

# The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

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SECRETARY

April 14, 2006

## CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Weaver's Cove LNG Project
PROJECT MUNICIPALITIES	: Fall River, Somerset, Swansea, and Freetown
PROJECT WATERSHED	: Taunton River
EOEA NUMBER	: 13061
PROJECT PROPONENT	: Weaver's Cove Energy, LLC
DATE NOTICED IN MONITOR	: March 8, 2006

As the Secretary of Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted for this project **does not adequately and properly comply** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and its implementing regulations (301 CMR 11.00). Therefore, I am requiring the preparation of a limited scope Supplemental Final Environmental Impact Report (SFEIR).

The FEIR is generally responsive to the scope contained in the Certificate on the Second Supplemental DEIR issued on December 16, 2005, and included an analysis of project alternatives and a comprehensive program of proposed mitigation measures in its draft Section 61 Findings, to the extent that these measures have been finalized. However, it has not sufficiently addressed significant concerns about the impacts from dredging on water quality and marine fisheries habitat and the development of appropriate mitigation measures such that the state permitting agency, in this case DEP, has adequate information on which to base its Section 61 Finding and issue a 401 Water Quality Certification for the project.

The primary concerns raised by commenters on this project have involved the security of the liquefied natural gas (LNG) ships in transit and the land-side facility, the potential impacts to public safety, and the potential impacts to the marine environment and fisheries resources from construction and operation of the project. While I would prefer a stronger state jurisdictional role by which to address fundamental concerns regarding public safety and security, the assessment and regulation of these issues are primarily subject to federal control. As discussed

below, the FEIR has adequately addressed issues related to project alternatives, public safety and security, and navigation, to the extent they are subject to MEPA jurisdiction.

Several issues subject to MEPA jurisdiction remain to be adequately addressed before the project can proceed to permitting, most notably the conditions under which dredging will occur, and the definition of mitigation that will be required for unavoidable impacts to fisheries resources. While I do not expect the SFEIR to resolve the outstanding issues identified in the agency comment letters to a final level of detail necessary for permits to be issued, I expect the SFEIR to address significant concerns regarding the impacts from dredging on water quality and marine fisheries habitat and the appropriateness of proposed mitigation measures.

### Project Description

As proposed, the project entails the construction of a liquefied natural gas (LNG) terminal in the City of Fall River, and natural gas pipeline facilities in Fall River, and the towns of Somerset, Swansea and Freetown. The proposed LNG terminal would include a 200,000-cubic meter storage tank with a high wall concrete secondary containment system. The terminal would have a baseload natural gas send-out capacity of 400 million cubic feet per day, plus capacity to provide an additional 400 million cubic feet per day for peak demand. Gas will be delivered to the Algonquin Gas Transmission system via two pipeline connections with a total length of approximately seven miles primarily along existing rights-of-way. The project also includes a truck loading facility to supply existing LNG peak-shaving facilities in New England. The project site has direct access to Route 79, a four-lane limited access highway with connections to Route 24 and Interstate 195.

The project also proposes using various open trench techniques to construct two 24-inch diameter natural gas pipelines totaling 6.1 miles. One of the proposed pipelines, the 3.6-mile Northern Pipeline, would connect to the Algonquin interstate pipeline system in Freetown. The second pipeline, the 2.5-mile Western Pipeline, would cross the Taunton River and connect to the Algonquin pipeline system in Swansea. The project would also include the construction of two meter and regulation stations at the end of the pipelines in Freetown and Swansea. Both pipelines would have a design maximum pressure of 1,440 per square inch gauge.

As currently proposed, the project involves dredging within an existing federal navigation channel, installing structures, and discharging fill material in wetlands and waterways for the construction of the LNG import terminal, and natural gas pipeline facilities. Specifically, the proponent has proposed to dredge approximately 2.6 million cubic yards of material from within a footprint of approximately 191 acres; replace a pier with jetty structure; install sheet pilings to stabilize and straighten approximately 2,650 feet of shoreline; and permanently fill approximately 0.94 acres of intertidal habitat, and 0.17 acres of subtidal habitat.

In order to facilitate the passage of deep-draft ships that would deliver LNG to the facility via Narragansett Bay and the existing Mount Hope Bay/Fall River Harbor Federal Navigation

Channel, the proponent proposes to dredge the channel to 37 feet below mean lower low water (MLLW) - the channel has an authorized depth of 35 feet below MLLW - and deepen and expand the existing Turning Basin to 41 feet. The dredging program involves the removal of up to 2.6 million cubic yards of sediment, including a one-foot overdredge allowance, from approximately 191 acres in the Taunton River and Mount Hope Bay. The proponent proposes to dispose of the dredged sediment offshore at either the Rhode Island Sound Dredged Material Disposal Site or the Massachusetts Bay Dredged Material Disposal Site as the preferred alternative for dredged sediment management. Both the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) have determined that the material is suitable for open water disposal at either location.

#### Changes to the Project since the SSDEIR

In response to the scope contained in the Certificate on the SSDEIR, which required that the proponent address the issue presented by Section 1948 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA) of 2005, prohibiting the demolition of the existing Brightman Street Bridge, the FEIR states that the proponent now proposes to use smaller ships to deliver LNG to the terminal site. The existing Brightman Street Bridge is a structure that has been described in previous MEPA filings as an obstruction to the safe operation of ships carrying LNG. The FEIR indicates that smaller ships will be able to transit between the existing Brightman Street Bridge and the new Brightman Street Bridge.

Prior filings under MEPA described plans to use LNG ships with cargo capacities of up to 145,000 cubic meters, which typically would have a total length of 950 feet, a beam (width) of 145 feet, and a loaded draft of 37.5 feet. Because the existing Brightman Street Bridge has a horizontal clearance of only 98 feet, ships of this size would not be able to transit past the bridge. The smaller LNG ships now proposed to be used would have a cargo capacity of approximately 55,000 cubic meters, a total length approximately 725 feet, a beam of 82 feet, and a loaded draft of 36 feet. In order to maximize the cargo carrying capacity within a smaller hull, it is necessary to maximize the depth of the ship, which in turn, requires that these smaller ships carry a quantity of permanent ballast. Because the ballast would be permanent, the FEIR indicates that no ballast water will be discharged into Massachusetts waters. The use of smaller ships would necessitate more frequent deliveries of LNG, approximately 120-130 visits annually (as compared to the 50-60 annual deliveries anticipated under the previous proposal to use larger ships) and additional openings of the new Brightman Street Bridge. Ships would arrive at the site once every three days, on an average annual basis.

According to the FEIR, the use of smaller ships would not require any additional state agency actions and would not necessitate any changes to the design of the terminal or the extent of maintenance and improvement dredging, nor would it result in any changes to the proposed construction and dredging schedule. The FEIR states there are no substantive changes to the air quality impacts posed by the project's use of smaller ships and the project remains a non-major source of nitrogen oxide (NOx) emissions. The use of smaller ships would not affect the use of

ballast water on an annual basis, but would not require as much cooling water as the use of larger ships. The FEIR specifically addressed the volumes of cooling water required by smaller LNG ships and the Massachusetts Office of Coastal Zone Management (CZM) believes the proponent has adequately addressed this issue. Cooling water use by the smaller ships would approximate 924 to 1,001 million gallons on an annual basis, or approximately 25 percent of the 3,780 million gallons per year required by the larger ships. Although the use of smaller ships and more frequent transits may create other concerns, the diesel electric propulsion systems used on smaller ships and on some of the larger ships would result in a significant reduction in the total volume of cooling water required throughout operation of the proposed facility. With this information in mind, I strongly recommend that the proponent use diesel electric ships exclusively, regardless of their size.

The United States Coast Guard (USCG) has reviewed the proposed use of smaller ships and, in its response letter to the proponent of March 13, 2006, outlines risks associated with the proposed navigation of smaller ships through the portion of the waterway that includes the existing and new Brightman Street Bridges. Because the openings of the two bridges are not navigationally aligned, the USCG has concerns about the smaller ships would maneuver between the bridges, which entails tugs having to stop a moving tanker after it clears the old bridge and then moving the vessel laterally before approaching the opening of the new bridge. The USCG is now awaiting an updated Navigation Transit Plan from the proponent that addresses these risks. Based on the information in the Navigation Transit Plan, the USCG may require the proponent to prepare a revised waterway suitability assessment prior to the USCG issuing a Letter of Recommendation. Therefore, I expect that issues related to the safety and security of the project will be addressed by the USCG in its review.

### MEPA History

The project was the subject of an Environmental Notification Form (ENF) in 2003. The Secretary's Certificate on the ENF required the preparation of a mandatory EIR and a Special Review Procedure (SRP) was established to guide the review of the project through both the MEPA and National Environmental Policy Act (NEPA) review processes. The project was the subject of a Draft EIR (DEIR) in 2004, which was found to be inadequate, and as a result, the Certificate on the DEIR required the preparation of a Supplemental Draft EIR (SDEIR). The SDEIR was also found to be inadequate and, as a result, the preparation of a SSDEIR was required. In the interim, the project completed review under NEPA. The Certificate on the SSDEIR was found to be adequate in a Certificate issued on December 16, 2005.

The project has completed review under the National Environmental Policy Act (NEPA) and received an Order Granting Authority under the Natural Gas Act and Issuing Certificate from the Federal Energy Regulatory Commission (FERC) on July 15, 2005, which was re-affirmed on January 23, 2006.

### State Permitting Requirements and MEPA Jurisdiction

At the state level, the project will require a Chapter 91 License and Permit, a 401 Water Quality Certificate, a Water Supply Cross Connection Permit, a Non-Major Comprehensive Plan Approval, an Asbestos Abatement Permit, approval pursuant to the Massachusetts Contingency Plan, and Superseding Orders of Conditions from the Department of Environmental Protection (DEP), and State Highway Access and Construction Permits from the Massachusetts Highway Department (MHD). The project will also require Federal Consistency Review by the Massachusetts Office of Coastal Zone Management Office (CZM), Tank Permit and Storage Approvals from the State Fire Marshal, and review and consultation by several other agencies with resource management responsibilities, including the Energy Facilities Siting Board (EFSB) and the Massachusetts Historical Commission (MHC). The project may also require a Site Assignment from DEP under the Solid Waste regulations.

In previous Certificates, the Secretary of Environmental Affairs asserted broad-scope jurisdiction over this project under MEPA given the large number of state permits required and the comprehensive subject matter of the required state permits. However, previous Certificates have also been careful to acknowledge MEPA's limited jurisdiction as it relates to security and public safety issues. As part of its Federal Consistency Review, CZM will consult with federal and state agencies that have public safety expertise for assistance, review project alternatives, and weigh the environmental and safety impacts of the project in accordance with Energy Policy #1. Additionally, because the Navigation Transit Plan may affect Chapter 91 water-dependent commercial and recreational interests, the proponent should inform DEP's Waterways Regulation Program informed of any changes that occur in the Navigation Transit Plan following review by the USCG.

### Summary of Mitigation Measures

The following is a summary of the major mitigation measures that have been developed and finalized to date through the MEPA and NEPA processes that the proponent has committed to implement in the draft Section 61 Findings presented in the FEIR.

#### *Site Remediation*

In accordance with the Massachusetts Contingency Plan, the proponent will monitor groundwater levels and the effectiveness of the site remediation during construction and will implement measures, including the construction of a sheet pile wall, to prevent the migration of light aqueous phase liquid (LNAPL) to the Taunton River. Upon final design of the sheet pile wall and prior to its construction, the proponent will submit to DEP a revised Remedial Alternatives Analysis and Remedy Implementation Plan Analysis that will address the impact of the sheet pile wall on the site remediation system.

With regard to the status of plans to continue on-site groundwater remediation activity, the FEIR notes that the proponent is discussing a remediation plan that could significantly

improve the petroleum recovery operation by Shell Oil Products Company, the current party responsible for site remediation. In its comments, DEP indicates that it would support this effort if it is likely to result in a faster clean-up of the site, and requests to be kept informed of any progress.

#### *Stormwater Management*

The proponent will implement erosion and sedimentation control measures contained in FERC's *Upland Erosion Control, Revegetation, and Maintenance Procedures* and *Wetland and Waterbody Construction and Mitigation Procedures*, as well as a site-specific erosion and sedimentation control plan and stormwater management plan. The proponent will comply with DEP's Stormwater Management Guidelines during both construction and operation.

#### *Wetlands*

The project will result in the filling of 1.0 acres of wetlands on the project site and dredging will result in impacts to 191 acres of subtidal habitat and approximately 0.23 acres of intertidal habitat. Construction of the pipelines will result in temporary impacts to 2.82 acres of wetlands, of which approximately 0.47 acres will be converted to other wetland types. The FEIR indicates that, although the project will no longer result in permanent impacts to salt marsh, the proponent has committed to implement a salt marsh mitigation plan consisting of the restoration and creation of approximately 0.74 acres of salt marsh to mitigate for the loss of winter flounder habitat. The proponent will also create approximately 0.18 acres of freshwater wetlands in an upland area.

#### *Marine Fisheries*

To mitigate for the loss of winter flounder habitat, the proponent has committed to contribute \$500,000 towards measures to bring about water quality improvements through the reduction of discharges from combined sewer overflows (CSOs) in the Taunton River/Mount Hope Bay watershed. The proponent has also committed to conduct a pre-harvest survey, and implement a shellfish harvest, relay and seeding plan to mitigate impacts to Northern quahogs resulting from dredging for the entire 84-acres of the proposed dredging footprint identified by DSMF as potential habitat.

#### *Chapter 91 Waterways*

According to the FEIR, construction and operation of the project are not expected to significantly affect recreational activities in the project area. Construction and operation of the facility could affect recreational boaters on a temporary basis, but the proponent will schedule dredging activities in coordination with the federal and state regulatory agencies to minimize disruption and conflicts with other users of the river. The Navigation Work Plan and Navigation Transit Plan, currently under development with the USCG, will include measures to ensure the safe passage of waterborne transportation and recreational use of the waterway during construction and operation of the facility, respectively. I expect that DEP will consider impacts to public waterfront access and to the passage of recreational and commercial vessels resulting from the moving security zone when it issues its Chapter 91 License for the project.

*Transportation*

In its comments, the Executive Office of Transportation (EOT) states that the FEIR has adequately addressed most of its concerns regarding traffic operations and delays resulting from bridge closures. Although the use of smaller ships will result in an increase in the number of ships traveling to and from the project site, EOT does not expect that the traffic impacts posed by this change to the project will be significant.

The proponent has committed to implement the following traffic mitigation measures at state highway locations:

- minor geometric improvements at the intersection of North Main Street, New Street, and the Route 79 southbound ramps, including signaling this intersection if approved by the Massachusetts Highway Department (MHD);
- minor widening of Route 79 between the Route 6 (new Brightman Street Bridge) ramps and the North Main Street ramps; and
- provision of portable signage to identify detours for crossing the Taunton River in the case of emergency closure of the Braga Bridge on I-195.

The proponent should continue to work cooperatively with MHD and appropriate emergency management agencies to determine the most effective locations for the placement of these signs.

*Air Quality*

The proponent will avoid, minimize and mitigate air quality impacts by using diesel electric-propelled ships fueled by natural gas. The Certificate issued by FERC requires that the proponent shall use transportation grade or better diesel fuel in all construction equipment, including dredging equipment; evaluate the feasibility of using catalysts and diesel particulate filters on this equipment and placing idling limits on construction vehicles to further reduce particulate matter, carbon monoxide (CO), and volatile organic compound (VOC) emissions. During construction, dust emissions will be minimized by the application of water. During operation, NOx and CO would be minimized by using ultra-dry low NOx water/glycol heaters. The proponent will meet federal and state air emission requirements by implementing best available control technology and undergoing an air plan approval process through DEP.

*Historic and Archeological Resources*

The proponent has undertaken a reconnaissance archeological survey, intensive (locational) archeological surveys, and archeological site examinations to identify archeological resources that may be present in the proposed project area. The proponent will continue to consult with MHC to resolve any potential adverse effects to archeological sites eligible for listing in the National Register of Historic Places. Although the FEIR demonstrates that the project would not be visible from the historic Winslow Burial Ground under worst case, or "leaf off" conditions, the proponent will continue to consult with MHC to address potential adverse effects to above-ground historic properties.

## SCOPE

### General

The SFEIR should follow the general guidance for outline and content contained in Section 11.07 of the MEPA regulations, as modified by this limited scope. The SFEIR should include a copy of this Certificate and each comment letter received. The proponent should adhere to the format indicated in this scope in preparing the SFEIR in order to facilitate its review.

The proponent should circulate a hard copy of the SFEIR to each state and local agency from which the proponent will seek permits or approvals, all those who commented on the FEIR, and to any parties specified in Section 11.16 of the MEPA regulations. In the interest of broad public dissemination of information, I strongly encourage the proponent to send a notice of availability of the SFEIR (including relevant comment deadlines, locations where hard copies may be reviewed and electronic copies obtained, and appropriate addresses) to all those who submitted comments on the ENF, DEIR, SDEIR and SSDEIR. This notification may take the form of electronic notification for those comments submitted via e-mail.

To save paper and other resources, I will allow the proponent to circulate the SFEIR in CD-ROM format, although the proponent should make available a reasonable number of hard copies available on a first-come, first-served basis, to accommodate those without convenient access to a computer.

### Site Remediation

In response to DEP's concerns involving the upland disposal of 60,000 cubic yards of contaminated dredged sediment, the FEIR presents data showing that levels of contamination in the sediment are within DEP's acceptable limits for sediment reuse at a lined landfill. However, it appears the characterization of the sediment may have been based on the analysis of a single core sample. Additional sediment sampling and analysis will be required before DEP can determine if it would allow the dredged material to be reused at a lined landfill within Massachusetts. The proponent should consult with DEP and provide the results of this sampling and analysis in the SFEIR. The SFEIR should also report on the resolution of this issue.

### Dredging and Water Quality

The FEIR presented an update to the draft Water Quality Monitoring Plan. DEP requires an approved Water Quality Monitoring Plan as part of its review for Section 401 of the Clean Water Act Certification. In its comments, DEP states that the additional information presented in the FEIR does not adequately address all of its concerns. The plan does not ensure adequate monitoring to determine whether or not dredging will result in adverse impacts on water column chemistry. In addition, although the proposed boundary of the mixing zone has been reduced



from 1,500 feet to 1,000 feet down-current of dredging activities, DEP feels that it is still excessively large. DEP recommends that the frequency of monitoring should be increased, at least during the initial stages of dredging. The FEIR indicates that additional water quality sampling and analysis of the Taunton River to further characterize ambient conditions is on-going. The SFEIR should present the results of this sampling and analysis. The SFEIR should also report on the resolution of water quality issues raised by DEP in its comments and propose appropriate mitigation measures .

### Marine Fisheries

As noted in the FEIR, consultations between the proponent and the Division of Marine Fisheries (DMF) have failed to resolve the numerous concerns expressed by DMF in its comments on the project throughout the MEPA review process. Generally, DMF believes that, in spite of the conservatism of the analytical models used, the proponent has not provided sufficient site-specific and spatially and/or temporally relevant data to support the estimates of the range and magnitude of potential adverse impacts to finfish and shellfish resulting from the project in the FEIR and previous MEPA filings. DMF remains unconvinced that the research cited in the FEIR accurately portrays conditions within the Taunton River/Mount Hope Bay ecosystem and, as a result, believes that the proponent has underestimated the project's impacts to marine fisheries resources and habitat. DMF maintains that the FEIR has failed to support the conclusion that the project will have only short-term and negligible impacts.

Both DMF and the National Marine Fisheries Service (NMFS) have maintained that the proponent adhere to time-of-year (TOY) restrictions on dredging activities for the protection of winter flounder spawning and juvenile development and the upstream spawning migrations of anadromous fish. Both agencies maintain that no in-water silt-producing activity should occur between January 15 and May 31 of any year in order to minimize adverse impacts on winter flounder spawning and juvenile development habitat. In order to provide protection for upstream spawning migrations of anadromous fishery resources within the Taunton River, both agencies maintain that no in-water, silt-producing activity should occur between March 1 and July 31 of any year. DMF also recommends a TOY restriction to protect the downstream anadromous fish migration, including Atlantic sturgeon, from June 15 through November 30 of any year.

Although not discussed in the FEIR, a letter to the USACE dated February 7, 2006, from the U. S. Department of the Interior (DOI) Fish and Wildlife Service recommends a March 1 to July 31 TOY restriction to protect the upstream anadromous fish migration, and a July 1 to October 31 TOY restriction to protect the downstream anadromous fish migration.

The assessment of the environmental impacts of the proposed dredging plan described in the FEIR is based on a 7±-month dredge window. (June 15 to January 14). In its comments, DEP expressed concerns about the potential water quality impacts of completing the proposed dredging operations within the TOY restrictions recommended by the state and federal marine resource protection agencies. If these recommended TOY restrictions ultimately result in the

imposition of a shorter dredge window (which could potentially be as short as six weeks annually), the proponent may be required to significantly modify its dredging operation in order to complete dredging activities within the limited timeframe. Increasing the number of operating barges, the size of the dredge buckets, and/or the number of dredge cycles per hour, etc., to compensate for a shortened dredge season could result in significant environmental impacts and the necessity for additional mitigation measures. The SFEIR should provide an update of its discussion of TOY restrictions with state and federal marine fisheries protection agencies; a description of possible modifications in the dredging operation that may be implemented to adhere to a shortened dredge window; a description of additional environmental impacts, if any, a shorter dredge window may have on water quality; and the measures proposed to avoid or minimize those impacts.

In its comments, DMF states that it does not believe that the proposed mitigation to reduce CSOs and create salt marsh habitat adequately addresses the loss or alteration of winter flounder spawning and juvenile development habitat. The proponent should continue to consult with DEP and DMF to identify additional potential in-kind habitat mitigation measures and report on the status of these consultations in the SFEIR. The SFEIR should also address DMF's comments regarding the potential additional impacts (i.e., increased turbidity) to marine resources posed by the passage of a greater number of smaller ships

In the absence of consensus regarding the cumulative impacts posed by dredging and the regular passage of deep-draft vessels on marine fisheries resources and habitats the information sought by DMF, it is appropriate that DEP consider the imposition of conservative TOY restrictions and operating conditions in its 401 Water Quality Certification for the project. Therefore, the proponent should continue to consult with DEP, DMF and NMFS to achieve consensus on TOY restrictions and other appropriate mitigation measures. I expect that the state agencies will work constructively with the proponent on these issues.


#### Responses to Comments

The SFEIR should respond to the substantive concerns raised in each of the comment letters on the FEIR, to the extent that they are within MEPA jurisdiction and to the extent that they are related to the limited scope items contained in this Certificate. The FEIR should include a copy of each comment letter listed at the end of this Certificate.

Mitigation and Draft Section 61 Findings

The SFEIR should include a final summary of all mitigation measures to which the proponent has committed to the extent that they are related to the limited scope items contained in this Certificate. Additionally, to the extent that mitigation measures for the project, as proposed in the SFEIR, differ from those proposed in the FEIR should include revised draft Section 61 Findings for use by the state permitting agencies.

April 14, 2006  
Date

  
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Stephen R. Pritchard

## Comments received on the FEIR:

04/03/06	Rep. David Sullivan
04/03/06	The Nature Conservancy
04/06/06	Taunton River Watershed Alliance
04/07/05	Anderson and Kreiger LLP
04/07/06	City of Fall River
04/07/06	Coalition for Responsible Siting of LNG Facilities
04/07/06	Conservation Law Foundation
04/07/06	Excelerate Energy
04/07/06	Roger Hood
04/10/06	Department of Environmental Protection
04/10/06	Energy Facilities Siting Board
04/10/06	ESS Group
04/10/06	Serena Lopes
04/10/06	John J. Sbrega
04/11/06	Executive Office of Transportation
04/11/06	Office of Coastal Zone Management
04/12/06	Division of Marine Fisheries

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