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

July 22, 2015

SUBJECT: Notification of Anticipated 2015 Remedial Action Work at the New Bedford Harbor Superfund Site Project, New Bedford, Massachusetts

Ms. Sara E. Porter
Conservation Agent
City of New Bedford
Conservation Commission
133 William Street, Room 309
New Bedford, Massachusetts 02744

Dear Ms. Porter:

This is the 2015 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, provide a summary of the completed work for the Upper and Lower Harbor Operable Unit #1 (OU#1) and to seek any comments you may have regarding the implementation. 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.

The U.S. Environmental Protection Agency (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), in four subsequent Explanation of Significant Differences (ESDs), and a draft May 2015 ESD proposing to eliminate construction of Confined Disposal Facilities (CDFs) A, B and C and ship the dredged material slated for the CDFs off-site to licensed disposal facility(ies), and to cap and monitor the Pilot CDF (formerly known as the Debris Disposal Area or DDA) located at our Sawyer Street facility as a solution for addressing approximately 900,000 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 CDFs to be built along the New Bedford shoreline of the Upper Harbor.[1]

- Relocation of NSTAR cables under the Acushnet River.

- 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, this is being constructed in the Lower Harbor.

- Long-term operation and maintenance of components of the harbor remedy, including a pilot capped underwater area of sediment just southwest of the hurricane barrier in the Outer Harbor, the CAD cell, the three CDFs and the Pilot CDF (formerly known as the Debris Disposal Area or DDA) located at the Sawyer Street facility[1].

- 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.

[1]EPA is expected to finalize the fifth ESD this summer once all public comments have been addressed. The fifth ESD will eliminate proposed CDFs A, B and C, select off-site disposal for the sediment slated for those CDFs, establish the Pilot CDF at the Sawyer Street location as a permanent disposal area, and establish capping and monitoring requirements for the Pilot CDF.

Anticipated 2015 Work

This will be the twelfth year of full scale dredging, mainly by hydraulic dredging methods, in the Upper Harbor. Our previous letter to you dated March 5, 2014 described the eleventh year of full scale dredging. In 2014, EPA removed an additional 77,000 cubic yards (CY) of PCB-contaminated sediment from several locations in the Upper Harbor, completed the construction of the Phase 1 Lower Harbor Confined Aquatic Disposal cell (LHCC) and began construction of the Phase II LHCC (Figure 2). Since 2001, approximately 352,000 CY of PCB-contaminated sediment have been dredged from the Harbor (not including the approximate 14,000 CY Hot Spot sediment removed in 1995).

The activities to be initiated in 2015 include: hydraulic dredging in the Upper Harbor, debris removal in the Upper and Lower Harbors, and continuing construction of the Lower Harbor Phase II LHCC. In addition, NSTAR has nearly completed installation of new distribution and transmission cables in existing conduits beneath the river bottom and will subsequently decommission the original cables by the end of this month. The Corps will then remove these cables from the shoreline with no in-water work. The NSTAR work is being accomplished from the shoreline with no in-water work.

Hydraulic dredging will focus on the removal of PCB-contaminated sediment from up to five distinct areas (Areas U, H, L, P and S) in the Upper Harbor (Figure 1). Initial mobilization and subsequent dredging activities for the Upper Harbor are scheduled to commence in July of this year with dredging activities continuing for several months. Sediment from these areas will be removed using a hydraulic auger type dredge (Mudcat) which has been successfully used during all previous year's remediation work (Figure 3). This dredge type was specifically chosen 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 will be deployed to allow for continuous dredging over a given tidal cycle (with only one dredge in use at any one time). Initially one dredge will

be deployed in the shallow waters of Areas L or P 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 S and H, and will be used when the shallow waters are inaccessible because of the tide. Following the anticipated completion of Dredge Areas L and P early in the season, that dredge will be relocated to the east side of Dredge Area H. Dredging in H and S will alternate with the tide cycles throughout the remainder of the season as both areas have deep water and shallow tidally dependent portions.

During dredging and debris removal, oil booms will be deployed around the perimeter of the excavation area to control any oil liberated from the sediment due to either dredging, or debris removal activities. Baffle curtains will be deployed along the southern boundary of Area S, to evaluate their effectiveness in capturing near-field re-suspended sediment. Baffle curtains are approximately 3 feet in height with a weighted and anchored bottom, and flotation at the top, creating an approximately three foot barrier from the sediment surface up into the water column (Figure 4). The baffle curtains will be deployed in waters ranging from approximately 2 to 12 feet deep; fish passage will be available at all times above the barrier in all areas, with the exception of the extreme eastern shoreline where the shallower depths occur. In addition, a water quality monitoring program will continue to be employed to ensure operations are carried out in an environmentally protective manner as well as to monitor the effectiveness of the baffle system.

The dredge sediment slurry, which consists of Harbor water and sediment, is transported from the dredge site, via a floating 10-inch high-density polyethylene (HDPE) pipe using in-line booster pumps. At the booster pump station, ferric sulfate is injected into the dredge slurry to prevent the liberation of hydrogen sulfide gas. The sediment slurry is then transported via pipeline to the desanding facility at Sawyer Street (See Figure 1 – Area C). The sand and debris are stockpiled, characterized and then shipped off-site to appropriate disposal facilities. The desanded 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 off-site disposal facility. All material (including TSCA (> 50 parts per million (ppm) PCB) sand and debris from Area C) 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, only after 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 (Figure 5).

As in all past years, this year's dredge plan is also being coordinated with the Massachusetts Division of Marine Fisheries and 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 providing requirements for the dredge contactor to ensure that any impacts to fish passage are minimized in the project area. As a result of these measures, no observable impediments 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 (2004-2014), 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 continuing. 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 and is complete (Figure 2). Phase 2 is scheduled to be completed by Fall 2015. Once the LHCC construction is complete, mechanical dredging of approximately 200,000 CY of sediment from the Lower Harbor and approximately 100,000 CY from north of the Route 195 bridge will begin. This material will be placed into the LHCC. This work is scheduled for Fall 2015 through 2017. The LHCC will be capped after allowing material in the cell to consolidate.

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 if you 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, or Dave Lederer, Remedial Project Manager for the Lower Harbor CAD cell work, at (617) 918-1325.

Sincerely,

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

Enclosures

Figures:
Figure 1 - 2015 Upper Harbor Dredging Areas and Pipeline Route
Figure 2 - Lower Harbor MUs and Debris Removal Areas
Figure 3 - Mudcat Image
Figure 4 - Baffle Curtain Schematic
Figure 5 - 2015 Air Monitoring Stations

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Figure 1 – 2015 Upper Harbor Dredging Areas and Pipeline Route

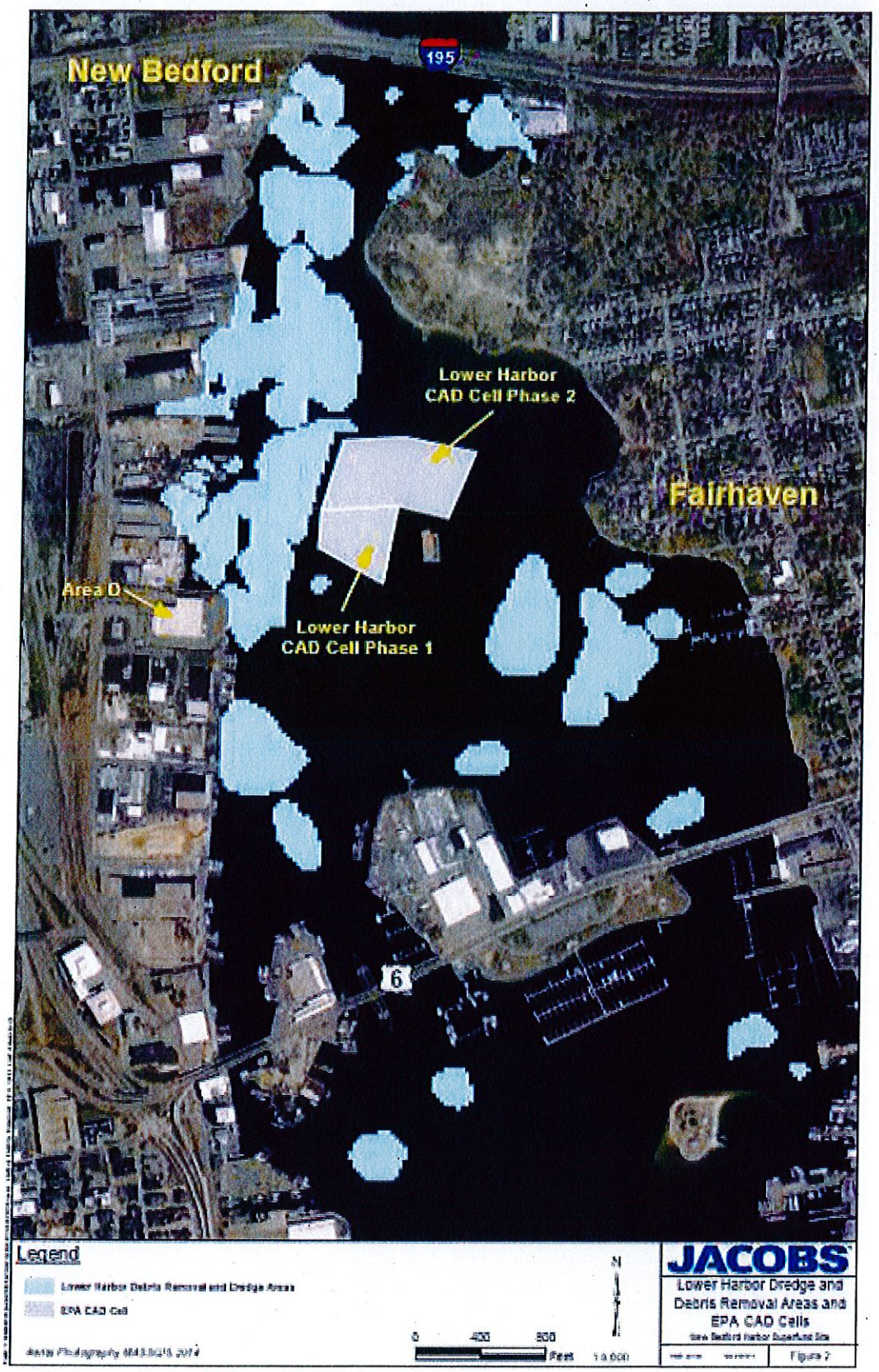

Figure 2 - Lower Harbor MUs and Debris Removal Areas

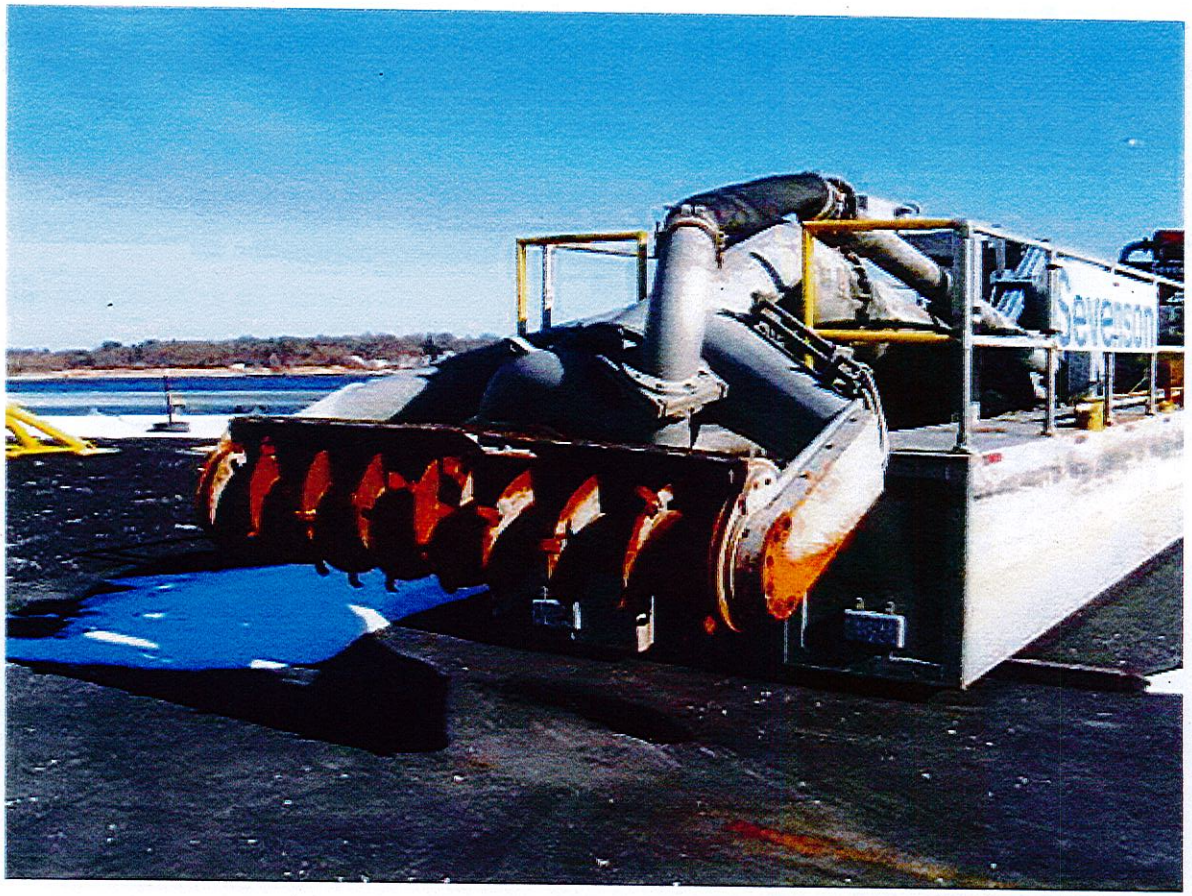

Figure 3 - Mudcat Image

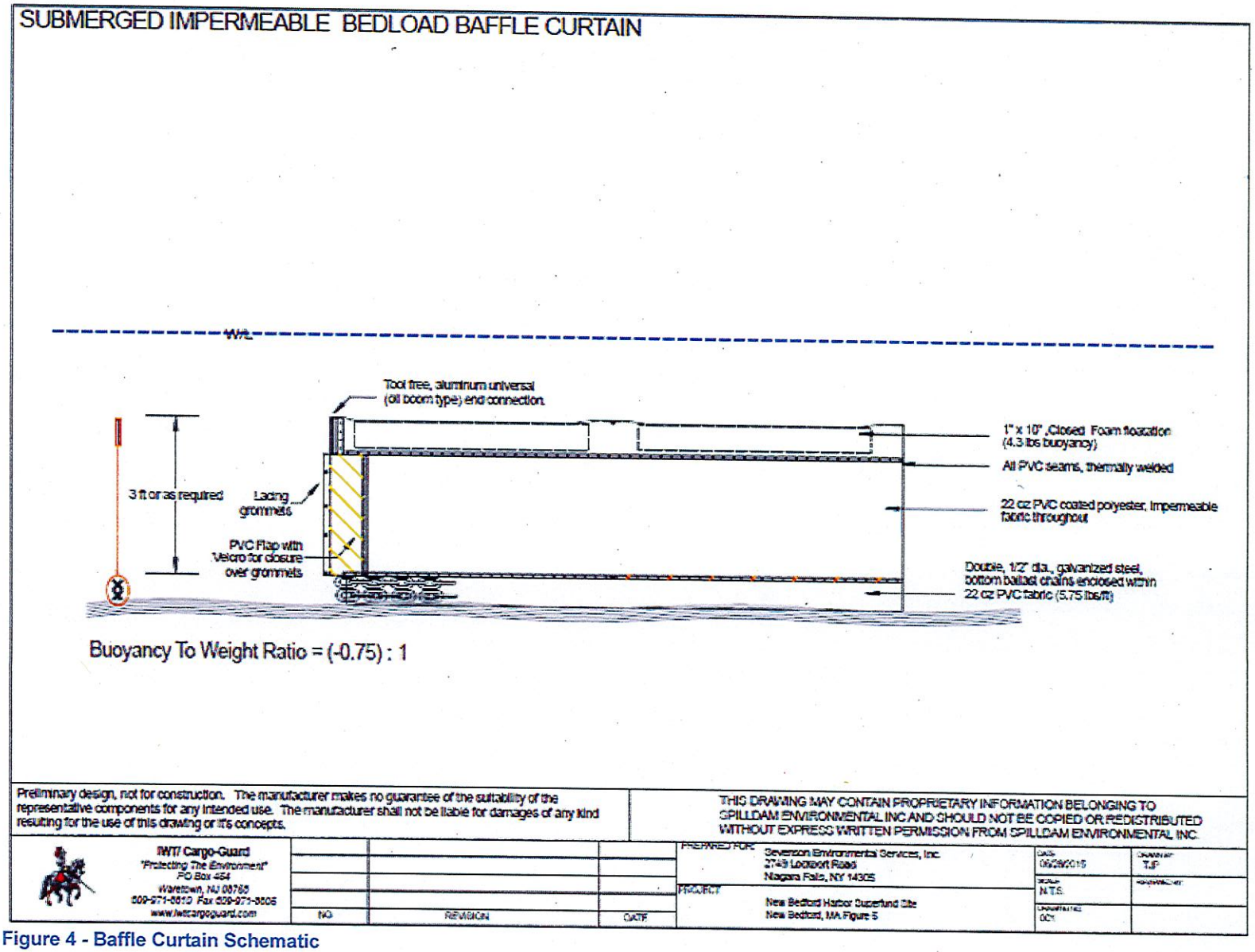

Figure 4 - Baffle Curtain Schematic

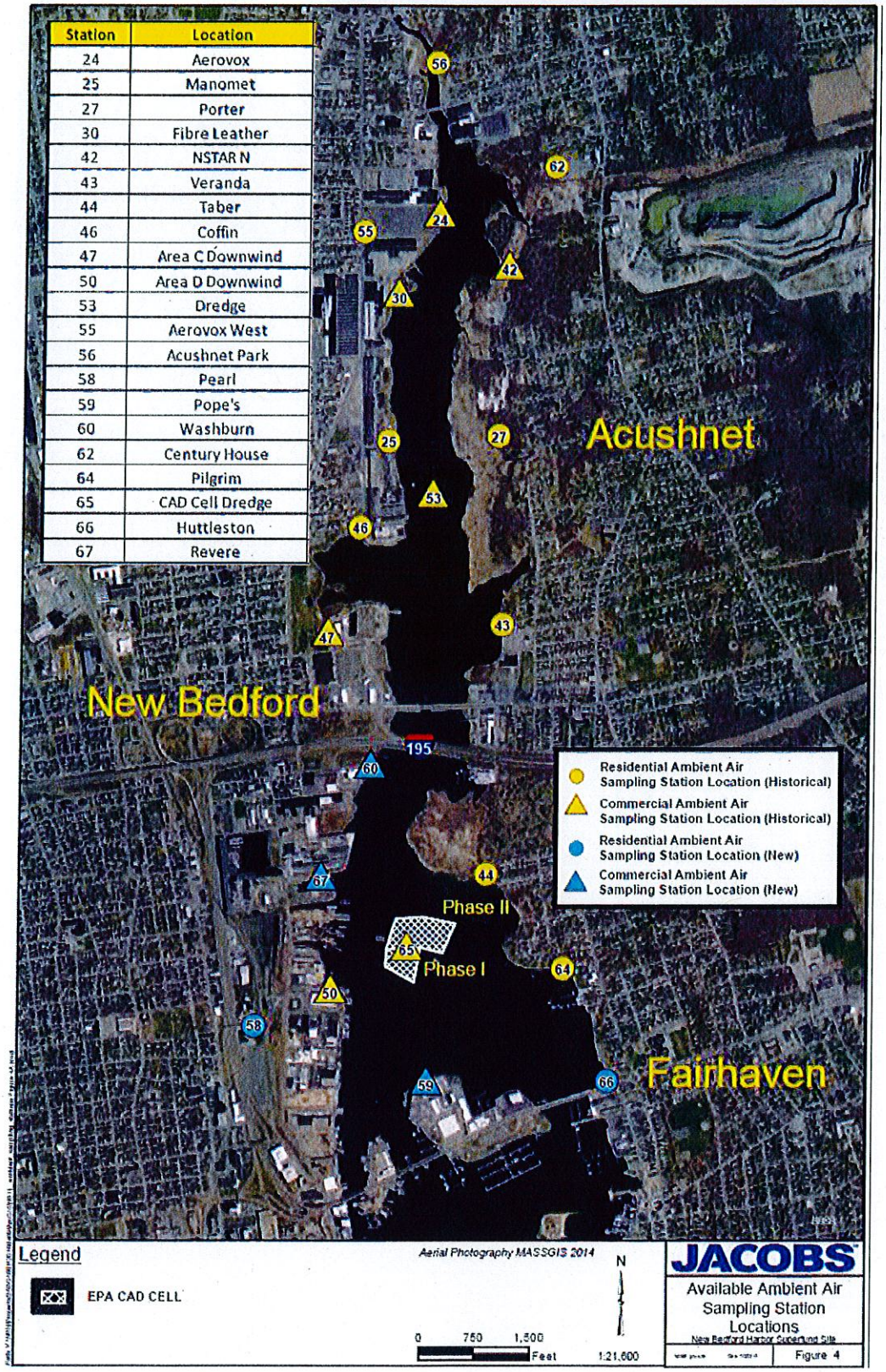

Figure 5 - 2015 Air Monitoring Stations