the additional need (thus comprising a 100-feet right-of-way).

The application and documentation state that the proposed pipeline route has been selected to maximize use of existing utility and other rights-of-way. The Mid-Atlantic Express route generally parallels existing rights-of-way for highways, overhead electric transmission and pipelines. The State of Maryland has considerable concerns about how the pipeline will be secured, operated and managed within state-owned highway right-of-way and information regarding how the applicant intends to utilize state owned ROWs should be provided. State Highway Administration (SHA) Utilities Engineers have had preliminary discussions about the project and have seen the documentation available to date but have not seen engineering plans that describe much needed details to address specific issues.
Further, MD 695 and I-95 are controlled access highways that require an exception and concurrence findings from the Federal Highway Administration (FHWA) and a permit from SHA (for MD 695) for siting facilities such as an LNG plant.

An alternative alignment seems also to describe the use of MdTA right-of-way along I-95. Similar concerns and questions should be noted on that alternative as well. AES must contact MdTA about this alternative or the need for permits to bisect their facility on either the primary or any alternative alignment.

The use of I-95 right-of-way conflicts with the State of Maryland’s plans for expansion of I-95. The documents also references the right-to-use the federal highway right-of-way. If this right to use highway rights-of-way is tied to the use of federal funds, it is important to note that the I-95 right-of-way north of MD 43 was not purchased with federal funds.

Construction is underway for the expansion of I-95 from I-895 North to north of MD 43 (I-95 Express Toll Lanes). Further information on the I-95 Express Toll Lanes project is available at http://www.i-95expressstolllanes.com. Also, project planning is underway for the expansion of I-95 from north of MD 43 to north of MD 22 (I-95 Section 200). An environmental document will be published in spring 2008 with a public hearing to be held in the summer of 2008 and a decision document is expected by fall 2008. Please refer to http://www.mdtastate.md.us/mdta/servlet/dispatchServlet?url=/195section200/home.jsp for additional information on the I-95 Section 200 project.

The State of Maryland also notes concerns about how the Primary Route will bisect State roadways. We have considerable concerns about how the pipeline will be secured, operated and managed as it parallels (within ROW) or bisects state highways. Highways of specific concern raised from review of the application and documentation include:

- MD 695 (Parallel);
- US 1, Belair Road (Bisect);
- MD 152, Fallston Road (Bisect);
- MD 23, East West Hwy (Bisect);
- MD 24, Rocks Road (Bisect);
- MD 543, Ady Road (Bisect);
- MD 440, Dublin Road (Parallel);
• MD 623, Castleton Road (Bisect); and
• I-95 (Bisect).

The State of Maryland is also particularly concerned with the potential for how the pipeline impacts our current planning and design of proposed future improvements to US 1, and MD 152 as found in the SHA Highway Needs Inventory (HNI). Multi-lane reconstruction of these roadways along where the Primary Route is described in the application is anticipated.

In addition to highways, the State of Maryland is concerned about how AES will cross class 1 and class 2 railroads and how AES will secure, operate, and manage the pipeline as it parallels or bisects the railways in the area. The following railways that the Primary Route will closely parallel (within ROW) or bisect:

• CSX (bisect & parallel);
• NSC (bisect);
• Amtrak (bisect); and
• Patapsco and Back River Railroad.

Amtrak operates The State of Maryland’s commuter rail service MARC. MARC service operates along the Amtrak Penn line. On each of the railways mentioned above, freight is also transported. The application and documentation provided to date do not address if AES can and will offer contingencies for any service interruptions caused by construction or security issues with the pipeline or LNG facility.

The pipeline portion of the project will require mitigation since clearing is anticipated. Any clearing inside the minimum Critical Area 100-foot Buffer must be mitigated at a 3:1 ratio. Clearing outside the minimum 100-foot Buffer requires mitigation at a 1:1 ratio. The Buffer can be expanded in the case of steep slopes (15% or greater) and highly erodible and hydric soils. Therefore, careful attention must be paid to these sensitive areas since the Buffer may require expansion. We recommend mitigation obligations be coordinated with the affected local government in that mitigation plantings should occur within the same watershed as the impacts, and the local governments may have a listing of priority mitigation and/or restoration sites. It is also important to note that mitigation will be required for impacts to wetlands and waterways resulting from the pipeline.

In Resource Report 8 (Section 8.5.4), Coastal Zone Management Areas, AES notes that LDA and IDA classifications or categories of land
development areas allow for use such as the associated pipeline as they are consistent with the existing development intensity. Although not mentioned in Resource Report 8, AES will be required to reduce storm water runoff at pipeline locations in the IDA to a level at least 10 percent below the load generated prior to development.

Resource Report 8 (Section 8.5.6) notes that construction and operation of the pipeline will not have any permanent impacts on agricultural land subject to conservation easements because these lands will be restored to preconstruction conditions. This is an incomplete characterization of the impact, particularly if construction of the pipeline requires the federal government to condemn a Maryland Environmental Trust easement. The Maryland Agricultural Land Preservation Foundation (MALPF) holds 46,000 acres of farmland in Baltimore, Cecil, and Harford counties and the State of Maryland is concerned the pipeline may compromise future agricultural use of the land.

The Sparrow’s Point site does not impact any Rural Legacy conservation easements. However, the proposed pipeline (alternative route) crosses two Rural Legacy Program conservation easements (Weaver and Powell properties) held by Harford County and located in the Lower Deer Creek Rural Legacy Area. Construction and maintenance of the pipeline may be inconsistent with the terms of the conservation easements. Also, more generally, both the preferred and alternative routes for the pipeline cross the Lower Deer Creek Rural Legacy Area. In general, DNR’s Public Lands Policy and Planning has concern over the location and design of the transmission line running to the north. The “preferred” alignment has the potential to significantly impact public parkland managed by DNR.

The State of Maryland has concerns pertaining to the extensive scope of impact of the pipeline in Harford County. The pipeline route crosses through existing residential areas and within close proximity to schools. Citizens throughout the County have expressed concern towards health and safety, impacts to property value, impacts to private wells, groundwater and surface water contamination, impacts to the Harford County landfill, and disturbance to agricultural operations during construction of the proposed project.

It is important to note that the AES-proposed mitigation plans for affected land parcels in Resource Report 8 (Tables 8.3.5-1, 8.4.2-1, 8.4.3-1, 8.5.1-1, 8.5.5-2) are too generic to be of much use. Outside of this conclusion, there was insufficient time to conduct a micro-impact assessment of the proposed pipeline route and the State of Maryland’s assessment of the pipeline route is still ongoing.
AIR AND NOISE QUALITY

Air Draft General Conformity

The applicant has indicated that they will get emission offsets (i.e., mitigate emissions) to conform to applicable State Implementation Plans (SIPs) during construction and operations. The applicant needs to specify exactly how they intend to mitigate or offset these emissions. If the applicant decides to purchase emissions reduction credits (ERCs) as part of their mitigation plan, then they need to identify all commitments to offset Nitrogen Oxide (NO$_x$), Volatile Organic Compounds (VOC), and Sulfur Dioxide (SO$_2$) emissions and also identify how they will be enforceable. The determination should clarify that the offsets will be a commitment in FERC's Record of Decision. In addition, the quantity of NO$_x$ emissions to be offset is very high and purchasing these offsets may be infeasible or very costly. The applicant should provide an analysis of the availability of such large quantities of offsets.

The State of Maryland notices in the Draft Conformity Document that, although a determination is triggered in one Air Quality Control Regulation (AQCR) (i.e., for having NO$_x$ emissions greater than 25 tons per year (tpy) in AQCR 115 during operations), if emissions in another, nearby AQCR is below its applicability level (i.e., less than 100 tpy NO$_x$ in AQCR 114 during operations), then those emissions are not proposed for mitigation. The State of Maryland and FERC will have to review this determination relative to overall SIP conformity, given the transport issues with ozone.

The applicant should describe emissions from delivery vehicles when estimating indirect emissions during construction and operations.

Based on the manufacturer’s exhaust rates (ACFM) and the stack diameters (ft) presented in Resource Report 9, Appendix 9A, Table 9A-3, 9A-4, and 9A-5, the exhaust velocities (ft/s) appear to be high. The modeling results should be revised if the revised/reduced exhaust velocities would negatively impact the results in Resource Report 9.

Air Permitting

The applicant should address Lowest Achievable Emission Rate (LAER) requirements for the emissions from ship unloading activities. Cold-ironing of ships at berth is becoming more common at shipping ports in cities that are in non-attainment areas.
When evaluating cumulative impacts to air quality, the applicant should consider the air emissions from the ethanol production plant proposed to be located within the Sparrows Point Industrial complex.

**Other Air Compliance**

The applicant should provide more information on the availability of NO\textsubscript{x} allowances for new sources such as the AES LNG terminal and Power Plant under existing and future NO\textsubscript{x} trading regimes.

To further mitigate fine Particulate Matter (PM) emissions from construction sources, the applicant should consider the use of ultra-low sulfur diesel fuel (LSDF) for diesel-powered equipment. Although LSDF will not be required at the time of construction, it will be available in the area for on-road vehicles.

The State acknowledges that the applicant may not be able to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) for PM\textsubscript{2.5} when the background levels currently exceed the NAAQS standards. The State of Maryland will work with FERC to evaluate how to address these impacts. However, the applicant should describe how condensable particulate matter is accounted for in PM\textsubscript{2.5} and PM\textsubscript{10} emission estimates for the project.

According to Resource Report 9, Table 9.3-9, the maximum PM\textsubscript{10} impact, 24-hr average, is 32.2 ug/m\textsuperscript{3} based on the scenario that includes the stationary sources to be permitted (Source Group 6). The Prevention of Significant Deterioration (PSD) increment for PM\textsubscript{10}, 24-hr average, is 30 ug/m\textsuperscript{3}. The applicant should address this apparent exceedance of the PSD increment, even though the source is not a PSD major source for PM\textsubscript{10}. Furthermore, the new NAAQS for PM\textsubscript{2.5}, 24-hr average, is 35 ug/m\textsuperscript{3}. Although PM\textsubscript{2.5} impacts in Baltimore County will be addressed in the future, a single source impact that is a large percentage of the NAAQS may be a concern to MDE. The applicant may consider estimating PM\textsubscript{2.5} emissions separately from PM\textsubscript{10} emissions to address this lower NAAQS.

Since the time the application was submitted, EPA has released a new version of the air dispersion model, AERMOD, which is now version 07026. Although a preliminary evaluation indicates that there is little difference in the results between the version used by the applicant and the new version, the applicant should always use the most recent version available whenever supplemental information is provided. Likewise, in the future, the applicant should use the most recent version of AERMAP available (currently version 06341).
The State has observed some unusual stack parameter data used for some of the smaller sources in the air dispersion modeling. It is recommended that the applicant consult the State air dispersion modelers to resolve any differences in these parameters.

Although it was not identified in the application, plans to utilize barges for the delivery of equipment to the site during construction are unclear. If so, emissions from the associated marine equipment should be accounted for.

The applicant should describe how the heated vent stack would be utilized, as opposed to a flare. If the natural gas to be combusted in the heated vent stack is not being vented, the applicant should include the methane emissions in the estimates.

**Noise Quality**

The State of Maryland reviewed the applicant’s evaluation of potential noise impacts from construction and operation of the LNG project. While operation of the facility is not expected to cause significant noise impacts, construction noise is likely to exceed FERC and State of Maryland guidelines at selected receptor locations. Construction at the terminal and power plant site is not expected to create exceedances; however, the drilling and related work associated with the pipeline construction will be more intrusive. This is due to the fact that pipeline construction activities will take place in much closer proximity to residential receptors, compared to the on-site facility construction.

Excavation and trenching within 50 feet of a residence is expected to exceed the State of Maryland noise limits for construction. AES has committed to incorporating residential mitigation measures for properties where construction will occur within 50 feet of a residence (Resource Report 9, January 2007, page 7), because noise levels exceeding 90 dBA, the State of Maryland’s construction noise limit, are expected to occur at such a short distance. It should be noted this 50-foot buffer distance must be measured from the residential property boundary, not from the residence itself, in order to comply with the State of Maryland’s regulations, since the State of Maryland noise limitations apply at the receiving property boundary.

Directional drilling activities occur at the point where the pipeline would pass under the Susquehanna River. Such drilling would take place on a 24-hour continuous basis, rather than being discontinued at night. This round-the-clock construction schedule will result in an exceedance of FERC’s 24-hour day-night average noise limit of 55 dBA. AES states that it is currently evaluating potential mitigation measures including the use
of mufflers, sound barriers, and equipment and work area enclosures. The applicant has committed to measuring construction noise at the Susquehanna drilling location, during the early stages of construction, to ensure that noise mitigation is effectively reducing the noise to compliant levels. If the 55 dBA average is not achieved, then the applicant states it will implement additional noise control measures (Resource Report 9, January 2007, page 9).

The State of Maryland recommends that the noise mitigation measures that the applicant lists on pages 12-13 of Resource Report 9 be incorporated as requirements if AES receives approval to construct and operate the LNG facility.
5.0 OTHER CONCERNS

The following section of this Advisory Report discusses other concerns related to the State of Maryland’s Coast Facilities Review Act and the Chesapeake and Atlantic Coastal Bays Critical Area Protection Program.

5.1 COASTAL FACILITIES REVIEW ACT

MDE received an application from AES for a State Coastal Facilities Review Act (CFRA) permit on January 9, 2007 for the construction of the proposed facility. The CFRA requires a comprehensive evaluation of impacts resulting from the proposed construction of an energy facility, as defined in the law, in Maryland’s coastal zone. The CFRA was passed to protect Maryland’s coastal resources from unwarranted impacts of the development of petroleum-based and associated facilities. The law establishes a State review process in which all applicable State permits/approvals must be reviewed and processed as part of the CFRA permit application. CFRA also requires the local government to “certify” that the proposed project complies with all local land use requirements.

The following State permits/approvals required for the proposed LNG facility will be processed as part of the CFRA permit application: (1) a Tidal Wetlands License from the State’s Board of Public Works for the proposed dredging and dredged material disposal; (2) a Nontidal Wetlands and Waterways Permit from MDE for the proposed construction of the pipeline extending from the proposed facility into Pennsylvania; (3) an Air Quality Permit(s) for operation of the LNG Terminal for air discharges associated with permit(s) for regasification of the LNG to vaporized natural gas; and (4) a State Water Appropriations Permit and a State Discharge Permit associated with construction and operation of the facility. Also, two federally-mandated State authorizations are required for the proposed facility: (1) a Clean Water Act Section 401 Water Quality Certification for federally-permitted discharges to jurisdictional Waters of the United States and contiguous wetlands; and (2) a Federal Consistency determination, pursuant to Section 307 of the Federal Coastal Zone Management Act of 1972, as amended, on the project’s consistency with the State’s federally-approved Coastal Zone Management Program (CZMP). Maryland’s CZMP is based on existing State laws and regulations. Accordingly, the Federal Consistency determination will be based on compliance with the applicable State laws and regulations, as noted above.
Currently, the State of Maryland is in the process of reviewing the AES permit application for completeness in accordance with the requirements of CFRA. Upon determining the application complete, MDE will place a Notice in the Maryland Register announcing the receipt of the CFRA permit application. Baltimore County, the location of the proposed facility, will have 60 days from the date of the Notice in the Maryland Register to take one of the following actions: (1) certify that the proposed facility complies with all local land use requirements; (2) stay the required certification until the State has completed its comprehensive environmental impact statement of the project’s impacts; or (3) deny the required local certification required by CFRA. If the County denies the required certification, the State must terminate its review of the CFRA permit application, including the review of all other State permits required for the project.

5.2 CHESAPEAKE BAY CRITICAL AREA ACT

In 1985 Maryland’s Legislature enacted the Chesapeake Bay Critical Area Act. The act requires local governments to implement the mandates of the act. The Chesapeake Bay Critical Area Commission must approve local programs. The state program prohibits specific uses within the boundaries of the Critical Area, a minimum of 1,000 feet landward from tidal waters. Local governments are required to adopt those prohibitions and, in response to local conditions, may include other prohibited uses within the Critical Area boundary. The Chesapeake Bay Critical Area Commission must approve these program changes.

On January 16, 2007 Bill No. 9-07 was introduced into the Baltimore County Council prohibiting the establishment or expansion of a LNG facility in the Chesapeake Bay Critical Area of Baltimore County. The measure received final approval by the Council and was signed into law on February 5, 2007. The prohibition will be included in the Baltimore County Zoning Regulations.
Appendix A
Baltimore County
Comment Letters
BALTIMORE COUNTY, MARYLAND
AES SPARROWS POINT LNG PROPOSAL

James T. Smith, Jr.
Baltimore County Executive

January 22, 2007

Today, along with directors from many of Baltimore County’s Departments and Agencies, I am reiterating Baltimore County’s opposition to the proposed location of a Liquefied Natural Gas plant as planned for Sparrows Point. Although we understand that LNG may be an excellent fuel source, we have concluded that the potential for safety, security, and environmental hazards constitutes an unacceptable risk to the Baltimore region. The public safety of our communities and waterways is a critical responsibility of government, and the protection of the environment is our legacy. Numerous reports describe how LNG is a highly flammable, dangerous substance. In 2004, a liquefied natural gas explosion in Algeria was responsible for the death of 27 people and is reported to have shattered windows as far as five miles away.

Furthermore, in the post-9/11 world in which we live, it is irresponsible to talk about an LNG facility without considering the consequences of a potential terrorist attack. Former United States Counter Terrorism official Richard Clarke has noted that LNG terminals and tankers present “especially attractive targets” to terrorists. We cannot ignore that analysis.

The eastern communities of Baltimore County are in the midst of a renaissance and revitalization, and the proposed LNG location would pose a very real threat to the momentum of their impressive progress. Baltimore County is working to bring businesses into communities like Dundalk, Turners Station, and North Point that will provide good jobs and at the same time support safe and secure neighborhoods where families can live, and shop, as well as work. Sparrows Point has the potential to grow as a job-creation center while setting a new standard for redevelopment that is environmentally responsible. An LNG plant at Sparrows Point would be a setback to our ongoing efforts to continue the revitalization of our eastern communities. We are determined to pursue other economic development opportunities on that site as we continue to oppose this proposal. The LNG facility is simply too high risk and too environmentally threatening for this community.

Placing the LNG plant at Sparrows Point also undermines the regional collaboration that has involved the community, county, other jurisdictions, and the Port of Baltimore on the Harbor Options Team. For several years, Baltimore County has been in discussions with the State of Maryland and the Port of Baltimore concerning the location of dredge material from the Baltimore Harbor. Community leaders have worked closely with County and State officials on this issue, and at Baltimore County’s request, the former Governor formed a task force to look at dredge disposal solutions. That was the beginning of the Harbor Options Team.
For the first time ever, Baltimore County, Baltimore City, and Anne Arundel County—the port’s three local jurisdictions-- agreed to work together with federal agencies and the Maryland Port Administration. The result of this collaboration is a plan recognized across the nation for the comprehensive and long-term management of 2.6 million cubic yards of dredge material per year for all harbor projects. The Harbor Options Team plan proposes significant community and environmental enhancements around the harbor’s edge in connection with providing the port’s needed dredge material containment.

The location of an LNG plant at this site would require an estimated 4.2 to 4.5 million cubic yards of dredge material be removed to prepare access channels and turning basins to accommodate plant operations. That is more than one and a half years of dredge material in the Harbor Options Team’s plan for this one facility. The disposal of this amount of material for this LNG plant would overwhelm our Harbor Options Team plan. We should not allow the progress that we’ve already made for the port, our County, and the State to be derailed.

The Harbor Options Team plan also calls for the creation of a shoreline walk and fringe wetlands, marinas and boat launches, continued water quality improvements, and the creative use of the port’s dredge material to construct a new marine terminal at Sparrows Point—facilities that would provide much needed capacity for port operations well into this century. The location of an LNG facility would hamper the ability of a major new terminal facility to attract high value cargo. Other harbor shipping, and the thousands of recreational boaters traveling to and from the Inner Harbor and our many marinas, would also be affected.

In short it is both dangerous and irresponsible to bring almost daily shipments of liquefied natural gas up the Chesapeake Bay, under the Bay Bridge, into one of the busiest ports in the United States and into a major population center—and we must not allow that to happen.

There is a bright future ahead for Dundalk, Sparrows Point, Turner’s Station and the surrounding communities. I am confident that when you have the opportunity to review all of the testimony that is being presented that it will be very clear the location of an LNG facility in the proposed location would be bad policy, and the absolute wrong thing to do. This project makes no sense socially, economically, or environmentally, and it endangers the public safety of thousands of individuals in Baltimore County. I stand in partnership with families throughout eastern Baltimore County and urge you to unequivocally state an intention to deny this permit at this pre-filing stage-- before the process goes any further.

The County continues to take action to prevent the location of an LNG plant on the Sparrows Point Peninsula. On February 5, 2007 the Baltimore County Council will pass legislation that prohibits the location of a LNG facility in the Chesapeake Bay Critical Area. Mr. David Carroll, Baltimore County’s Director of Environmental
Protection and Resource Management, will provide detailed information about this legislation in his comments presented to your committee. We believe this legislation will make it impossible for the proposed facility to be constructed in Sparrows Point. I urge you to deny the permit application immediately.

Thank you for this opportunity to comment on a matter of grave importance to the people of Baltimore County.
These comments are prepared in response to the application made by AES Sparrows Point LNG, LLC to the Federal Energy Regulatory Commission (FERC) on January 8, 2007. It is our understanding that these comments will be included in the “Advisory Report” that is to be prepared by the Power Plant Research Program (PPRP) of the Maryland Department of Natural Resources (DNR) to FERC as part of the required application review process.

It should be noted that the application is voluminous and additional issues and comments may be raised by Baltimore County as the Draft Environmental Impact Statement document is prepared and submitted for public comment. As part of our response the following are overarching concerns with the inadequacy of the application. These topics will be followed with actions involving local response and/or state and federal consistency.

1. Lack of Specificity in Addressing Fundamentals of the Application. Throughout the application there is a failure to offer specific details or responses to fundamental issues. There are also assumptions made concerning components of the facility or operation that cannot be supported by fact. Examples include but are not limited to:

A. Dredged Material Recycling Facility (DMRF). The proposal for managing the substantial quantity of dredged material is open ended with vague proposals as to how the processed material will be ultimately disposed of, the disposition of water from the processing, no discussion as to the implications of managing the piles of dried, processed materials, and the impacts of truck traffic that may be generated if the material is carried away from the site.

The discussion of the various options of disposing of the material from Sparrows Point to an ocean dumping site or using
trucks or rail cars to transport to some type of land coverage operation is specious. The Maryland Port Administration has been actively involved in looking at land application, product development, etc for many years. The Baltimore Harbor Options Team recommended the formation of an innovative uses task force to look at the feasibility of options other than utilizing containment facilities. The MPA has also investigated the feasibility of marketable product development with no reasonable option materializing. Disposal of dredged material, even processed, is a major issue facing ports throughout the nation. There has been very limited success in finding viable options. To include this route as a viable option does not respond to a fundamental issue as required by the FERC application. It is not sufficient to say that these issues will be addressed as part of the permitting process. If the applicant cannot offer a reasonable and viable proposal at this juncture then the application should be declared fundamentally deficient and incomplete.

B. Adequate Land Area for a LNG Operation; Construction, Operation and Safety.
It is our understanding that the proposed facility is to be located on an 80-acre parcel; with only approximately 45 acres of that total is fast land. Because of the small scale of the drawings it is difficult to determine if appropriate setbacks have been accommodated. It should be noted that there is virtually no buffer zone between the proposed facility and adjacent land uses. It should also be noted that there is no indication of the 100-foot Chesapeake Bay Critical Area Buffer.

Included in the application are references made to utilizing considerable acreage offsite not under ownership by AES for construction staging. In particular is a 20-acre site to the north of the proposed project, which is also the proposed location of the Ecron ethanol facility. It is our understanding that the entire site north of the proposed LNG facility is under a contractual obligation and not now available. There is no discussion as to the viability of the LNG project or safety implications if those sites are not available. This is typical of the assumptions made
throughout the application that, if they do not materialize, will call the viability of the proposal into question.

C. Inability to Participate in or Review the Coast Guard’s Waterway Suitability Assessment. Apparently the USCG has been engaged in the process of conducting this fundamental assessment for a number of months. While there is reference in the application little, if any, useful information is contained that would allow interested parties to make informed decisions concerning impacts on port traffic movements, commercial watermen, recreational boating, economic considerations, and safety to the public. It should be noted that the Coast Guard assessment process did not include invitations for participation by local governments with a direct interest in this proposal. Our comments, therefore, only reflect information included in the actual application. We therefore believe that the U.S. Coast Guard’s WSA, when released, is also fundamentally deficient by virtue of the fact that only a limited and selected audience was allowed to participate in the assessment process.

The application’s discussion in Resource Report #11, 11.4.4 Waterway Suitability Assessment is at best vague, has a number of omissions and mis-statements. For instance, the report claims that since there are only 6 marine vessels leaving or entering the Port per day, operations can easily absorb the LNG traffic. This statement fails to acknowledge the heavy recreational usage of the Port that must share the restricted width of the Port with existing marine traffic. The Port and other private operators have continually identified this mix as a point of tension. The statement also fails to acknowledge the fact that LNG ship movement is far from routine. In fact, LNG ships will necessitate closure of the Port once a vessel starts its passage into the Craighill channel just north of the Bay Bridge. This passage will involve sole utilization of approximately 15 miles of channels entering the port into the proposed terminal site. There are four angles that must be negotiated before the vessels reach the entrance channel to the proposed site. Given the claimed speed of 10 knots this means an LNG vessel will take several hours to make the trip between the Bay Bridge and the access channel. Additional time will be needed to slow the
vessels to make the turn into the access channel to the site and be maneuvered into its moorings. During that time the exclusion zone will either close off or greatly reduce access to and from Bear Creek. The application makes no mention of the possible impacts on the MPA’s efforts to grow the cruise ship business. Cruise ships often leave the port in the evening and the closures could have serious implications for scheduling and the ability to attract patrons. There needs to be detailed discussion in the application and the WSA of not only the physical safety implications to other commercial vessels, recreational traffic, but also the economic and management implications for the Port of Baltimore.

While the application makes an attempt to discuss impacts to recreational fishing vessels there is little or no useful information as to the implications for recreational pleasure boating. The discussions on page 24/25 are limited and seem to be set in context of only scheduled “marine events”. It fails to address the fact that most recreational activities are “ad hoc” including races, leisure sailing, etc. It also fails to address the fact that LNG vessels will transect the narrowest point of the bay, (between Sandy Point and Kent Island) which is also the most active section of the bay for recreational boating. There is also no acknowledgement that a significant number of both “scheduled events” and leisure boating are by sailing vessels that have the most limited response time. The discussion in the application is completely inadequate and if utilized solely to make decisions concerning recreational boating safety, would place thousands of citizens at risk.

D. Implications on the Port of Baltimore, Personal Safety, and Critical Infrastructure. The National Strategy for Maritime Security makes it very clear that ports are at considerable risk from terrorists. In the September 2005, report on Maritime Security, page 4, the authors identify very real risks related to ports; “Terrorists can also develop effective attack capabilities relatively quickly using a variety of platforms, including explosives-laden suicide boats and light aircraft;………………as kinetic weapons to ram another vessel…” The report continues; “Terrorists can also take advantage of a vessel’s legitimate cargo, such as chemicals, petroleum, or liquefied natural
gas, as the explosive component of an attack.” In a footnote the report details, “This maritime mode of terrorist attack has been established, tested, and repeated. The terrorist group al-Qaida in October 2000 successfully attacked the U.S. Cole in Yemen with an explosive-laden suicide small boat and 2 years later attacked the French oil tanker M/V Limburg.” It is clear federal security agencies raise the very real possibility of liquefied natural gas vessels becoming primary targets of terrorists. It is also clear from the report that it is imperative to protect “critical infrastructure” e.g. highways, ports, transportation networks, etc. It is counter-intuitive to believe that the introduction of a LNG facility into an active port adjacent to major highways, communities, and other “critical infrastructure” is in conformance to national security interests and the protection of public safety.

2. Actions Taken to Insure Local Input
   
   A. Coastal Facilities Review Act. This act was passed a number of years ago to protect Maryland’s coastal resources and communities from unwarranted impacts of the development of petroleum based and associated facilities. At the core of the CFRA is a process, which requires the participation of local and state governments in review and decision making relative to all permits and licenses. Sections 14-502 (d) (e) are explicit in the involvement of all interested parties. Sections 14-506 (c) and 14-507 (a) are the core operative paragraphs. Section 14-502 (c) states; “The application shall not be processed further nor shall the analysis required to be undertaken until the county government wherein the facility is proposed to be located or wherein the pipeline will terminate, has certified to the Department that all local land use classifications, including zoning, special exceptions, variances or conditional uses, necessary for the location and operation of the proposed facility have been or will be granted.” Section 14-507, (a) states, “Further action may not be taken by the Secretary under this subtitle without completion of the statement required under Section 14-506 of this subtitle, and its being made available to the public, and until the county government, where the proposed facility is to be located has certified to the Department that all necessary local approval has been or is reasonably expected to be extended for commencement of construction.”
The CFRA is part of the Maryland’s federally approved Coastal Zone Management plan developed pursuant to the Federal Coastal Zone Management Act of 1972. Maryland’s Coastal Zone Management Program is a “networked” program composed of multiple programs and legislative actions. It is the position of Baltimore County that the CFRA must be conformed to as part of the FERC process. Without the successful completion of the process as outlined in the CFRA, Maryland may not certify a project as consistent with the Coastal Zone Management Act of 1972.

B. Maryland’s Chesapeake Bay Critical Area Act. In 1985 Maryland’s Legislature enacted the Chesapeake Bay Critical Area Act. The act requires local governments to implement the mandates of the act. The Chesapeake Bay Critical Area Commission must approve local programs. The state program prohibits specific uses within the boundaries of the Critical Area, a minimum of 1,000 feet landward from tidal waters. Local governments are required to adopt those prohibitions and, in response to local conditions, may include other prohibited uses within the Critical Area boundary. The Chesapeake Bay Commission must approve these program changes.

On January 16, 2007 Bill No. 9-07 was introduced into the Baltimore County Council prohibiting the establishment or expansion of a liquefied natural gas facility in the Chesapeake Bay Critical Area of Baltimore County. The measure is expected to receive final approval by the Council and signed into law on February 5, 2007. The prohibition will be included in the Baltimore County Zoning Regulations. Upon enactment the act will be conveyed to the State’s Chesapeake and Coastal Bays Commission for review and anticipated approval.

Baltimore County believes that the review and approval, which must be taken by the Commission, constitutes state action and therefore should be incorporated into the consistency determination made by the Maryland Department of the Environment.
3. Specific Comments Addressing Technical Deficiencies
   A. Permit Requirements: Failure to fully identify all required local permits including but not limited to; Chesapeake Bay Critical Area approvals, Stormwater quantity and quality permits, grading permits.
   B. Limited sediment resuspension data. Data was apparently calculated under static conditions. The area has a significant fetch and Bear Creek is influenced by stormwater flows.
   C. Failure to document impacts of movement of scows on harbor traffic including recreational boating and commercial fishing fleet. Dredging will take place in primary access route to and from Bear Creek.
   D. Discussion of failure to obtain right-of-ways for pipeline. Will this trigger an attempt to condemn private and publicly owned properties?
As the Director of the Office of Homeland Security and Emergency Management for Baltimore County, one of my roles is to identify and assess hazards or potential hazards that could have catastrophic impacts on the citizens of the County.

Since 9/11/2001, we have widened our focus to look at a wider range of potential emergency scenarios and we regularly seek input from experts from a variety of professional backgrounds to help us in the disaster planning process. We have had to inventory the already numerous localities in our jurisdiction which could present themselves as a “high value” targets to someone or some group with malicious intentions. We have been striving to *reduce and/or mitigate* the number of hazards in our community, not *increase* them.

The past several years have presented a significant challenge to many of us in the homeland security/emergency management field. Every year, we are presented with new issues to address. From protecting special needs populations to providing our responders with the best equipment (not to mention, navigating our way through the homeland security grant process), we have more to deal with today than we ever have in the past. Baltimore County’s Office of Homeland Security & Emergency Management is not unlike many other local offices of emergency management; limited personnel and unlimited planning priorities. Planning for an emergency at an LNG terminal in a densely populated area will only add to that and will most likely take away some of our resources and focus away from some of our most critical projects.

We are very concerned at the prospect of locating a LNG terminal in an area that is in such close proximity to highly concentrated residential areas and commercial centers, and quite frankly, it does not make much sense.

There are approximately 35,000 residents of Baltimore County within three miles of Sparrows Point (not even factoring in motorists, working individuals, and school children that are in the area on any given day and also populations in nearby portions of Baltimore City). There just doesn’t seem to be enough space to have an adequately sized buffer zone for a facility of this type in this area. The immediacy of any emergency at a LNG terminal would make any evacuation efforts futile. Another complicating factor is the limited and narrow roadways in and out of the area. These roadways would quickly become unusable with the convergence of emergency equipment.

I urge you to deny this permit immediately. Thank you.
It is impossible to talk about locating a Liquefied Natural Gas plant in the midst of a residential community without talking about the hazardous properties of LNG. LNG is extremely cold and its release can cause structural failure in nearby tanks, vessels and supporting structures. The extreme temperatures of LNG can cause severe injuries and death.

LNG is easily ignited by heat, sparks, and flame, and its ignition results in extremely high temperature fires. Its vapors become extremely explosive when they come into contact with the air. Although LNG is lighter than air at normal temperatures, when it transitions from liquid to a gas, the vapor cloud is extremely cold and initially heavier than the surrounding air. Vapors can accumulate in storm sewers and other low-lying areas and travel until they find an ignition source. Even in situations when there has been no ignition source, there have been situations like the one in Indonesia in 1993 where LNG enters a storm drain system and undergoes rapid vapor expansion, resulting in extensive property damage from the resulting explosive expansion of gas. LNG containers may explode when heated and ruptured cylinders become missiles threatening neighboring communities.

To give you an idea of just how significant the LNG threat is in our communities, we only need to review the evacuation zone requirements developed by the Department of Transportation in its Emergency Response Guidebook in 2004 for LNG emergencies involving rail cars. The immediate evacuation zone for a large spill on a rail car is ½ mile downwind. The evacuation zone for a fire involving a tank car is one mile in all directions. Compare the recommended evacuation zones to the zones that would be needed to address a breach at the Sparrows Point facility. Rail cars hold a maximum of 33,000 gallons of LNG. The three tanks proposed at Sparrows Point will hold a total of 94.5 million gallons on LNG. Should this facility be located in the midst of a residential community? The answer is crystal clear, and we know the answer to the question!

Let me close with a few final reminders:

- Accidental spills will pose a risk to individuals within ½ mile of the spill.
- A medium to large spill (5-7 square yard breach) will cause a risk to people within one mile.
- A large-scale release will have a cascade effect because of the effects of a cryogenic liquid on the surrounding tank structures and vessels. This would involve a large fire or fireball, cause extensive property damage, and place people more than one mile away at risk.
These risks do not even take into account the land-based part of the operation including three large storage tanks, processing equipment to boil off the LNG into vapor, and a compression system to pressurize the gas for transportation through a high-pressure pipeline to Pennsylvania.

In summary, I would like to add that as Fire Chief I have been asked repeatedly what would the fire department need to be adequately prepared to respond to a disaster at an LNG plant. The response to that question is very straightforward: there is no way to prepare for that kind of disaster, and if we believe there is, we are simply fooling our citizens and ourselves. I ask that this proposal be halted immediately out of the respect for the safety and well being of the citizens of eastern Baltimore County. Thank you.
The County Department of Economic Development joins the County Executive and our colleagues in other County agencies in expressing opposition to the proposal to locate an LNG import terminal at the Sparrows Point shipyard.

The Department of Economic Development focuses its efforts on the creation and retention of quality jobs in Baltimore County. We take great pride in the County’s recent move to Maryland's #2 jobs center. This County’s diverse economy, with strength in many business sectors, is growing almost across the board, and the economic future of Baltimore County is bright. The southeastern portion of the County has a tremendous legacy as a manufacturing center, and we are grateful for the continued presence of major industrial employers. We see great potential for redevelopment of the shipyard facilities now controlled by Barletta Willis, and we also see opportunity for creating high quality jobs on the underutilized land at Sparrows Point. The Department has also been a strong partner in the County Executive’s Renaissance efforts, working closely in nearby Dundalk on several major projects aimed at strengthening Baltimore County’s neighborhood downtowns. All of these initiatives work together to ensure that Baltimore County remains a great location to raise a family and work.

The proposal to construct a LNG facility on Sparrows Point in many ways contradicts our efforts to strengthen the local economy by attracting high wage, high value companies. An LNG plant, with its inherent safety concerns, could make the area much less attractive to current and prospective employers, and make it that much harder for the County to attract and retain quality new jobs there.

The Eastern Baltimore County Revitalization Strategy implemented in 1996 is the first large scale revitalization plan undertaken in Baltimore County. Intense and targeted action from the public and private sectors represents a fundamental commitment to these established older communities. The focused strategy has indeed “jump-started” growth in the eastern sector through many small hard fought incremental changes. Employment is growing, and vacant and underutilized properties are being upgraded and developed. The proposed site for the plant is in the North Point Enterprise Zone. This State-approved Zone was created to help make this area more attractive to business, and its status was recently recertified and extended for an additional 10 years. An LNG plant at Sparrows Point is inconsistent with the premise behind the Revitalization Strategy and the Enterprise Zone, as the plant would have a low number of permanent jobs and therefore only moderate direct economic impact.

Further, our efforts at supporting the Renaissance of Dundalk, accompanied by major County financial investments in local projects, would be challenged by the perceived risks of living near an operating LNG facility.
In summary, this Department opposes the proposal for an LNG facility at Sparrows Point.
For the past three years, I have served the citizens of Baltimore County as the Director of Permits and Development Management. Prior to that appointment, I served for 12 years as Deputy Zoning Commissioner and Development Hearing Officer for Baltimore County. On behalf of Baltimore County, I strongly oppose the proposal by AES Sparrows Point LNG LLC and Mid-Atlantic Express, LLC, to utilize this parcel of land in Sparrows Point as a Liquefied Natural Gas transmission facility.

My opposition testimony is not based on environmental, safety, or land planning rationales. I will leave those arguments to my colleagues and others present this evening that are much more qualified than I to address those issues. My opposition to this proposal is based solely on Maryland law as adopted and applied to Baltimore County by the Baltimore County Council. I have read the proposal by this applicant and have studied the manner in which they propose to operate this utility transmission facility. It has been reviewed by the staff in the Office of Permits and Development Management, and we conclude that this permit is unlawful and that it is an impermissible use of this land.

The proposal under consideration, given its location on the shores of the Patapsco River, is located within the Chesapeake Bay Critical Area. In March of 1988, the Baltimore County Council, pursuant to Bill No. 32-88, adopted the Chesapeake Bay Critical Area Regulations and codified them within the Baltimore County Zoning Regulations. The drafters of this landmark legislation saw fit to specifically prohibit the establishment of four uses from ever occurring within this protected environmental area. These prohibitions still stand today and are found in section 105 of the Baltimore County Zoning Regulations. They are:

A. A solid or hazardous waste collection or disposal facility.
B. A sanitary landfill.
C. A permanent sludge hauling, sludge storage, or sludge disposal facility.
D. A Utility Transmission Facility (such as the one proposed by this applicant).

To make this legislation even clearer, on February 5, 2007 the Baltimore County Council is expected to add the construction of an LNG plant to the list of prohibitions above. As Director of Permits and the individual in charge of the development process in Baltimore County, I cannot sit idly by and allow this applicant to develop and utilize this property in direct contravention of the law. I can only assume that the drafters of the Chesapeake Bay Critical Area Recommendations knew of the inherent dangers this type
of facility would have on the sensitive environmental area that they sought to protect with their landmark legislation.

I believe strongly that no permit should be issued for the LNG plant proposed on the Sparrows Point Peninsula.
The proposed LNG facility in Sparrows Point could stall or even reverse the momentum toward a better Dundalk/Edgemere/North Point Community. Over the last several years, this area has seen significant residential development and redevelopment that has increased property values and made people feel better about their community. Aside from the obvious safety issues posed by transport, storage and processing of vast quantities of liquefied natural gas, the LNG facility poses undeniable risks to the community as a whole in terms of economic vitality, livability, self image and future growth potential.

The plant is proposed to be constructed within a three-mile radius of nine public parks, two schools, ten marinas and a senior center. These facilities are used both by area residents as well as many others from outside the community. Recreation is a vital component in the quality of life equation for any community. This area contains a very diverse population with people of all ages, especially children. Their recreational needs are also very diverse and include activities such as youth baseball and softball, fishing, boating and golf. There are many families in this area who use the area parks for picnicking, hiking and biking and other forms of exercise. To construct such a potentially dangerous facility in any densely populated area is bad policy, bad planning and unfair to the people in the area.

I remind the committee that it would not take a disastrous explosion, terrorist attack or hazardous material spill or leak to make people realize that this was the wrong place to build this facility. Over time, small sporadic problems, causing the community to be on alert or simply inconveniencing the public would incrementally degrade quality of life. The constant fear of “a major malfunction at the LNG plant” would cast a pall over this beautiful community. The people here don’t deserve that.

The Baltimore County Department of Recreation and Parks and the citizens of the County have a huge investment in this community. The investment is starting to return dividends. There are enough dangers and risks faced by communities simply through ongoing, everyday events. To purposely, knowingly, place a community at risk is unconscionable. I’m sure there will be many other economic opportunities that will be proposed for this site.
Appendix B
Baltimore County
Liquefied Natural Gas Task Force
Final Report
Baltimore County Liquefied Natural Gas Task Force

Final Report

9 January 2007
The undersigned members of the Baltimore County Liquefied Natural Gas Task Force agree that this final report results from a fair and open process and that the overall conclusions and recommendations in this report reflect our views.

Joël Baker, Co-Chair  
Joint – Science/Environ/Energy  
Date 1/4/07

Brad Heavner  
Joint – Science/Environ/Energy  
Date 1/4/07

Sharon Beazley, Co-Chair  
Senate – Citizen  
Date 1/4/07

John Hohman  
Joint – Science/Environ/Energy  
Date 1/4/07

Dunbar Brooks  
Senate – Citizen  
Date 1/4/07

Frederick Hoover  
Joint – Science/Environ/Energy  
Date 1/4/07

Craig Chesek  
MD Public Service Commission  
– Chairman’s Designee  
Date

Linwood Jackson  
House – Citizen  
Date 1/4/07

Frank Dawson  
DNR – Secretary’s Designee  
Date 1/4/07

Chris Rice  
MD Energy Administration  
– Director’s Designee  
Date 1/4/07

Russell Donnelly  
House – Citizen  
Date 1/14/07

Fred Thiess  
Senate – Citizen  
Date 1/16/07

Richard Eskin  
MDE – Secretary’s Designee  
Date 1/4/07

Guido Guarnaccia  
House – Citizen  
Date 1/4/07
Whereas we believe that:

1. The economically-challenged communities surrounding the Sparrows Point Peninsula have endured generations of environmental pollution, and;

2. The transportation network and demographics of the surrounding communities make emergency response and evacuation of the surrounding neighborhoods very difficult, and;

3. Dredging, processing, and disposal of large volumes of contaminated sediment during construction and operation of the proposed LNG facility will release pollutants into the Chesapeake Bay, and;

4. The proposed LNG facility will likely have minimal direct impact on energy supplies and costs in Maryland, and;

5. The economic impact of the proposed LNG facility on Maryland in terms of jobs will likely be minor;

The undersigned members of the Baltimore County Liquefied Natural Gas Task Force conclude that construction and operation of a liquefied natural gas terminal and facility on the Sparrow Point Peninsula, Baltimore County, does not serve the long-term interests of the citizens of Maryland.

Note: Agency representatives were not asked to sign, recognizing that could conflict with their official responsibilities.

The undersigned members of the Baltimore County Liquefied Natural Gas Task Force agree that this final report results from a fair and open process and that the overall conclusions and recommendations in this report reflect our views.

[Signatures and dates]
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Preface

This report of the Baltimore County LNG Task Force was written before the formal application has been made to the Federal Energy Regulatory Commission (FERC) to build and operate a facility at Sparrows Point. During the ‘pre-filing’ phase, the potential applicant prepares and submits to FERC a series of Resource Reports that describe in general terms the nature of the project. FERC, the U.S. Coast Guard, and others comment on and evaluate these reports in preparation for the Draft Environmental Impact Statement should the project go forward. During the deliberations of the Task Force, the potential applicant revised several Resource Reports and therefore the background information was constantly evolving. Many of the specifics relating to the proposed facility, especially operational decisions under the jurisdiction of FERC and the U.S. Coast Guard had not yet been made when this report was prepared. Until a formal application has been submitted to FERC, and there is sufficient time to review the specifics of the facility, the Task Force findings and recommendations in this report remain provisional.
Executive Summary

The Baltimore County Liquefied Natural Gas Task Force was established by Senate Bill 996 during the 2006 General Assembly to study issues concerning a proposed facility on the Sparrow Point Peninsula, Baltimore County. AES Sparrows Point LNG, LLC proposes to construct and operate liquefied natural gas (LNG) import, storage, and re-gasification facility on 80 acres on the Sparrows Point Peninsula. LNG would arrive at the LNG Terminal via ship, be offloaded to three shore-side storage tanks, re-gasified, and transported to consumers via an 87 mile pipeline through Baltimore, Harford, and Cecil Counties, MD and Lancaster and Chester Counties, PA.

In addition to the LNG facility, in its pre-application submission AES proposes to build a Dredge Material Recycling Facility at Sparrows Point to process dredged sediment during the 18 to 24 month construction phase. This facility would dewater and stabilize dredged sediment into a form suitable for shipping off site using 220 truck trips per day. AES is also considering construction of a natural gas-fired electricity generating station near the LNG facility.

Local concern about potential LNG facilities in Maryland led to a number of efforts by local and state officials to influence the approval process. Specific concerns from the community include health, safety, and quality of life issues. Permitting of LNG facilities is coordinated by the Federal Energy Regulatory Commission (FERC), with input from a number of Federal and State agencies. Governor Ehrlich designated the Maryland Department of Natural Resources Power Plant Research Program as the lead agency to coordinate the State’s response to the potential LNG facility at Sparrows Point.

This report is based on pre-filing materials submitted to FERC by the applicant, as the formal filing was not available when this report was due. Many of the specifics relating to the proposed facility, especially operational decisions under the jurisdiction of FERC and the U.S. Coast Guard had not yet been made when this report was prepared. Until a formal application has been submitted to FERC (anticipated for early January 2007), and there is sufficient time to review the specifics of the facility, the Task Force findings and recommendations in this report remain provisional.

Overall Recommendations

1. The Task Force has identified several major issues of concern for which the applicant has not indicated adequate solutions. Maryland should advise FERC, and use existing State law and permitting authority to the maximum extent possible, to require that unless and until solutions to these critical issues are found, the State would not consider that the safety of the surrounding communities and environmental integrity have been adequately protected as required by the relevant laws. The most significant of these issues include:
a. Notification, transportation and evacuation capabilities for the surrounding communities are clearly inadequate.
b. The feasibility of processing the required volume of dredged material in a legal and safe manner with existing technology and legal limitations on dredged material disposal in this area is doubtful.
c. Established principles of environmental justice would be violated.

2. The applicant should be required to pay all costs borne by the State and local governments for environmental, security and safety protection resulting from any proposed facility.

3. An environmentally, socially, and economically responsible comprehensive development plan for the entire Sparrows Point Peninsula should be prepared by Baltimore County, with State assistance if requested. Any development on the Sparrows Point Peninsula should not conflict with current and planned environmental restoration efforts and should result in net environmental benefit.

4. To ensure future economic viability and energy security, Maryland should develop a comprehensive energy policy that balances supply and demand.

5. Maryland and Baltimore County should continue to be advocates for the local communities. All available legislative and judicial avenues to direct responsible development of the Sparrows Point Peninsula should be investigated.

6. A state ombudsman should be designated to communicate the status of development of Sparrows Point to the public.

Findings

1. Economically distressed communities that surround the proposed facility have for generations borne the brunt of environmental pollution in the Sparrows Point area. The community believes that the proposed LNG facility is not compatible with proposed industrial and commercial activities in the Sparrows Point area, and that the facility poses a significant risk to health, safety and quality of life to a community that has already borne more than its share of such impacts.

2. There is considerable public concern about the potential risks of LNG traffic in the Chesapeake Bay and of the terminal, storage, and re-gasification facility at Sparrows Point.

3. Much of FERC’s and the USCG’s assessments of risk from LNG plants are based on a report conducted by Sandia National Laboratories which is derived largely on models and assumptions. These models have not been verified at the scale of the proposed LNG facility.

4. Adequate communication to the public during an emergency is a major concern due to lack of effective means of public notification due to insular or non-English speaking communities.
5. The road system is inadequate for evacuating public from the area in a reasonable amount of time. Several potentially affected communities have only a single road for evacuation.

6. Many local residents rely completely on public transportation. Baltimore County does not have sufficient resources to respond to a major emergency at an LNG plant.

7. FERC will determine land exclusion zones around the proposed plant based on site-specific calculations and recommendations from the Sandia report as established by National Fire Protection Act 59A: Standard for the Production, Storage, and Handling of LNG.

8. The USCG has not yet submitted its Waterway Suitability Report (WSR), which will provide recommendations to FERC on the size of any marine safety and security zones around LNG tankers in Chesapeake Bay.

9. The USCG has not yet made a recommendation via the Waterway Suitability Report on whether or not the Chesapeake Bay Bridge and/or the Key Bridge will have to be closed to traffic during the transit of LNG tankers in the vicinity.

10. The volume of dredged material generated by the proposed project would greatly exceed the already limited capacity for harbor material disposal.

11. Unconfined disposal of spoil from Baltimore Harbor is prohibited outside of Baltimore Harbor; unconfined disposal of spoil from a “Baltimore County tributary” is prohibited within five miles of the Hart-Miller-Pleasure Island chain; and a contained disposal site may not be approved within the same five mile limit.

12. The applicant has indicated that they will propose to build an on-site facility to process the dredge material prior to shipping off-site. There is no facility in the region to process the dredged sediment into a product that could be classified as an innovative use and therefore no precedent for permitting such a facility.

13. The limited capacity to dispose of Baltimore Harbor sediments requires careful prioritization of Harbor dredging projects.

14. Suspended sediments, toxic substances and nutrients will be released during dredging. The quantity released will depend on the nature of the dredging technique used, which must be designed to minimize pollutant release to the water column. Even using the best available dredging and disposal technologies, the large volume of materials handled will result in an overall large release of contaminants.

15. Baltimore Harbor, including some areas surrounding the proposed facility, has poor environmental quality due to excessive levels of nutrients and toxic pollutants. During the past 10 years, considerable resources have been spent to assess and manage these problems, and substantial efforts to improve the Harbor continue.

16. The Patapsco River is the site of a significant amount of commercial fishing activity. Between 2003 and 2006, an annual average of approximately 85,000 pounds of fish and shellfish were commercially harvested from the Patapsco River.

17. Approximately 500 charter boat trips per year originate in Baltimore Harbor for recreational fishing, sightseeing, and other services.
18. The use of natural gas typically has less overall environmental impact than other fossil fuels, including coal.

19. Current LNG imports at Cove Point will be more than three times the projected natural gas consumption in Maryland after the approved expansion of Cove Point. The citizens of Maryland disproportionately bear the costs of environmental impacts, security, and emergency preparation and response for LNG they do not need.

20. While the proposed facility will increase natural gas supplies to the mid-Atlantic and Northeastern U.S., greater energy security could result from reducing energy demand through modernizing equipment in the region. Such reductions would have other positive environmental benefits beyond not constructing and operating the proposed facility.

Recommendations

1. A comprehensive long-range Master Plan for the development of the Sparrows Point Peninsula should be developed by Baltimore County, with assistance, if requested, from the State.

2. Maryland should assure that the cumulative and interactive impacts of the combined activities on Sparrows Point are evaluated once the formal application has been filed with FERC.

3. Maryland should strongly recommend through the comment process that:
   a. FERC and USCG take into account all studies on the risks of LNG not incorporated into the Sandia report, including those not publicly available and those of other countries.
   b. When FERC and USCG interpret any findings based on models and assumptions to estimate the level of risk from the proposed LNG facility, they should include safety factors adequate to account for uncertainties in the models. They should use calculations from any recognized authority that provide the largest safety factor.
   c. FERC and USCG should require experiments on the hazards of LNG releases on the scale that would be experienced by a catastrophic failure of a tanker or land based storage tank before any final decisions are made on this application.

4. Maryland should strongly recommend through the comment process to FERC that the Emergency Response Plan:
   a. Must include an effective and rapid means of notifying and evacuating the public in the event of an emergency. This plan must specifically address the road capacity for evacuation and evacuating those dependent on public transportation, and be acceptable to local and State agencies. This should include on-going public education efforts on notification and evacuation methods, as well as on-going drills for emergency responders.
   b. Must clearly identify the applicant as the responsible party for covering both the direct costs to respond to an emergency and the indirect costs of planning and preparation.
5. Marine safety and security zones are calculated based on safety and security issues and must not be compromised to accommodate impacts on recreational and commercial activities. If the impacts to recreational and commercial activities are unacceptable, then Maryland should recommend to FERC that the project must not move forward.

6. Maryland should continue to prioritize the use of disposal capacity in Baltimore Harbor for required maintenance of navigation channels.

7. No dredge sediment disposal/process operation should be permitted until disposal capacity is clearly and legally documented and the regulatory path defined.

8. Because Harbor sediments typically contain bioaccumulative contaminants, any discharge permits must consider the potential for long-term impacts in addition to acute impacts.

9. Maryland should work through existing regulatory authorities and voluntary incentives to insure that any new major activity in the Sparrows Point area is ‘environmentally positive’ (i.e., the area’s environmental quality is better than if the project did not occur).

10. Maryland should ensure, through the Water Quality Certification and the Consistency Determination, that the proposed activity is consistent with existing Harbor-wide remediation and restoration programs.

11. Maryland should be a strong advocate for the residents of the surrounding communities, ensuring that any development on the site is consistent with the principals of environmental justice.

12. Maryland should strongly recommend through the comment process that FERC, with input from Maryland DNR, should accurately calculate the economic and cultural impacts to the recreational and commercial communities resulting from the inevitable loss of access to the waterway, and require that the applicant compensate these communities appropriately.

13. Maryland should adopt a comprehensive energy strategy that balances supply-side (increased energy production) and demand-side (increased efficiency, conservation) policies.

14. Since this facility would push the region toward a supply-side response to energy demand and thereby undermine demand-side strategies, the applicant should be required to invest heavily in statewide energy conservation programs in Maryland.
I. Background

I.A. Overview of the Potential LNG Facility at Sparrows Point. AES Sparrows Point LNG, LLC proposes to construct and operate a new liquefied natural gas (LNG) import, storage, and regasification facility on 80 acres on the Sparrows Point Peninsula in Baltimore County. LNG would arrive at the LNG Terminal via ship, be offloaded to three shore-side storage tanks, re-gasified, and transported to consumers via an 87 mile pipeline through Baltimore, Harford, and Cecil Counties, MD and Lancaster and Chester Counties, PA. The facility at Sparrows Point would consist of a marine terminal, three on-shore storage tanks, and the equipment to convert LNG to gas. The three storage tanks would each be 170 feet high and 270 feet in diameter and contain 42 million gallons (160,000 cubic meters) of LNG. Operating at full capacity would require offloading a ship every two to three days. In addition to the LNG facility, in its pre-application submission, AES proposes to build a Dredge Material Recycling Facility at Sparrows Point to process dredged sediment during the 18 to 24 month construction phase. This facility would dewater and stabilize dredged sediment into a form suitable for shipping off site. The Dredge Material Recycling Facility would occupy 5 acres of upland property adjacent to the LNG facility. Transport of the processed dredge material offsite would require 220 truck trips per day away from the site. AES is also considering construction of a natural gas-fired electricity generating station near the LNG facility.

Local concern about potential LNG facilities in Maryland led to a number of efforts by local and state officials to influence the approval process. Specific concerns from the community include health, safety, and quality of life issues. The project description has changed over time and is significantly different than what was initially presented to the communities.

I.B. Legislative History. During the 2005 and 2006 Maryland General Assembly Sessions bills were proposed to limit the siting of LNG facilities within the State. During legislative analysis of SJ 16 in the 2006 General Assembly session, “...(a)n advice of council letter from the Attorney General’s office (17 March 2006) states that specified legislation introduced in the 2006 legislative session restricting the construction or operation of an LNG facility in Maryland is preempted by federal law. According to the letter, the federal Natural Gas Act has long been understood as preempting state authority to regulate the siting and operation of LNG facilities which are under the jurisdiction of the Federal Energy Regulatory Commission (FERC).” (Department of Legislative Services, Fiscal and Policy Note for Senate Joint Resolution 16, Maryland General Assembly 2006 session). Although by law, FERC has primary jurisdiction to authorize the construction and operation of proposed LNG facilities, the State of Maryland exercises delegated federal permitting authority under the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act. To the extent that State and local laws are applicable to the Project, they too must be satisfied by the applicant\(^1\). The Maryland

\(^1\) Because the Natural Gas Act grants FERC exclusive jurisdiction over permitting the siting of proposed terminals and pipeline, some State and local laws may be preempted and not enforceable. However, the
Department of Natural Resources Power Plant Research Program was designated by Governor Ehrlich as the lead agency to coordinate the State’s response to the potential AES LNG facility at Sparrows Point.

Senate Bill 996, passed in 2006, established the Baltimore County Liquefied Natural Gas Task Force (the Task Force). The task force consists of:

1. four members from the scientific, environmental, and energy communities, jointly appointed by the President of the Senate and the Speaker of the House of Delegates,
2. the Chairman of the Public Service Commission or the Chairman’s designee,
3. the Secretary of the Environment or the Secretary’s designee,
4. the Secretary of Natural Resources or the Secretary’s designee,
5. the Director of the Maryland Energy Administration, or the Director’s designee,
6. three members nominated by the Senator representing the Maryland legislative district in which the proposed liquefied natural gas facility in eastern Baltimore County is proposed to be sited, subject to approval of the President of the Senate, and three members nominated by the Delegates representing the Maryland legislative district in which the proposed liquefied natural gas facility in eastern Baltimore County is proposed to be sited, subject to approval of the Speaker of the House of Delegates. The Task Force elected co-chairs and was staffed by the Departments of the Environment and Natural Resources.

Table 1. Baltimore County Liquefied Natural Gas Task Force

<table>
<thead>
<tr>
<th>Name and Designations</th>
<th>Name and Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Baker (co-chair), Science/Environment/Energy</td>
<td>Sharon Beazley (co-chair), Senate-appointed citizen</td>
</tr>
<tr>
<td>Dunbar Brooks, Senate-appointed citizen</td>
<td>Craig Chesek, Secretary’s Designate, Maryland Public Service Commission</td>
</tr>
<tr>
<td>Frank Dawson, Secretary’s Designate, Department of Natural Resources</td>
<td>Russell Donnelly, House-appointed citizen</td>
</tr>
<tr>
<td>Richard Eskin, Secretary’s Designate, Department of the Environment</td>
<td>Guido Guarnaccia, House-appointed citizen</td>
</tr>
<tr>
<td>Frederick Hoover, Science/Environment/Energy</td>
<td>Linwood Jackson, House-appointed citizen</td>
</tr>
<tr>
<td>Chris Rice, Secretary’s Designate, Maryland Energy Administration</td>
<td>Fred Thiess, Senate-appointed citizen</td>
</tr>
</tbody>
</table>

State’s delegated authority under the listed federal statutes is expressly applicable to the construction and operation of the proposed Sparrows Point Terminal as well as any other laws that may be applicable to any federal agencies authorities and responsibilities related to LNG terminals. 15 USC §717(b)
Senate Bill 996 charged the Task Force to study the following:

1. the risks and hazards of a liquefied natural gas production, storage, or regasification facility;
2. the kind and use of the proposed production, storage, or regasification facility;
3. the current and projected population and demographic characteristics of the location of the proposed production, storage, or regasification facility;
4. the current and proposed land use near the location of the proposed production storage, or regasification facility;
5. the natural and physical aspects of the proposed location;
6. the emergency response capabilities near the proposed facility location;
7. the need and appropriate distance for remote siting;
8. the effect of the proposed facility location on recreational and commercial boating and fishing and crabbing in the area;
9. the impact on the environment, especially on water quality, due to the quality of the dredged material from the large scale dredging that is intended to be undertaken to accommodate the ships transporting the liquefied natural gas; and
10. the impact on the ability of residential property owners near the proposed facility to retain access to their properties by way of the waterway.

The Task Force shall report its findings and recommendations to the Governor and General Assembly on or before December 2006.

I.C. Scope of Task Force. The Task Force first met on September 5, 2006 at the Maryland Department of Environment in Baltimore. At that meeting, Dr. Joel Baker and Ms. Sharon Beazley were elected co-chairs, the overall procedures for the Task Force meetings were discussed, and it was determined that the Task Force would focus primarily on the Sparrows Point facility and not the proposed 87 mile pipeline. The Task Force decided to hold open meetings, allowing interested observers to attend the scheduled meetings and, at the discretion of the co-chairs, participate in the discussion. Task Force information, including meeting schedules and minutes, presentation graphics, and background materials are available to the public via a dedicated web site (http://www.mde.state.md.us/ResearchCenter/lng_taskforce.asp). During the first meeting, the Task Force reviewed the ten items in SB 996 and created three subcommittees charged with addressing the specifics of each issue.
Table 2. Baltimore County LNG Task Force Subcommittees (issue numbers refer to section designations in SB 996).

<table>
<thead>
<tr>
<th>Subcommittee</th>
<th>Issues to be Addressed (from SB 996)</th>
<th>Subcommittee Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use</td>
<td>3. Current and projected population and demographics</td>
<td>Beazley, Rice, Brooks, Thiess</td>
</tr>
<tr>
<td></td>
<td>4. Current and proposed land use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Natural and physical aspects</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>8. Effect on boating, fishing, and crabbing</td>
<td>Baker, Donnelly, Eskin, Heavner</td>
</tr>
<tr>
<td>Impacts</td>
<td>9. Environmental impacts, especially on water quality due to dredging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Impact on water access</td>
<td></td>
</tr>
<tr>
<td>Risk and Safety</td>
<td>1. Risks and hazards</td>
<td>Chesek, Hoover, Hohman, Guarnaccia, Dawson, Jackson</td>
</tr>
<tr>
<td></td>
<td>2. Kind and use of facility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Emergency response capabilities near the facility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Need and appropriate distance for remote siting</td>
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</table>

Seven Task Force meetings have been held to compile information on these topics. Each subcommittee was charged with drafting ‘findings’ and recommendations based on the material presented at these meetings.

Table 3. Baltimore County LNG Task Force Meeting Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 5, 2006</td>
<td>Organizational</td>
</tr>
<tr>
<td>October 4, 2006</td>
<td>Land Use</td>
</tr>
<tr>
<td>October 18, 2006</td>
<td>Risk and Safety</td>
</tr>
<tr>
<td>November 1, 2006</td>
<td>Environmental Effects</td>
</tr>
<tr>
<td>November 17, 2006</td>
<td>Review of draft findings</td>
</tr>
<tr>
<td>December 20, 2006</td>
<td>Finalize draft report</td>
</tr>
<tr>
<td>January 4, 2007</td>
<td>Final approval of report</td>
</tr>
</tbody>
</table>

II. Legal and Regulatory Status.

Several state and federal laws are relevant to the construction and operation of a liquefied natural gas facility in Maryland. The Federal Energy Regulatory Commission (FERC) has overall authority for permitting LNG facilities through the National Gas Act. Maryland state agencies provide comments on the pre-filed resource reports, on the application, and on the subsequent Environmental Impact Statement to FERC via the Department of Natural Resources’ (DNR) Power Plant Research Program (PPRP). The State laws applicable to an LNG facility assure Maryland citizens of a process protective of the appropriate uses of their natural resources, and consistency with other coastal plans. The federal laws may have other goals including energy security and reliability.
IIA. Applicable State Laws or Actions. There are several key laws that need to be addressed by the Maryland Department of the Environment (MDE) with respect to various aspects of allowing a facility at Sparrows Point. These laws govern the construction of the facility, any dredging or dredge material placement or use, and the construction of the pipeline, which is a necessary component of the LNG facility. A summary list of relevant federal and state requirements is provided in Table 4. Processing of these permits will not begin until MDE and the U.S. Army Corps of Engineers (USACE) receive the complete permit application.

II.A.1 Nontidal Wetlands and Waterways Permit (Environment Article, Title 5, Subtitle 9) and State Tidal Wetlands License (Environment Article, Title 16, Subtitle 1-5). The nontidal wetlands and waterways permit issued in conjunction and consultation with the USACE must be obtained for any impacts to nontidal wetlands or waterways associated with the project as Sparrows Point or the proposed pipeline. The review process requires avoidance and minimization of impacts, and mitigation is required for unavoidable impacts to these resources.

A State Tidal Wetlands License, issued by the Board of Public Works (BPW) based on a report and recommendations from MDE, is also required for any proposed dredging and dredge material disposal. Expansion or deepening of a channel would be considered a new project as opposed to maintenance dredging.

Environment Article, Sections 5-1102 and -1103 place certain limitations on the disposal of dredge material from within Baltimore Harbor. Unconfined disposal of spoil from Baltimore Harbor is prohibited outside Baltimore Harbor; unconfined disposal of spoil from a “Baltimore County tributary” is prohibited within 5 miles of the Hart-Miller-Pleasure Island chain; and a contained disposal site may not be approved within the same 5 mile limit.

II.A.2. Section 401 Water Quality Certification. The State must also issue a Water Quality Certification under Section 401 of the Clean Water Act that certifies that any federally permitted discharges to jurisdictional waters and wetlands will not violate the State’s water quality standards.

II.A.3. Discharge Permits. After dredging and deposition of dredge material in a disposal facility, the dredge material needs to be “de-watered.” As the sediment settles and the water collects at the surface, this water is discharged back in the Bay or tributary. This discharge requires a State discharge permit from MDE.

II.A.4. Coastal Zone Management Act’s Consistency Review. The Coastal Zone Management Act establishes that a state with an approved coastal zone management program can oppose “federal activity” that the state considers inconsistent with its coastal zone management program (15 USCA § 1456(c)). “Federal activities” include activities both within and outside of the coastal zone that affect land use, water use, or natural resources of the coastal zone (15 USCA 1456(c)(1)(A)). “Federal activities” include activities performed directly by a federal agency or a contractor on behalf of the agency,
activities that are not performed by a federal agency, but that require federal permits or licenses, and federal assistance to state and local governments (15 USCA §1456(c)(3)(A)).

An applicant for an activity requiring a federal permit or license must provide in the application to the federal agency a certification that the proposed activity complies with the State’s approved coastal zone management program (id). At the same time, the applicant must also provide a copy of the certification to the State, along with all necessary information and data (id). Each State must establish procedures for public notice of the activity, and public hearings, if the State thinks such hearings are appropriate (id).

At the “earliest practicable time,” but no later than six months after receipt of a copy of the applicant’s certification, the State must notify the licensing federal agency whether the State concurs or objects to the applicant’s certification (id). The State’s concurrence will be conclusively presumed if it fails to notify the licensing federal agency within 6 months of receiving the applicant’s certification (id). The federal agency cannot issue the required permit or license until the State has concurred with the applicant’s certification, unless the Secretary of Commerce finds, after reasonable opportunity for detailed comments from the federal agency and the State, that the activity “is consistent with the objectives of this chapter [chapter 33 of Title 16 of the United State’s Code, the Coastal Zone Management Act] or is otherwise necessary in the interest of national security.”

II.A.5. Critical Areas Law (Baltimore County) The establishment or expansion of the following uses is prohibited in all Chesapeake Bay Critical Areas:

A. Solid or hazardous waste collection or disposal facilities
B. Sanitary Landfills
C. Permanent sludge hauling, storage or disposal facilities other than those associated with wastewater treatment.
D. Transportation facilities and Utility transmission facilities, except those necessary to serve uses permitted in the underlying zone per the Baltimore County Zoning Regulations. Such uses may be permitted only in intensely developed areas and only after the activity or facility has demonstrated that there will be a net improvement in water quality to the adjacent body of water (Bill No. 9-1996).
E. Non-maritime heavy industries, except those uses permitted in the underlying zone as authorized by these regulations. Such uses may be permitted only in intensely developed areas, as defined by the Baltimore County Code, and only after the activity or facility has demonstrated that there will be a net improvement in water quality to the adjacent body of water.

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Table 4: Summary of federal and State regulatory requirements, responsibilities or authorities.

<table>
<thead>
<tr>
<th>Action</th>
<th>Agency</th>
<th>Authority</th>
<th>Prerequisites</th>
<th>Basis for Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall authority to approve Onshore Facility (LNG Terminal)</td>
<td>FERC</td>
<td>NGA Section 3</td>
<td>Requires completion of an Environmental Impact Statement</td>
<td>Project is not inconsistent with the public interest</td>
</tr>
<tr>
<td>Approval of Pipeline</td>
<td>FERC</td>
<td>NGA Section 7</td>
<td>Same</td>
<td>same</td>
</tr>
<tr>
<td>Approval of Safety and Security of Facility and U. S. Coast Guard</td>
<td>Port and Waterways Safety Act, 33 USC §1221 et seq. and the Maritime Transportation Security Act, 46 USC 70101 et seq.</td>
<td>WSA that meets the requirements of NV05-05.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of dredge and fill in navigable waters</td>
<td>Corps of Engineers</td>
<td>Rivers and Harbors Act Section 404 of the Clean Water Act</td>
<td>Joint federal/state permit application</td>
<td>Avoidance and minimization of impact and mitigation of unavoidable impacts</td>
</tr>
<tr>
<td></td>
<td>Board of Public Works</td>
<td>State Tidal Wetland Act §16-201 et. Seq.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impacts to nontidal wetlands and waterways</td>
<td>Corps of Engineers</td>
<td>Section 404 of the Clean Water Act</td>
<td>Joint federal/state permit application</td>
<td>Avoidance and minimization of impact and mitigation of unavoidable impacts</td>
</tr>
<tr>
<td></td>
<td>MDE</td>
<td>State Nontidal Wetlands Protection Act §5-901 et seq.</td>
<td>Joint federal/state permit application</td>
<td>Avoidance and minimization of impact and mitigation of unavoidable impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waterway Construction Act §5-501 et seq.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air quality impacts*</td>
<td>MDE</td>
<td>Clean Air Act</td>
<td>Air quality permit application</td>
<td>Meets the requirements of the Act and implementing regulations</td>
</tr>
<tr>
<td>Water Quality impacts*</td>
<td>MDE</td>
<td>Clean Water Act, Section 401 Water Quality Certification</td>
<td>Joint federal/state permit application</td>
<td>That any federally permitted discharges from the facility will not violate the State water quality standards.</td>
</tr>
<tr>
<td>Proposed federal activities (i.e., FERC approval)*</td>
<td>MDE</td>
<td>Section 307 of the federal Coastal Zone Management Act, 15 USC §§1451 et seq.</td>
<td>Application for FERC approval and EIS</td>
<td>Requires compliance with all enforceable policies of the State’s Coastal Zone Management Program</td>
</tr>
<tr>
<td>Proposed construction of LNG facility</td>
<td>MDE</td>
<td>Coastal Facilities Review Act §14-501 et seq.</td>
<td>Coastal Facilities Review Act permit application (will include application for all applicable State permits)</td>
<td>Local certification and compliance with all applicable State permits</td>
</tr>
</tbody>
</table>

*Note: All non-federal permit processes are subject to FERC coordination rules found in 18 CFR §§153, 137, 375 and 378.
II.B. Timeline. All permitting of the proposed LNG facility at Sparrows Point will follow a timeline established by FERC\textsuperscript{3}. The permitting process begins when an applicant expresses the intent to file for a permit by submitting a ‘pre-filing’ letter to FERC. Subsequently, the applicant prepares a series of Resource Reports that describe the general nature of the proposed facility, the potential impacts on local communities, the environment, etc. Meetings are held to inform the local communities of the potential facility. The Resource Reports form the basis for FERC to prepare the draft Environmental Impact Statement should the application be filed. State and federal agencies and other interested parties gather information and review the Resource Reports prior to the formal permit filing, but only after a full and complete application is received by FERC is it possible to complete the impact assessment.

For the AES Sparrows Point LNG facility, the pre-filing date was March 24, 2006, and the formal application may be filed in early January 2007. Within 30 days of the filing, the State of Maryland has the opportunity to file an advisory report with FERC identifying the State’s concerns. This will be done through the Power Plant Research Program at DNR in coordination with all applicable State agencies. Maryland’s cabinet was advised of this opportunity during a meeting on December 19, 2006 and all departments have agreed to fully participate in the development of this advisory report.

\textsuperscript{3} The Energy Policy Act of 2005, amended the Natural Gas Act to provide FERC with authority to set a schedule for all federal agencies and all state agencies acting under federal authority to set schedules for the completion of all permitting activities required to site an LNG facility. Further, the administrative record created by these permit actions are required to be maintained by FERC so that all state permit actions must be coordinated through FERC. FERC issued a final order implementing this authority on October 19, 2006 so that State permitting activities undertaken for Sparrows Point will be subject to the established coordination process.
<table>
<thead>
<tr>
<th>Date</th>
<th>Applicant</th>
<th>Federal</th>
<th>State</th>
<th>LNG Task Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 March 2006</td>
<td>Pre-filing letter sent to FERC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>1. Review Draft Resource Reports (FERC)</td>
<td>Review Resource Reports with comments to FERC</td>
<td>First Meeting</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>2. Prepare Preliminary Draft Environmental Impact Statement (FERC)</td>
<td></td>
<td>Risk &amp; Safety Land Use</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>3. Prepare Waterways Suitability Report (USCG)</td>
<td></td>
<td>Environmental Draft Findings &amp; Recommendations</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td></td>
<td></td>
<td>Draft Report Report Due 31 December</td>
</tr>
<tr>
<td>July</td>
<td></td>
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<tr>
<td>December</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8 January 2007¹</td>
<td>File application at FERC</td>
<td>1. Within 30 days of filing, submit advisory report to FERC detailing State and local safety concerns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>2. Prepare water quality certification required for a wetlands license</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>3. Prepare analysis of coastal zone management consistency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
<td></td>
<td></td>
<td>Comment on Draft EIS</td>
</tr>
<tr>
<td>May</td>
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<tr>
<td>June</td>
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<tr>
<td>October</td>
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</tr>
</tbody>
</table>

¹Anticipated filing date. All subsequent dates estimated from this date.
III. A description of the local community, land use and a characterization of a potential LNG facility at Sparrows Point.

### Issues in SB 996

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>the current and projected population and demographic characteristics of the location of the proposed production, storage, or regasification facility;</td>
</tr>
<tr>
<td>4.</td>
<td>the current and proposed land use near the location of the proposed production, storage, or regasification facility</td>
</tr>
<tr>
<td>5.</td>
<td>the natural and physical aspects of the proposed location</td>
</tr>
</tbody>
</table>

### III.A. Background.

#### III.A.1. The Surrounding Communities.

The socioeconomic characteristics of the communities (as defined by U.S. Census Designated Places [CDP]) adjacent to the proposed facility are:

- **a. Total Population**: 71,554
- **b. Population Density (persons per square mile)**: 5,541
- **c. Total Housing Units**: 30,149
- **d. Percent of Population 5 years or older with disability**: 24%
- **e. Percent of Families in Poverty (1999)**: 6%
- **f. Percent of Families with female householder**: 19%
- **g. Percent of Individuals in Poverty**: 8%
- **h. Median Housing Value (1999)**: $103,650
- **i. Median Household Income (1999)**: $43,359

Approximately 5,000 people live within 2 miles of the proposed facility, including the communities of Turner Station, Watersedge, and Carnegie Plats. These are the nearest residential communities to the proposed facility. The nearest community is Turner Station, whose border is 1.1 miles from the facility. Turner Station is an eighty percent African-American, economically distressed community located in southeastern Baltimore County (census tract 4213.00).

The major communities surrounding the proposed facility (Dundalk and Edgemere) contain the highest concentration and absolute number of U.S. Housing and Urban Development (HUD) subsidized units within Baltimore County. HUD regulations prohibit funding new housing projects within a HUD-defined acceptable separation distance (ASD) from a hazardous facility. Siting a LNG facility may jeopardize future HUD funding to the surrounding communities should HUD determine that housing falls within the ASD.

#### III.A.2. Current Land Use.

In addition to the residential communities already identified, the Dundalk and Edgemere areas contain commercial, industrial, office, mixed use, institutional and open space land uses. The predominant character of these two major communities is residential. The Sparrows Point Peninsula and its Sparrows Point...
Industrial Park is a unique location within Baltimore County singled out exclusively in the most recent Baltimore County Master Plan. The current land use of the Sparrows Point Industrial Park and site of the proposed LNG facility is zoned ‘Manufacturing Heavy’.

The current industrial sites operating at the Sparrows Point Peninsula include:

a. Mittal Steel  
b. ATEC Hydraulics  
c. Mobile Dredge  
d. Onyx Environmental Services  
e. Air Products and Chemicals  
f. Multi-Serv  
g. Kinder Morgan  
h. LaFarge  
i. Kroff Materials Reprocessing  
j. Barletta Willis Corporation  
k. Senesco  
l. Airgas  
m. North America Ship Recycling  
n. MP Industries  
o. three industrial landfills (Grays and Coke Point Landfills and ER&WR Wood Waste Processing Facility)

**III.A.3. Proposed Land Uses on Sparrows Point Peninsula.** In addition to the potential LNG facility, a number of other industrial activities have been proposed or are in the planning stages for the Sparrows Point peninsula, including (a) the AES dredge materials innovative reuse facility, (b) the Ecron ethanol plant, (c) the expansion of the Multiserve and Fritz screening plants to reprocess slag, (d) the expansion of the Kroff facility for hazardous materials and waste oil recycling, and (e) the AES proposed electricity co-generation plant.

**III.A.4. Characteristics of Proposed Site.** A 1997 Consent Decree required assessment, design, and remediation of the Sparrow Point site. Industrial activities on the site have contaminated the soils with a wide range of pollutants, including: antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel, tin, zinc, ammonia, benzene, cyanide, ethyl benzene, ethylene glycol, cyanide, hydrogen sulfide, PAHs including naphthalene and pyrene, PCBs, pentachlorophenol, phenols, sodium phenolate, styrene, sulfuric acid, toluene, trichloroethylene, xylene, coal tar, oils, lime sludge, waste alkaline rinses, mill scale and ship yard wastes. In June 2006, pursuant to the consent decree, the shipyard area, which includes the footprint of the proposed LNG facility, was removed from the consent decree (letter of June 15, 2006 from Robert E. Greaves, Chief, EPA General Operations Branch and Kendl P. Philbrick, Secretary of MDE to Robert Abate, Manager, Safety, Health and Environment, ISG Sparrows Point LLC). SPS Shipyard LLC, the site owner, subsequently submitted an application for the property to the Voluntary Cleanup Program (VCP). SPS Shipyard is completing its environmental
assessment of the property and will develop a Response Action Plan. Under the VCP cleanup will be accelerated relative to the priority that the area was assigned under the consent decree.

Much of the Sparrows Point site is constructed land created by filling nearshore areas with a variety of materials. A geotechnical survey performed in July 20064 indicates that the site is underlain by existing fills containing concrete rubble and steel slag. The fills are underlain by up to 84-feet of soft, compressible, alluvial soils. These soils are likely not suitable for foundation support without soil improvement methods such as stone columns, requiring that new structure be supported by driven H-pile foundations.

III.B. Issues.

The Task Force identified three important issues related to land use and demographics in the area:

1. The proximity of economically distressed communities that have for generations borne the brunt of environmental pollution in the Sparrows Point area.
2. The compatibility of the proposed LNG with current and proposed industrial activities in the Sparrows Point area.
3. The existing contamination of the Sparrows Point industrial area.

In addition to the LNG facility at Sparrows Point, the proposal involves an 87-mile pipeline from the facility to southern Pennsylvania. The Task Force did not evaluate the impacts of the pipeline.

III.C. Recommendations

III-1. Maryland should insure that the evaluation of the LNG facility abides by state and federal Environmental Justice policies5 as directed by Presidential Executive Order 128986.

III-2. Baltimore County, with assistance from Maryland if requested, should develop a comprehensive long-range Master Plan for the development of the Sparrows Point peninsula.

III-3. Maryland should strongly urge FERC to fully consider the current and proposed industrial activities adjacent to the proposed LNG facility, especially with regards to cumulative impacts. In particular, FERC should consider whether an LNG facility and an ethanol production plant can be sited in close proximity to each other. Any subsequent proposal to

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5 For an example, see the Department of Energy’s Environmental Justice policy at http://www.lm.doe.gov/env_justice/documents/envjus2.htm
construct an electric generating unit should also be considered together with the LNG facility in conducting the required risk assessment.

III-4. The Task Force recommends complete remediation of the Sparrows Point site prior to construction to prevent the release of toxic contaminants that could affect the local residents. Contaminated materials should be completely removed from the Sparrows Point Peninsula. Maryland should recommend that FERC make this a condition of the license.

III-5. Maryland should require an independent geotechnical and engineering analysis of the proposed LNG facility to insure the design and construction methods contain an adequate margin of safety for building on debris-filled soils.

IV. An analysis of risk and safety issues of a potential LNG facility at Sparrows Point

<table>
<thead>
<tr>
<th>Issues in SB 996</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the risks and hazards of a liquefied natural gas production, storage, or regasification facility;</td>
</tr>
<tr>
<td>2. the kind and use of the proposed production, storage, or regasification facility</td>
</tr>
<tr>
<td>6. the emergency response capabilities near the proposed facility location;</td>
</tr>
<tr>
<td>7. the need and appropriate distance for remote siting;</td>
</tr>
</tbody>
</table>

IV.A. Background

A Risk and Safety Committee of the Task Force was established to evaluate potential human health and safety issues of the proposed AES facility at Sparrows Point. Given that charge, the Committee, chaired by DNR Acting Assistant Secretary Frank Dawson, contacted key regulatory authorities responsible for evaluating human health and safety issues in the licensing process, as well as local and State agencies responsible for emergency preparedness and response, and requested presentations and discussion before the full Task Force. In response to that request, presentations were made to the Task Force at their October 18, 2006 meeting by the following:

Mr. Terry Turbin (LNG Engineering Branch, Federal Energy Regulatory Commission)
Lieutenant Commander Laura Weems (Project Chief Waterways Management, United States Coast Guard, Sector Baltimore)
Mr. Richard Muth (Director, Baltimore County Office of Homeland Security and Emergency Management)

Each presenter was asked in advance to address a series of questions specific to their areas of expertise and responsibility. Mr. Turbin and LCDR Weems were asked to address the FERC and USCG roles respectively, how those agencies assess risk of LNG ship traffic and facilities, and how the results of those assessments are factored into the licensing process. Mr. Muth was asked to address Baltimore County’s plans and
capabilities for planning for and responding to an emergency at an LNG facility in Sparrows Point.

IV.B. Issues.

Based on the invited presentations and follow-up discussions by the full Task Force and the Risk and Safety Committee, three major issues of concern were identified.

1. **Calculation of Safety Zones**: The USCG and FERC will calculate safety zones and procedures around LNG ships in transit, ships while berthed at the terminal, and the land around the terminal itself. These may or may not include a requirement to close the Chesapeake Bay Bridge and Key Bridge while LNG ships transit beneath or near the bridges. The Task Force was concerned that these calculations will be based in large part on assumptions and models that may not adequately protect public health. There was also concern that the safety zones around LNG ships in transit may be reduced to accommodate recreational and commercial traffic on the water, and thereby further increase the risk to the public. In addition to the methods typically used by FERC to calculate safety zones around the LNG facility, the U.S. Department of Housing and Urban Development (HUD) provides guidance for locating residences and any other facility or area where people may congregate an acceptable separation distance (ASD)\(^7\). The HUD ASD method, which was developed to assess risk of pressurized containers, often results in larger calculated safety zones than those used by FERC in LNG siting decisions, often by a factor of ten.

2. **Emergency evacuations of local communities**: There was considerable concern by the Task Force that the existing road network in the area of the proposed facility, the fact that the proposed facility would be located on a peninsula with limited avenues for egress, the relatively large local population that do not speak English, and the large number of schools and churches in the area, would all serve to make an effective and safe evacuation in the event of an emergency impossible.

3. **Emergency response capability**: Neither Baltimore County, the surrounding local governments, nor the State, have the equipment or staff to adequately respond to an emergency situation at an LNG ship or land facility. The Task Force was concerned that these capabilities do not currently exist, and that the State and local governments would incur an extremely large cost to adequately prepare for response to an accident should an LNG facility be built at Sparrows Point.

\(^7\) HUD Blast Overpressure Safety Standard (CFR 51.204-24)
IV.C. Findings and Recommendations

Senate Bill 996 Issue #1: The risks and hazards of a liquefied natural gas production, storage, or regasification facility.

Findings:

IV-1. There is considerable public concern about the potential risks of LNG traffic in the Chesapeake Bay and of the terminal, storage, and regasification facility at Sparrows Point.

IV-2. Much of FERC’s and the USCG’s assessments of risk from LNG plants are based on a report conducted by Sandia National Laboratories (Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill over Water, 2004), which is derived largely on models and assumptions. These models have not been verified at the scale of the proposed LNG facility.

Recommendations:

Maryland should strongly recommend through the comment process that:

IV-1. FERC and USCG take into account all studies on the risks of LNG not incorporated into the Sandia report (examples include LNG Facilities in Urban Areas. A Security Risk Management Analysis for Attorney General Patrick Lynch, Rhode Island, by Richard Clarke, 2005; U.S. Environmental Protection Agency, Guidance Document for Hazard Analysis, 1987), including those not publicly available. Also the LNG guidance policies used by European nations and Australia in licensing LNG facilities in their countries should be considered when making decisions on this and any future LNG applications.

IV-2. When FERC and USCG interpret any findings based on models and assumptions to estimate the level of risk from the proposed LNG facility, they should include safety factors adequate to account for uncertainties in the models. They should use calculations from any recognized authority that provide the largest safety area.

IV-3. FERC and USCG should require experiments on the hazards of LNG releases on the scale that would be experienced by a catastrophic failure of a tanker or land based storage tank before any final decisions are made on this application.

Senate Bill 996 Issue #2: The kind and use of the proposed production, storage, or regasification facility.
Findings:

IV-3. The proposed LNG terminal, storage tanks, and regasification facility are typical of those used in the LNG industry. However, at Sparrows Point in addition to the LNG facility, the pre-filing notification describes a dredge material recycling plant and the potential siting of a power plant.

IV-4. Sparrows Point Peninsula is the site of several industrial activities, and others are proposed. The cumulative and interactive impacts of the combined activities are not fully known.

Recommendation:

IV-4. Maryland should assure that the cumulative and interactive impacts of the combined activities on Sparrows Point are evaluated once the formal application has been filed with FERC.

Senate Bill 996 Issue #6: The emergency response capabilities near the proposed facility location.

Findings:

IV-5. Adequate communication to the public during an emergency is a major concern due to lack of effective means of public notification due to insular or non-English speaking communities.

IV-6. The road system is inadequate for evacuating public from the area in a reasonable amount of time. Several potentially affected communities have only a single road for evacuation.

IV-7. Many local residents rely completely on public transportation.

IV-8. Baltimore County does not have sufficient resources to respond to a major emergency at an LNG plant.

Recommendations:

Maryland should strongly recommend through the comment process that:

IV-5. FERC requires that The Emergency Response Plan must include an effective and rapid means of notifying and evacuating the public in the event of an emergency. This plan must specifically address the road capacity for evacuation and evacuating those dependent on public transportation, and be acceptable to local and State agencies. This should include on-going public education efforts on notification and evacuation methods, as well as on-going drills for emergency responders.
IV-6. The Emergency Response Plan must clearly identify the applicant as the responsible party for covering both the direct costs to respond to an emergency (e.g., high expansion foam capabilities, fire boats, emergency response personnel, planning for and implementing evacuations) as well as the indirect costs of planning and preparation (e.g., staff and management time after the emergency devoted to response and restoration, training and refresher training for emergency responders).

Senate Bill 996 Issue #7: The need and appropriate distance for remote siting:

Findings:

IV-9. FERC will determine land exclusion zones around the proposed plant based on site-specific calculations and recommendations from the Sandia report as established by National Fire Protection Act 59A: *Standard for the Production, Storage, and Handling of LNG*. Two sets of exclusion zones will be set:

a. “Thermal Radiation Exclusion Zones” which establishes several exclusion zones around the land storage tanks and the vaporization, process, and transfer areas within which certain activities and structures are prohibited. These include the outdoor assembly of 50 or more people; offsite structures used for occupancies or residences, and property lines that can be built upon. (Title 49, CFR, Part 193, Section 193.2057: *Federal Safety Standards for LNG Facilities*).

b. “Vapor Dispersion Exclusion Zones” which requires that provisions be made to minimize the possibility of flammable vapors from a design spill from reaching a property line that can be built upon. (Title 49, CFR, Part 193, Section 193.2059: *Federal Safety Standards for LNG Facilities*).

The company must have control over the identified exclusion zones (i.e. ownership or easements).

FERC does not have standard distances for these exclusion zones, but rather bases their decisions on unique characteristics of each proposed plant. These exclusion zones have not yet been set by FERC for the AES proposal at Sparrows Point, although AES has calculated proposed exclusion zones\(^8\). The exclusion zones proposed by AES are significantly smaller than those at Cove Point. FERC established exclusion zones for the Dominion Cove Point LNG facility in Calvert County and the AES proposed exclusion zones for the Sparrows Point facility are as follows:

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\(^8\) Mr. Kent Morton (AES) at the LNG Task Force meeting, November 17, 2006.
Table 6. Calculated Exclusion Zones.

<table>
<thead>
<tr>
<th></th>
<th>Dominion Cove Point (Established by FERC)</th>
<th>AES Sparrows Point (Proposed by AES)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thermal Radiation Exclusion Zones around LNG storage tank impoundments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No outdoor assembly of 50 or more people:</td>
<td>1,423 ft.</td>
<td>949 ft.</td>
</tr>
<tr>
<td>No offsite structures used for occupancy or residence:</td>
<td>771 ft.</td>
<td>737 ft.</td>
</tr>
<tr>
<td>Property line that cannot be built upon:</td>
<td>537 ft.</td>
<td>394 ft.</td>
</tr>
<tr>
<td><strong>Vapor Dispersion Exclusion Zone around LNG storage tank.</strong></td>
<td>1,200 ft.</td>
<td>262 ft.</td>
</tr>
</tbody>
</table>

It is important to note that the exclusion zones required by FERC around the proposed AES Sparrows Point LNG facility may be greater or less than the zones established by FERC at Dominion Cove Point, as they are two different facilities. A significant difference is that the Cove Point terminal off loads approximately 1 mile from the shoreline while the proposed Sparrows Point LNG facility is shoreside. The basic characteristics of the existing Cove Point facility, the expanded Cove Point facility (approved by FERC and currently under construction), and the proposed Sparrows Point facility are compared in Table 7:

Table 7. Comparison of Dominion Cove Point and the Proposed Sparrows Point LNG Facility

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing Cove Point</th>
<th>Expanded Cove Point</th>
<th>Proposed Sparrows Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG Storage Tanks</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Total Storage Capacity (m³)</td>
<td>375,000</td>
<td>695,000</td>
<td>480,000</td>
</tr>
<tr>
<td>Natural Gas Capacity (bcf/day)</td>
<td>1.0</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Developed lands (acres)*</td>
<td>108</td>
<td>130</td>
<td>80</td>
</tr>
<tr>
<td>Ship traffic (ships/year)</td>
<td>~90</td>
<td>~200</td>
<td>~130</td>
</tr>
<tr>
<td>Required dredging (million cubic yards)</td>
<td>0</td>
<td>0</td>
<td>2.5 – 4.0</td>
</tr>
</tbody>
</table>

*Sparrows point proposal includes area developed for cogeneration and sediment processing (60 acres LNG + 20 acres cogeneration and sediment).
IV-10. The USCG has not yet submitted their Waterway Suitability Report (WSR), which will provide recommendations to FERC on the size of any marine safety and security zones around LNG tankers in Chesapeake Bay. The USCG may recommend to FERC that marine safety and security zones be modified from recommendations in the Sandia report to lessen the impacts to commercial and recreational activities, and in recognition of the physical configuration of the waterway. (Title 33, CFR, Part 165: Regulated Navigation Areas and Limited Access Areas). (See section V below for more on the impacts to commercial and recreational activities.)

LNG tankers transiting the Chesapeake Bay to the Dominion Cove Point LNG terminal have a 500-yard safety and security zone around the ship while in transit and while berthed at the Cove Point offloading platform (Title 33, CFR, Part 165, Sections 500 and 502).

IV-11. Additionally, the USCG has not yet made a recommendation via the Waterway Suitability Report on whether or not the Chesapeake Bay Bridge and/or the Key Bridge will have to be closed to traffic during the transit of LNG tankers in the vicinity. Currently the Tobin Bridge in Boston must be closed to vehicular traffic when LNG tankers transit beneath it en route to the Tractebel LNG terminal. The Delaware Memorial Bridge would not be closed for vehicular traffic under a proposed LNG terminal on the Delaware River in New Jersey, but this is currently being litigated.

Recommendations:

IV-6. The State should conduct its own calculations of applicable exclusion zones to ensure agreement with the applicant, FERC, and USCG calculations, and to take into account local and State concerns regarding impacts to recreational and commercial activities on the waterways, impacts to traffic and construction activities on the Bay Bridge, etc. The State’s conclusions should be forwarded to FERC as conditions on any potential license to the applicant.

IV-7. Marine safety and security zones are calculated based on safety and security issues and must not be compromised to accommodate impacts on recreational and commercial activities. If the impacts to recreational and commercial activities are unacceptable, then Maryland should recommend to FERC that the project must not move forward.
V. Environmental consequences of a potential LNG facility at Sparrows Point.

<table>
<thead>
<tr>
<th>Issues in SB 996</th>
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<tr>
<td>8. the effect of the proposed facility location on recreational and commercial boating and fishing and crabbing in the area;</td>
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<tr>
<td>9. the impact on the environment, especially on water quality, due to the quality of the dredged material from the large scale dredging that is intended to be undertaken to accommodate the ships transporting the liquefied natural gas; and</td>
</tr>
<tr>
<td>10. the impact on the ability of residential property owners near the proposed facility to retain access to their properties by way of the waterway.</td>
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V.A. Background

Much of the Sparrows Point peninsula and adjacent waters are contaminated due to legacy industrial activity. Portions of the former Bethlehem Steel site have contaminated soils and the site is targeted for clean-up under a consent decree. However, the proposed LNG site is no longer part of the consent decree, but has entered the Voluntary Cleanup Program. The near-surface sediments in the lower Bear Creek near the proposed LNG site contain high levels of organic pollutants (hydrocarbons and PAHs), metals and sulfides, and are often toxic to native organisms. While the area remains one of the most contaminated in Maryland, there is some recent indication of improved water quality, likely linked to reduced industrial activity on the site. Such ‘natural recovery’ of the land itself will not occur without active remediation of Sparrows Point soils.

The contamination of the area raises concerns about potential releases of pollutants during any construction. For example, winds may carry resuspended polluted soils away from the site, distributing contaminants into local communities. Also, dredging contaminated sediments will release contaminants into the overlying water, even if the best available environmental dredging techniques are used. Processing of dredged sediments on the site will likely discharge water from the site which, if untreated, would adversely impact the surrounding water.

As with almost all industrial activities, once in operation an LNG facility will release pollutants into the air and water. These releases will be regulated by the Maryland Department of the Environment through Clean Air Act and Clean Water Act permits. Maintenance dredging to maintain navigation channels into the facility, including dredging of the turning basin, will continue to generate contaminated dredge material requiring treatment and disposal.

Since LNG operations will restrict use of a portion of the waterway during LNG tanker movement and off-loading, there is a concern that an LNG facility at Sparrows Point would impact commercial and recreational use of the waterway in the area. The Bear Creek area is densely populated, and many in the community use the waterway for recreation. Bear Creek may also be suitable spawning habitat for commercially or ecologically important fish species.
The Task Force also examined the rationale for building an LNG facility at Sparrows Point in order to consider the ‘no action’ alternative to the proposal. The proposed facility and pipeline would deliver natural gas to southern Pennsylvania, to be further distributed to customers in the northeast. Maryland would not directly receive natural gas from the proposed facility, and any impact on Maryland energy costs or stability would likely be indirect. The project is justified on projections of future energy demands based on ‘business as usual’ energy use. As with any commodity, price and supply of energy is controlled by supply and demand. The Task Force examined whether improved energy efficiency in the region may achieve a comparable impact to building an additional LNG facility in Maryland.

V.B. Issues

The environmental issues considered by the Task Force include (a) the impact of dredging, including treatment and disposal of dredged material, (b) the environmental impacts of construction and operation of an LNG facility at Sparrows Point, (c) the loss of waterway use, and (d) the impact of an LNG facility at Sparrows Point on Maryland energy supplies.

V.C. Findings and Recommendations

VC.1. Dredging.

Findings:

V-1. The volume generated by the proposed project would greatly exceed the already limited capacity for harbor material disposal.

V-2. Unconfined disposal of spoil from Baltimore Harbor is prohibited outside of Baltimore Harbor; unconfined disposal of spoil from a “Baltimore County tributary” is prohibited within five miles of the Hart-Miller-Pleasure Island chain; and a contained disposal site may not be approved within the same five mile limit.

V-3. The applicant has indicated that they will propose to build an on-site facility to process the dredge material prior to shipping off-site. There is no facility in the region to process the dredged sediment into a product that could be classified as an innovative use and therefore no precedent for permitting such a facility.

V-4. The limited capacity to dispose of Baltimore Harbor sediments requires careful prioritization of Harbor dredging projects.

V-5. Suspended sediments, toxic substances and nutrients will be released during dredging. The quantity released will depend on the nature of the
The dredging technique used, which must be designed to minimize pollutant release to the water column. Even using the best available dredging and disposal technologies, the large volume of materials handled will result in an overall large release of contaminants.

Recommendations:

V-1. Maryland should continue to prioritize the use of disposal capacity in Baltimore Harbor for required maintenance of navigation channels.

V-2. State and Federal regulatory agencies should not permit dredge sediment disposal or disposal process operation until disposal capacity is clearly and legally documented and the regulatory path defined.

V-3. A formal opinion from the Attorney General of Maryland as to the legality of processing of dredge materials on the proposed location under the current law should be requested prior to granting permission to dredge a deepened channel.

V-4. State and Federal permitting agencies for any discharge permits must consider the potential for long-term impacts in addition to acute impacts because sediments in the proposed project area typically contain bioaccumulative contaminants. Impacts from dredging and de-watering should be evaluated cumulatively with existing impacts.

V.C.2 Environmental Impacts.

Findings:

V-6. Baltimore Harbor has poor environmental quality due to excessive levels of nutrients and toxic pollutants. During the past 10 years, considerable resources have been spent to assess and manage these problems, and substantial efforts to improve the Harbor continue.

V-7. The sediment in some areas surrounding the proposed facility is extremely contaminated and local neighborhoods have borne a disproportionately large pollution burden for several generations.

V-8. Since the reduction of industrial activity at the Sparrows Point site, there is some evidence of improvement in environmental conditions in Bear Creek. Dredging and construction will increase pollution.

Recommendations:

V-5. Maryland should work through existing regulatory authorities and voluntary incentives to insure that any new major activity in the Sparrows
Point area is ‘environmentally positive’ (i.e., the area’s environmental quality is better than if the project did not occur). Environmental impacts shall be avoided or minimized to the extent possible and the remaining impacts offset by mitigation.

V-6. Maryland should ensure, through the Water Quality Certification and the Consistency Determination, that the proposed activity is consistent with existing Harbor-wide remediation and restoration programs.

V-7. No activity should be allowed at Sparrows Point that interferes with or delays the required environmental remediation of the site.

V-8. Maryland shall be a strong advocate for the residents of the surrounding communities, ensuring that any development on the site is consistent with the principles of environmental justice.

V.C.3. Effect of the proposed facility on recreational and commercial boating, fishing and crabbing.

Findings:

V-9. In 2005, there were 200,532 boats registered in Maryland, of which 21,357 were registered in Baltimore County, and 3,032 were registered in Baltimore City.

Table 8. Maryland Boat Registration, 2005

<table>
<thead>
<tr>
<th></th>
<th>Pleasure</th>
<th>Commercial Fishing</th>
<th>Other</th>
<th>Total</th>
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<tbody>
<tr>
<td>Baltimore County</td>
<td>21,004</td>
<td>14</td>
<td>339</td>
<td>21,357</td>
</tr>
<tr>
<td>Baltimore City</td>
<td>2,933</td>
<td>0</td>
<td>99</td>
<td>3,032</td>
</tr>
<tr>
<td>State Total</td>
<td>172,069</td>
<td>735</td>
<td>4,304</td>
<td>200,532</td>
</tr>
</tbody>
</table>

V-10. The Patapsco River is the site of a significant amount of commercial fishing activity. Between 2003 and 2006, an annual average of approximately 85,000 pounds of fish and shellfish were commercially harvested from the Patapsco River. Hard blue crabs comprise approximately 75% by weight of the Patapsco River commercial fishery harvest.

V-11. Approximately 500 charter boat trips per year originate in Baltimore Harbor for recreational fishing, sightseeing, and other services (pers. 9 Maryland Department of Natural Resources, Licensing and Registration Service 10 Maryland Department of Natural Resources, Fisheries Service
comm. to Russell Donnelly from the Watermens Association). Charter fishing boats must report to DNR where they stop to fish. The Patapsco River is utilized by charter fishing boats on a highly variable basis depending on annual variation in the location of fish populations. Between 2003 and 2005, the charter boat fishing industry reported a low of four fishing trips in 2003 and a high of 100 fishing trips in 2004 (DNR Fisheries Service).

V-12. Evidence is strong that the Bear Creek area is currently a spawning habitat for white perch, and was historically for other species.\(^\text{11}\)

Recommendations:

Maryland should strongly recommend through the comment process that:

V-9. FERC implement marine safety and security zones based solely on safety and security considerations and these must not be compromised to accommodate impacts on commercial and recreational activities. If the impacts on commercial and recreational activities are unacceptable, then Maryland should recommend to FERC that the project not move forward.

V-10. FERC, with input from Maryland DNR, should accurately calculate the economic and cultural impacts to the recreational and commercial communities resulting from the inevitable loss of access to the waterway, and require that the applicant compensate these communities appropriately.

V.C.4. Energy supply and policy

Findings:

V-13. In general, any new facility would increase the reliability of natural gas supply to the region, which may influence utility costs.

V-14. The applicant’s stated purpose for the proposed facility is to serve customers outside Maryland. The Task Force is not aware of any plans to build a gate station from this facility feeding to Maryland consumers.

V-15. The use of natural gas typically has less overall environmental impact than other fossil fuels, including coal.

V-16. Current LNG imports at Cove Point are approximately twice the current natural gas consumption in Maryland, providing LNG for regional distribution. After expansion of Cove Point, which has been approved by FERC and is currently underway, the capacity of that facility will be more

\(^{11}\) Maryland Department of Natural Resources, Fisheries Service
than three times the projected natural gas consumption in Maryland. The citizens of Maryland disproportionately bear the costs of environmental impacts, security, and emergency preparation and response.

V-17. While the proposed facility will increase natural gas supplies to the mid-Atlantic and Northeastern U.S., greater economic impact could result from reducing energy demand through modernizing equipment in the region. Such reductions would have other positive environmental benefits beyond not constructing and operating the proposed facility. Comprehensive studies\(^\text{12}\) have demonstrated that cost-effective demand reduction potential is large enough to offset population increase and substantially lower overall demand.

**Recommendations:**

V-11. Maryland should adopt a comprehensive energy strategy that balances supply-side (increased energy production) and demand-side (increased efficiency, conservation) policies.

V-12. Since this facility would push the region toward a supply-side response to energy demand and thereby undermine demand-side strategies, State and federal agencies should require the applicant to invest significantly in statewide demand management programs in Maryland. This should include utility or state-run energy efficiency programs in addition to economic assistance to improve home heating and public transportation in the area.

**VI. Overall Recommendations**

VI-1. The Task Force has identified several major issues of concern for which the applicant has not indicated adequate solutions. Maryland should advise FERC, and use existing State law and permitting authority to the maximum extent possible, to require that unless and until solutions to these critical issues are found, the State would not consider that the safety of the surrounding communities and environmental integrity have been adequately protected as required by the relevant laws. The most significant of these issues include:

a. Notification, transportation and evacuation capabilities are clearly inadequate.

b. The feasibility of processing the required volume of dredged material in a legal and safe manner with existing technology and legal limitations on dredged material disposal in this area is doubtful.

c. Established principles of environmental justice would be severely violated.

VI-2. The applicant should be required to pay all costs borne by the State and local governments for environmental, security and safety protection resulting from any proposed facility.

VI-3. An environmentally, socially, and economically responsible comprehensive development plan for the entire Sparrows Point Peninsula should be prepared by Baltimore County, with State assistance if requested. Any development on the Sparrows Point Peninsula should not conflict with current and planned environmental restoration efforts and should result in net environmental benefit.

VI-4. To ensure future economic viability and energy security, Maryland should develop a comprehensive energy policy that balances supply and demand.

VI-5. Maryland and Baltimore County should continue to be advocates for the local communities. All available legislative and judicial avenues to direct responsible development of the Sparrows Point peninsula should be investigated.

VI-6. A state ombudsman should be designated to communicate the status of development of Sparrows Point to the public.

VII. Acknowledgements

The Baltimore County Liquefied Natural Gas Task Force acknowledges the contributions of several individuals who contributed to our analysis and report. We thank Mr. Brent Hare (MDNR), Mr. Terry Turbin (LNG Engineering Branch, Federal Energy Regulatory Commission), Lieutenant Commander Laura Weems (Project Chief Waterways Management, United States Coast Guard, Sector Baltimore), Mr. Richard Muth (Director, Baltimore County Office of Homeland Security and Emergency Management), and Mr. George Harman (MDE) for their instructive presentations. Dr. Dave Goshorn (MDNR) actively participated in the Task Force meetings and provided valuable contributions to this report. Mr. Kent Morton (AES) and Mr. Vincent B. Dick (Haley & Aldrich) facilitated access to Resource Reports. Finally, we thank the staffs of MDE and DNR for their assistance with Task Force meetings and report production.