



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

March 10, 2014

Engineering/Planning Division
Environmental Resource Section

SUBJECT: Notification of Anticipated 2014 Remedial Action Work at the New Bedford Harbor Superfund Site Project, New Bedford, Massachusetts

Mr. Christopher Boelke
National Marine Fisheries Service
Northeast Regional Office, Habitat Conservation Division
55 Great Republic Drive
Gloucester, Massachusetts 01930-2298

Dear Mr. Boelke:

This is the 2014 coordination letter describing upcoming activities associated with the New Bedford Harbor Superfund cleanup. The purpose of this letter is to inform you of this year's activities and to seek any comments you may have regarding the implementation. Specifically, this is the eleventh year of full scale dredging, mainly by hydraulic dredging methods, in the Upper Harbor. Our previous letter to you dated June 5, 2013 described the tenth year of full scale dredging and includes a summary of the completed work for the Upper and Lower Harbor Operable Unit #1 (OU#1). In 2013, the U.S. Environmental Protection Agency (EPA) removed an additional 18,995 cubic yards (cy) of PCB-contaminated sediment from several locations in the Upper Harbor and began construction of a confined aquatic disposal (CAD) cell in the area identified in the Dredged Material Management Plan (DMMP) as appropriate for the building of CAD cells (Maguire Group, 2002). Since 2002, approximately 250,000 CY of PCB-contaminated sediment have been dredged from the harbor (not including the approximate 14,000 cy Hot Spot sediment removed in 1995).

On September 19, 2013, the U.S. District Court for the District of Massachusetts approved a Supplemental Consent Decree which requires AVX Corp. to pay \$366.25 million plus interest for the New Bedford Harbor cleanup effort. These funds will allow EPA to accelerate its cleanup of PCB-contaminated sediment in the harbor. As a result, protection of public health and the environment will be more rapidly achieved through expedited remediation of this sediment. Simultaneous dredging operations in the upper and lower harbor including work in subtidal and intertidal areas should reduce the estimated time to complete the cleanup from 40 years to approximately 5-7 years.

For management purposes, the New Bedford Harbor Superfund Site has been divided into three areas – the Upper Harbor, the Lower Harbor, and the Outer Harbor consistent with the geographical features of the area and gradients of PCB

concentrations in sediment. The boundary line between the Upper and Lower Harbor is the Coggeshall Street Bridge where the width of New Bedford Harbor narrows to approximately 100 feet. The boundary between the Lower Harbor and Outer Harbor is the 150 foot wide opening of the New Bedford Harbor Hurricane Barrier.

EPA selected the OU#1 cleanup remedy for the Upper and Lower Harbor areas (from the upper reaches of the Acushnet River to the Hurricane Barrier) in the September 1998 Record of Decision (ROD) and in four subsequent Explanation of Significant Differences (ESDs), as a solution in addressing approximately 900,000 cubic yards cy of PCB-contaminated sediment. The major components of the OU#1 Remedy include, but are not limited to:

- Hydraulic dredging of subtidal sediment in the Upper Harbor, dewatering, and off-site disposal;
- Dredging of additional sediment from areas of the Upper Harbor and disposal of that sediment into three confined disposal facilities ("CDFs") to be built along the New Bedford shoreline of the Upper Harbor;
- Relocation of NSTAR cables under the Acushnet River (Phase 2 is expected to begin in spring of 2014 (no in-water work in 2014) and be completed by January 2016).
- Excavation of contaminated sediment in the wetland areas.
- Restoration of remediated wetlands.
- Dredging of sediment from the Lower Harbor and the southern end of the Upper Harbor and disposal of that sediment in a confined aquatic disposal ("CAD") cell, which will be constructed in the Lower Harbor;
- Long-term operation and maintenance of components of the harbor remedy, including a capped area of sediment just southwest of the hurricane barrier in the Outer Harbor, the CAD cell, and CDFs.
- Long-term site-wide monitoring and institutional controls (e.g., seafood monitoring, seafood advisories and land use restrictions).

Most of the OU#1 work is being implemented through an interagency agreement between EPA and the U.S. Army Corps of Engineers (USACE). To accomplish this work, the Upper and Lower Harbor areas have been separated into individual dredge Management Units (MU's for subtidal sediment) and Vegetated Units (VUs for wetland areas) based on engineering and environmental considerations (See Figure 1). The remediation of MU's and VUs will be accomplished in the most expeditious manner following careful planning and evaluation of the remaining contamination.

Anticipated 2014 Work

The activities to be initiated in the 2014 include hydraulic dredging in the Upper Harbor and continuing construction of the Lower Harbor CAD cell (LHCC). In addition, NSTAR is expected to install distribution cables in existing conduits beneath the river bottom. This work will be accomplished from the shoreline with no in-water work expected.

Hydraulic dredging will focus on the removal of PCB-contaminated sediment from up to four distinct areas (Area O, Area L, Area P, and Area R) in the Upper Harbor (See Figure 1). Initial mobilization for the Upper Harbor activities is scheduled to commence in mid-March of this year with dredging activity to commence in April and continue for several months.

Material from these areas will be removed using a hydraulic auger type dredge (Mudcat) which has been successfully used during all previous year's remediation. This dredge type was specifically chosen to perform this work for its capability to dredge in shallow areas, proven efficiency in sediment removal and transport and its ability to uniformly remove material to predetermined elevations. The horizontal augers are fully enshrouded along the back of the auger to minimize loss of material and to direct flow of material to the dredge pump. This technology serves to limit sediment resuspension thus minimizing water quality impacts. Debris removal will occur ahead of dredging operations in some areas to remove scrap, wood, tires, cables, boulders, etc., that have the potential to impair dredging production or to damage the equipment resulting in project delays and additional expense.

Due to the shallow nature of some of the dredge areas identified above, three hydraulic "Mudcat" dredges (Figure 2) will be deployed to allow for continuous dredging over a given tidal cycle (with only one dredge in use at any time). One dredge will be deployed in the shallow waters of Area O and will be used predominantly during periods of high tide when there is sufficient water to allow adequate flotation of the dredge over the intertidal areas. The second and third dredges will be deployed to the deeper waters of Areas L, P, or R and will be used when the shallow waters are inaccessible because of the tide. During debris removal and construction operations, oil booms will be deployed around the perimeter of the excavation areas to control any oil liberated from the sediment due to either dredging, or debris removal activities. In addition, a water quality monitoring program (described below) will continue to be employed to ensure operations are carried out in an environmentally protective manner.

The dredge sediment slurry, which consists of harbor water and sediment, will be transported from the dredge site via a floating 10-inch high-density polyethylene (HDPE) pipe using in-line booster pumps to the desanding facility with ferric sulfate injection to

prevent the liberation of hydrogen sulfide from the dredge slurry located at Sawyer Street (See Figure 1 – Area C). The sediment slurry is then transported via pipeline to the dewatering, treatment and handling facility located approximately a mile and a half downstream. The dewatering process will create a dense material (filter cake) with low water content from the slurry material. This material will then be transported to a licensed offsite disposal facility. All material will be transported off-site by truck or rail to a transload facility located in Worcester, Massachusetts, where it will then be shipped by rail to its final destination located in Michigan. The water extracted by the dewatering process will be treated by an on-site wastewater treatment system and discharged back into the harbor, meeting very stringent discharge criteria. As in the past, ambient air monitoring will be conducted at specific sampling locations before, during the dredge operation and after its completion.

As in all past years, this year's dredge plan is also being coordinated with the Massachusetts Division of Marine Fisheries in addition to the National Marine Fisheries Service to seek ways to minimize impacts to migrating fish species that may be present in the project area. A Fish Migration Impact Plan has been developed to provide requirements for the dredge contractor to implement to ensure that the passage of fish species through the project area is not impacted. As a result of these measures, no observable impacts to fisheries migration were noted during previous years dredging activities from either decreased water quality or physical obstruction. As with all previous dredging and construction activities associated with this project (2004-2013), a boat-based real time water quality monitoring program, along with fixed-station in situ water quality monitoring, will continue to be implemented for this year's activities to assure adherence to the ecologically protective criteria established for this project. In prior years, monitoring has shown that water quality impacts have been limited mostly to the immediate project area with any plumes generated diminishing quickly as they moved down-current of the operation. In order to decrease the likelihood of water quality impact, an oil absorbent boom will be installed around the perimeter of all the work zones.

The construction of the LHCC is currently underway (See Figure 3). The construction of the LHCC will be completed in two phases. Phase 1 consists of a transition cell to allow for the storage of top of CAD material from Phase 2. Phase 1 is currently underway and is scheduled for completion in spring 2014. Phase 2 will begin at the conclusion of Phase 1 and is scheduled to be completed by early 2015. Once the LHCC construction is complete, mechanical dredging of approximately 300,000 cy of sediment from the Lower Harbor and the area from approximately the Sawyer Street area south to the Lower Harbor will begin. The dredged material will be placed into the LHCC. This work is scheduled for 2015 through 2016. The LHCC will be capped subsequent to final placement activities after allowing material in cell to consolidate.

The relocation of the NSTAR cables will consist of cutting and decommissioning the existing distribution cables after new cables are pulled through an existing duct bank located under the Acushnet River. All work will be performed in existing manholes and on the shoreline. The decommissioned cables are not located in duct banks. Decommissioning of existing transmission cables and installation of new transmission cables is scheduled to occur in 2015 and 2016. After NSTAR has decommissioned/abandoned all cables, USACE will remove and dispose of the cables at an appropriate licensed off-site facility.

The USACE/EPA will continue to keep you apprised in a timely manner of the various upcoming phases of the New Bedford Harbor Superfund Project. With increased funding for the project, extensive planning is underway to determine the sequencing of future remediation. Additional coordination letters will be generated at that time prior to the initiation of this work.

Should you have any questions or concerns or would like any additional information regarding the work described above, please feel free to contact Ms. Ginny Lombardo, EPA Remedial Project Manager and Site Team Leader, at (617) 918-1754, Ms. Elaine Stanley, EPA Remedial Project Manager for the Upper Harbor work, at (617) 918-1332, Mr. Dave Lederer, Remedial Project Manager for the Lower Harbor CAD cell work, at (617) 918-1325 or Mr. Todd Randall, USACE Environmental Resources Section Marine Ecologist, at (978) 318-8518.

Sincerely,



Scott Acone, P.E.
Chief, Engineering/Planning Division

Enclosures

Reference:

Maguire Group, 2002. Dredge Material Management Plan for New Bedford and Fairhaven, Massachusetts. Prepared for the Massachusetts Office of Coastal Zone Management, City of New Bedford, and the Town of Fairhaven. Prepared by Maguire Group Inc, 225 Foxborough Boulevard, Foxborough, MA. 452 pp.

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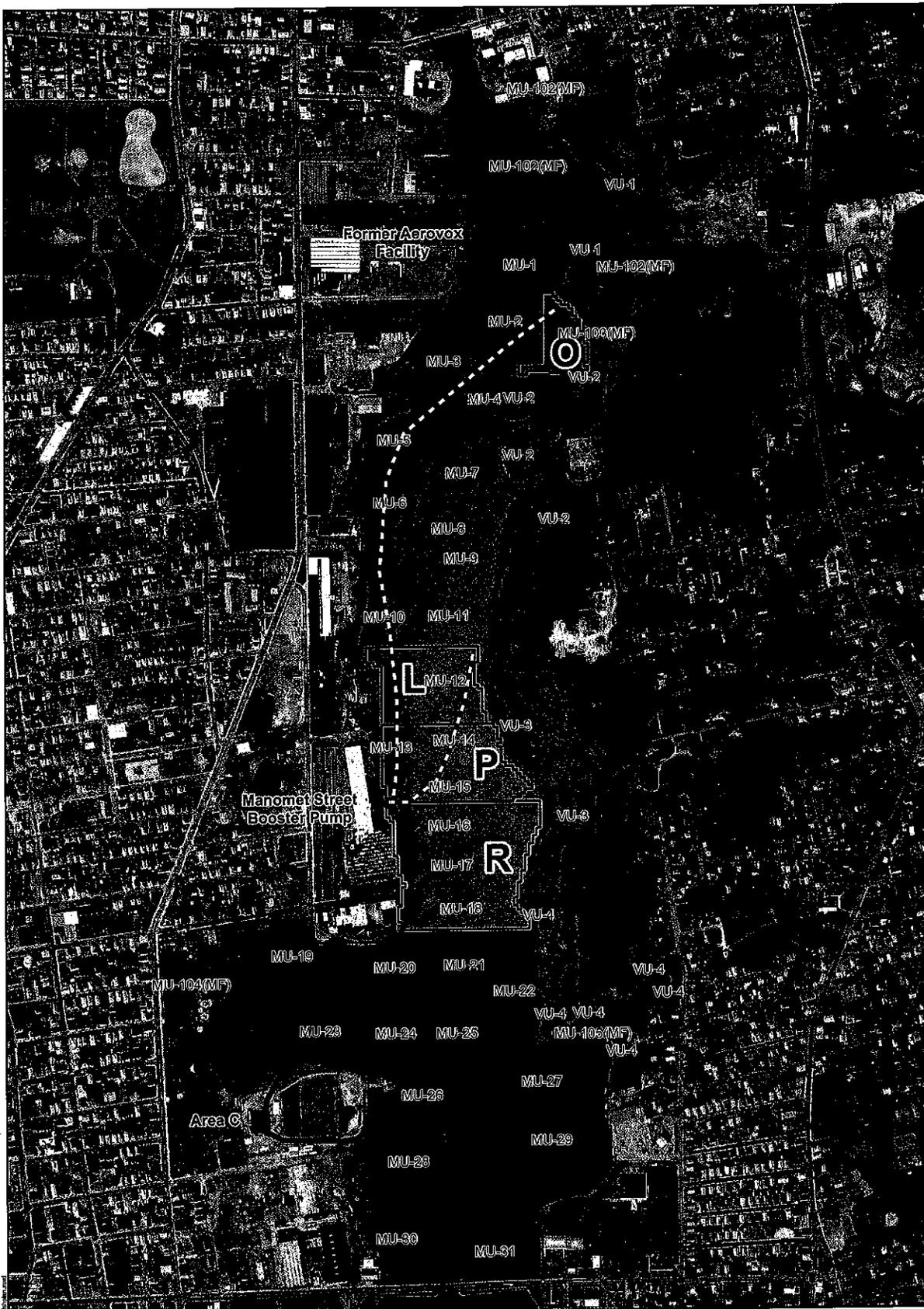
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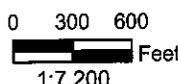


Legend

-  Pipeline from Dredge Area O to Manomet Street Booster Pump
-  Pipeline from Dredge Areas L, P, & R to Manomet Street Booster Pump
-  Pipeline to Desanding Building
-  Pipeline from Area C to Area D
-  Manomet Street Booster Pump

-  2014 Dredge Area O
-  2014 Dredge Area L
-  2014 Dredge Area P
-  2014 Dredge Area R

 Management Units



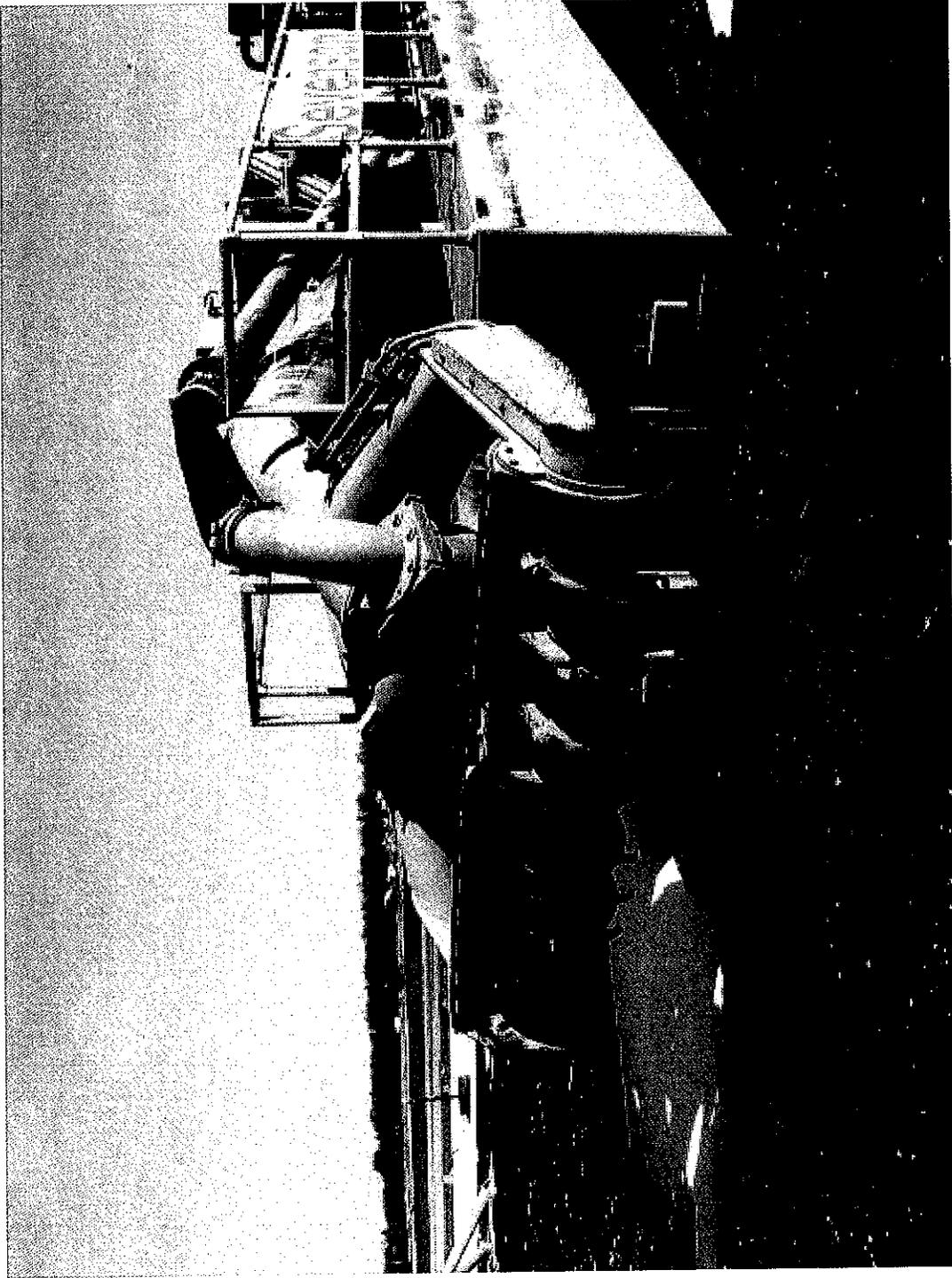
JACOBS

Booster Pump Location and Dredge Pipeline Routes

New Bedford Harbor Superfund Site

NUMC: 050876 DATE: 01/17/2014

Figure 1



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Mudcat MC 2000 Dredge

New Bedford Harbor Superfund Site
New Bedford, Massachusetts

4/16/09cr Fig3_mudcat.cdr

Figure 2

FIGURE 3

