

From: [Valiton, Brian E NAE](#)
To: [Sheeringer, Paul J NAE](#)
Subject: FW: NSTARGPItr18May2011inlieufee.docx (UNCLASSIFIED)
Date: Tuesday, October 16, 2012 4:03:32 PM
Attachments: [1170_001.pdf](#)

Classification: UNCLASSIFIED
Caveats: NONE

Copy of water quality cert for NSTAR project with stacy's e-mail address below.

-----Original Message-----

From: Stacy Minihane [<mailto:sminihane@btiweb.com>]
Sent: Wednesday, May 18, 2011 10:11 AM
To: Valiton, Brian E NAE
Cc: Tim Condon; George Preble; LaMontagne, Eric; Watton, Daniel
Subject: RE: NSTARGPItr18May2011inlieufee.docx (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

DÉVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

LAURIE BURT
Commissioner

March 23, 2011

Daniel Walton
One NSTAR Way, NE250
Westwood, MA 02090

Re: **401 WATER QUALITY CERTIFICATION**
Application for BRP WW 08, Minor project dredging

At: Acushnet River Estuary, NEW BEDFORD

401 WQC Transmittal No: X234709
Wetlands File No:
ACoE Application No:
Release Tracking No: 4-12592

Dear Mr. Walton:

The Department has reviewed your application of the above referenced Water Quality Certification (WQC). In accordance with the provisions of Section 401 of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.), MGL c.21, §§ 26-53, and 314 CMR 9.00, it has been determined there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law.

The waters of Acushnet River Estuary at Inner New Bedford Harbor are designated in the Massachusetts Surface Water Quality Standards as Class SB. Such waters are intended "as habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation." Anti-degradation provisions of these Standards require that "existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

Background: On September 18, 2007, the Department issued a 401 Water Quality Certification, transmittal no. W128523, to NSTAR to conduct remedial dredging of contaminated sediment in the boat slip (hereafter referred to as the "Inner Slip"). The Department assigned Release Tracking Number (RTN) 4-12592 to the disposal site.

The remedial dredging consisted of removing approximately 5,555 cubic yards of sediment to the depth of -15 feet Mean Low Water (MLW). Remediation was delayed in part because of the increase in cost of material handling and disposal due to the presence of hydrogen sulfide in the sediment. In addition, boring advancement revealed that the sheet piles comprising the bulkhead did not extend to bedrock as initially assumed, and dredging of the Inner Slip to the depth of -15 MLW could compromise the stability of the bulkhead.

Because of the above feasibility issues, the project was put on hold in order to evaluate additional alternatives to remediate the contaminated sediment.

NSTAR is the Primary Response Party (PRP) and former owner. The current owner is Sprague Massachusetts Properties LLC of Portsmouth, New Hampshire.

Proposed project: This project entails two components, Inner Slip and Outer Slip, and it is within the limits of the Polychlorinated Biphenyls (PCB) contamination for the New Bedford Harbor Superfund Site. The overall goals are: 1) achieve a condition of No Substantial Hazard and 2) eliminate the Immediate Response Action (IRA) condition. Under the 401 WQC, a Permanent Solution will be achieved for the Inner Slip and a Temporary Solution for the Outer Slip in accordance with the MCP.

A new sheet pile cutoff wall will be installed across the entrance to the Inner Slip to create an on-site containment structure (i.e. confined disposal facility (CDF)). Another sheet pile wall will be installed inside the CDF to form two cells. Cell 1 is approximately 50 feet in width and 20 foot in length from the mouth of the Inner Slip. Cell 2 is the remainder of Inner Slip. Top of the wall elevation will be at +2 ft MLW.

Outer Slip

Approximately 1,100 cubic yards of shallow, visibly tar-impacted sediments from selected areas of the Outer Slip will be removed. Dredging will be performed by a clamshell dredge with an environmental bucket and dredged material will be deposited in the CDF. When the dredge cannot deposit the dredged material over the cut-off wall into the CDF, transfer barges and/or a crane may be used. Turbidity curtains and booms will be used to separate the dredging work area from the outer harbor and turbidity curtain will be maintained around the dredge barge.

The dredged area of the Outer Slip will be capped. Prior to installation of a cap, approximately 200 cubic yards of sand will be used to backfill the dredged area. A minimum two-foot thick layer will be placed over the backfill and existing sediment. The two-foot cap will be comprised of a six-inch low permeable material, typically clay, overlaid by a six-inch layer of clean sand to protect the clay layer during the installation of a subsequent six-inch stone armor layer, followed by another six-inch layer of clean sand to support benthic habitat. The cap will cover an area approximately 18,000 ft² and require approximately 1,525 y³ of capping material.

Inner Slip

After the entire 1,100 cubic yards of contaminated sediment from the Outer Slip is transferred, all the sediment inside the CDF will be solidified by adding approximately 3,000 cubic yards of Portland cement resulting in volume expansion of 25 percent.

According to the Solidification Bench Scale Treatability Study, by adding 15 percent of Portland cement to the contaminated sediment, a permeability of 1.7×10^{-7} cm/sec was achieved.

The Inner Slip will be capped to eliminate the exposure pathway to Oil Hazardous Material (OHM) in the solidified dredged material. The cap will consist of an approximately three-foot thick layer of clean gravel, underlain by a geotextile demarcation layer.

Alternatives Analysis: Four remedial alternatives were evaluated in accordance with 310 CMR 40.0858 of the Massachusetts Contingency Plan (MCP), which also satisfied the requirements of 314 CMR 9.07(1)(b).

Dredged Material Dewatering: Dewatering of the dredged material will not be required for the stabilization process.

Sediment sampling data: Cores samples of sediment were collected for chemical analysis under the Massachusetts Contingency Plan. The results of the chemical analysis confirmed the presence of Manufactured Gas Plant (MGP) related contaminants, including Volatile Organic Compounds (VOCs), Polynuclear Aromatic Hydrocarbons (PAHs), selected heavy metals, pesticides and non-aqueous phase tar.

Decanting of water in Cell 1 and 2¹: For the dredged material placement process, water in Cell 1 and Cell 2 will be decanted to the maximum extent as possible. Water level of the two cells will also need to be in equilibrium to maintain the integrity of the sheet pile walls. Equilibrium of Cell 1 and 2 is maintained by having weirs at the top of the walls separating Cell 1 from Cell 2, and Cell 1 from the Outer Slip, with the inverts set at MLW.

When dredging the Outer Slip, dredged material will be placed into Cell 1. The volume of the dredged material will displace an equal volume of water in Cell 1 and the displaced water will flow back to the dredge area of the Outer Slip through the weir opening at the outer sheet pile wall (the weir opening of the inner sheet pile wall will be closed or blocked). As noted in the Proposed Project section of the Certification, turbidity curtains and booms will be in place surrounding the dredge area, turbidity associated with the decanted water will likely to be contained within the dredge area.

When the dredged material in Cell 1 reaches the depth of -1ft National Geodatic Vertical Datum (NGVD), the outer weir (to the Outer Slip) will be blocked off and Portland cement will be added to stabilize the sediment. The sediment volume is expected to expand by 25 percent. To maintain equilibrium during sediment stabilization, excess water in Cell 1 will be pumped to the water treatment system located in the parking lot adjacent to the Inner Slip prior discharge back to the harbor. The water treatment system consists of a frac-tank, filtration and Granular Activated Carbon (GAC).

Any remaining dredged material from the Outer Slip along with any discarded material from Cell 1 will be placed in Cell 2 up to a depth of -5 ft NGVD. Water in Cell 2 that is displaced by the placement of dredged material will be decanted or pumped back to the dredge area of the Outer Slip, similar to the process used for Cell 1. The sediment stabilization process is repeated in Cell 2. Excess water generated during sediment stabilization process in Cell 2 will be pumped through the water treatment system and discharged to the harbor.

¹ Personal communication with Jim Ash and Stacy Minihane, March 9, 2011

Disposal of contaminated sediment: The dredged material from the Outer Slip will be disposed of in the CDF.

Rare Species and Rare Wildlife Habitat: The site is not located within the Priority Habitats of Rare Species, Estimated Habitats of Rare Wildlife in accordance with the Massachusetts Natural Heritage Atlas, 13th Edition.

Public Notice: The 401 WQC application public notice was published in the New Bedford Standard Times on September 17, 2010 and Department received no comment during the 21-day public comment period, which ended on October 8, 2010.

Section 61 Findings: Pursuant to M.G.L. Chapter 30, Sections 61 to 62H including (M.E.P.A.) this project was reviewed as EOE No. 13067 and the Secretary's Certificate, issued on November 5, 2010 found that an Environmental Impact Report (EIR) would not be warranted.

Comments from Mass. Division of Marine Fisheries (DMF) during the MEPA review emphasized the importance of using bottom-weight silt curtains to minimize turbidity and risk of marine resources. DMF recommended a Time-of-Year (TOY) restriction on in-water work if there would be increases in turbidity outside the containment system. Because benthic organisms can burrow deeper than six inches, DMF indicates that 12 inches of clean sand would be a more appropriate mitigation measures for restoration of habitat within the Outer Slip (see Condition 12).

Therefore, based on information currently in the record, the Department grants a 401 Water Quality Certification for this project subject to the following conditions to maintain water quality, to minimize impact on waters and wetlands, and to ensure compliance with appropriate state law. The Department further certifies in accordance with 314 CMR 9.00 that there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law. Finally, the Department has determined that upon satisfying the conditions and mitigation requirements of this approval, the project provides a level of water quality necessary to protect existing uses and accordingly finds that the project to be implemented satisfies the Surface Water Quality Standards at 314 CMR 4.00.

1. The Contractor shall take all steps necessary to assure that the proposed activities will be conducted in a manner that will avoid violations of the anti-degradation provisions of Massachusetts Surface Water Quality Standards that protect all waters, including wetlands.
2. Prior to the start of work or any portion of the work there after, the Department shall be notified of any change(s) in the proposed project or plans that may affect waters or wetlands. The Department will determine whether the change(s) require a revision to this Certification.
3. Dredging in accord with this Certification may begin following the 21-day appeal period and once all other permits have been received.

4. Work in waters and wetlands shall conform to the Description of Proposed Dredging Site and plans, figures submitted in this application to the Department, 18 sheets prepared by Beals and Thomas, Inc., dated January 26, 2011, signed and stamped by James Ash. The Department shall be notified if there are modifications and or deletions of work as specified in the plans. Depending on the nature of the scope change, approval by the Department may be required.
5. The Department shall be notified, attention Ken Chin 617-292-5893, one week prior to the start of in-water work so that Department staff may inspect the work for compliance with the terms and conditions of this Certification.
6. The Certification remains in effect for the same duration of the federal permit that required it or five years from the date of issuance of this Certification whichever comes first.
7. Future maintenance dredging is not authorized under this Certification.
8. Best management Practices (BMPs) shall be deployed to minimize turbidity at the Outer Slip. At a minimum, prior to the commencement of in water work, double silt curtains shall be installed around the dredging area and shall not bottom out at low tide. Silt curtains shall be suitable grade appropriate with the current condition at the site. If applicable, dredging shall be carried out using a closed, environmental bucket. There will be no Time of Year (TOY) restriction for the dredging/capping activities provided no increase in turbidity occurs outside of the containment system. In the event turbidity outside of the proposed Outer Slip containment area is anticipated then no dredging shall occur between Jan 15th and May 31st as stated in the Mass. Div. of Marine Fisheries letter dated October 25, 2010. The double silt curtains shall remained in place until the sediment stabilization in Cell 2 is completed and no untreated excess water will be flow or discharged back to the harbor.
9. The applicant shall submit a turbidity and total suspended solids (TSS) monitoring plan(i.e. seaward side of the silt curtain) to the Department for review and approval within eight weeks of the effective date of this Certification or four weeks prior to commencement of the dredging operation, whichever comes first.
10. Prior to commencement of the Inner Slip solidification operation of the sediment, the applicant shall submit a sampling plan of the solidified sediment for permeability analysis to the Department for review and approval. The sampling plan shall utilize a grid system, no larger than 10 foot on center in collecting "representative" samples of the solidified sediment. At a minimum, one sample shall be taken at the center of each grid to a depth of 18 inches.
11. Within five working days of solidified sediment sampling, results of the permeability analysis shall be provided to the Department for review. If the results indicated that the solidified sediment in the CDF did not achieve within 80 percent of the permeability of 1.7×10^{-7} cm/sec achieved in the treatability study, a liner of a minimum thickness of 20 mils shall be placed on top of the solidified sediment prior to the placement of the geo-textile/gravel cap.
12. The Outer Slip cap shall be constructed immediately following completion of the approved dredge activities. As proposed the Outer Slip cap shall extend 10 feet beyond the estimated edge of impacts. The Outer Slip dredge area cap shall be modified to incorporate a final 12

inch thick layer of clean sand to support benthic habitat rather than the proposed final 6 inch thick layer of clean sand.

13. Disposal of any volume of dredged material at any location in tidal waters is subject to approval by this Department and the Massachusetts Coastal Zone Management office.
14. Within 30 days of the completion of the Outer Slip dredging and capping, a bathymetric survey of the Outer Slip, depicting post-dredge/cap conditions, shall be sent to the Department.
15. The applicant, or their contractor, shall make every feasible effort to complete the project within the permitted timeframe. Should the applicant, or their contractor, fail to complete the project and wish to request an amendment to the Certification for incursion into the no-dredge period, the written request shall be received by the Department by January 2nd. The following information shall be included in the request:
 - a. project location and transmittal number,
 - b. the date on which dredging started,
 - c. the number of days and hours per day the dredge operated,
 - d. expected daily average production rate and the actual daily average production rate,
 - e. an explanation of why the project failed to remain on schedule,
 - f. an account of efforts made to get the project back on schedule,
 - g. a plan depicting the areas that remain to be dredged,
 - h. the number of cubic yards that remain to be dredged,
 - i. an accurate estimate of the number of days required to complete the project,
 - j. an evaluation of the impact of continued dredging on the species of concern,
 - k. a description of any efforts that will be made to minimize the impacts of the project on the species of concern, and a realistic assessment of any societal/financial effects of a denial of permission to continue dredging.

The Department will share the information with other resource agencies and a decision to grant or deny the amendment shall be made by January 15th. Requests for amendment received after January 2nd will be considered at the Department's discretion.

16. No later than four weeks after issuance of the Permit, the applicant shall submit a notification procedure outlining the reporting process to the Department for incidents, relating to the dredging activities, impacting surrounding resource areas and habitats such as, but not limited to, observed dead or distressed fish, or other aquatic organisms, observed oily sheen on surface water beyond the deployed BMPs, sediment spill, turbidity plume beyond the deployed BMPs, and barging or equipment accident/spill. If any time during implementation of the project an incident occurs, all site related activities impacting the water shall cease until the source of the problem is identified and adequate mitigating measures employed to the satisfaction of the Department.
17. Mitigation for the loss of 8000+/- SF of Land Under the Ocean (i.e. subtidal habitat) associated with the construction of the on-site CDF shall be provided along the Acushnet River.

NSTAR and the City of New Bedford (City) have agreed to work cooperatively to design, permit and construct the proposed mitigation area. The mitigation site is located at the

former Reliable Truss Site, identified in the *Selected Inventory of Potential Wetland Restoration Sites in the Buzzards Bay Watershed (Phases I and II, March 2004)* as NEWB 29 New Bedford. This site is now owned by the City and being developed as Rivers End Park, a Brownfields revitalization project.

NSTAR is responsible for providing the following data, documents, plans and mitigation support to the City of New Bedford for construction of the Mitigation Site:

- a. Characterization of the upland soils for disposal (soils destined for removal and disposal by the City during wetland mitigation construction), and characterization of wetland soils, if required, for associated permitting.
- b. Preparation of wetland mitigation (salt marsh creation) design plans for approximately 15,000 square feet of new salt marsh and brackish marsh wetland area (including procedures for post-construction monitoring by the City).
- c. Preparation of the wetland mitigation (salt marsh creation) construction cost estimate.
- d. Preparation of the wetland mitigation (salt marsh creation) permit package for the City to submit as the Project Proponent.
- e. A permitting professional to attend permit submission hearings with the City as Project Proponent.
- f. Upon receipt by NSTAR of required materials and input from the City but no later than four(4)months from the date of issuance of this Certification the above deliverables No. 17 a. through 17d. shall be submitted to the City for permit filings, with notification to MassDEP. If the applicant, or their contractor, is unable to complete and submit the deliverables within the permitted timeframe a written request to extend the timeframe may be submitted to the Department. The extension request shall include the project location and transmittal number, an explanation of the reason for the delay in meeting the deliverable schedule and an estimate of the number of days required to comply with condition no. 17f.

The City of New Bedford, as the Mitigation Project Proponent, is responsible for the submittal of all necessary local, state and federal permit applications, wetland mitigation construction and post- construction wetland mitigation monitoring to insure the success of the approved mitigation plan.

This certification does not relieve the applicant of the obligation to comply with other applicable state or federal statutes or regulations. Any changes made to the project as described in the previously submitted Notice of Intent, 401 Water Quality Certification application, or supplemental documents will require further notification to the Department.

Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the Department when an application is required:

- a. the applicant or property owner;

- b. any person aggrieved by the decision who has submitted written comments during the public comment period;
- c. any ten (10) persons of the Commonwealth pursuant to M.G.L. c.30A where a group member has submitted written comments during the public comment period; or
- d. any governmental body or private organization with a mandate to protect the environment, which has submitted written comments during the public comment period.

Any person aggrieved, any ten (10) persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to M.G.L. c.30A, § 10, a Notice of Claim must be made in writing, provided that the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee specified within 310 CMR 4.10 along with a DEP Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate, and addressed to:

Case Administrator
Department of Environmental Protection
One Winter Street, 2nd Floor
Boston, MA 02108.

A copy of the request shall at the same time be sent by certified mail or hand delivery to the issuing office of the Wetlands and Waterways Program at:

Department of Environmental Protection
One Winter Street, 5th Floor
Boston, MA 02108.

A Notice of Claim for Adjudicatory Hearing shall comply with the Department's Rules for Adjudicatory Proceedings, 310 CMR 1.01(6), and shall contain the following information pursuant to 314 CMR 9.10(3):

- a. the 401 Certification Transmittal Number and DEP Wetlands Protection Act File Number;
- b. the complete name of the applicant and address of the project;
- c. the complete name, address, and fax and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, fax and telephone numbers, and address of the attorney;
- d. if claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found at 314 CMR 9.02;
- e. a clear and concise statement that an adjudicatory hearing is being requested;
- f. a clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to this Certificate, including specifically the manner in which it is alleged to be inconsistent with the Department's Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Certification; and
- g. a statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Department of Environmental Management (when the certificate concerns projects in Areas of Critical Environmental

Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

The hearing request along with a DEP Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

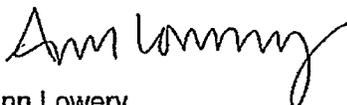
Commonwealth of Massachusetts
Department of Environmental Protection
Commonwealth Master Lockbox
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory-hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Failure to comply with this certification is grounds for enforcement, including civil and criminal penalties, under MGL c.21 §42, 314 CMR 9.00, MGL c. 21A §16, 310 CMR 5.00, or other possible actions/penalties as authorized by the General Laws of the Commonwealth.

If you have questions on this decision, please contact Ken Chin at 617-292-5893.

Sincerely,



Ann Lowery
Acting Assistant Commissioner
Bureau of Resource Protection

enclosure: Departmental Action Fee Transmittal Form
Material Shipment Record (MSR)

cc:

Karen Adams, Regulatory/Enforcement Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751
Robert Boeri, CZM, 251 Causeway Street, Suite 800, Boston, MA 02114
Eileen Feeney, DMF, 1213 Purchase St., 3rd floor, New Bedford, MA 02740-6694
David Hill, Liz Kouloheras, DEP SERO
New Bedford Conservation Commission, 133 William Street, New Bedford, MA 02740
Stacy Minihane, Beals and Thomas, Inc., 32 Court St., Plymouth, MA 02360

KC/X234709