TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 5/18/2009	TRANSMITTAL NO. 0350-3

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: NEW BEDFORD RESIDENT OFFICE 103 Sawyer Street New Bedford, MA 02746-2448	FROM: Jacobs Engineering 55 Old Bedford Road Lincoln, MA 01773	CONTRACT NO. DACW33-03-D-0006 0007	CHECK ONE: [X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 0350	PROJECT TITLE AND LOCATION TERC II New Bedford Harbor Superfund New Bedford, MA		CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
3	2008 Dredge Season Data Submittal	REPORTS	24			A	N	

REMARKS

Distribution:
USACE Concord: hard copy & electronic - KC Mitkevicius, Bob Leitch; electronic - Jay Mackay, Mark Otis;
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MAssDEP: hard copy & electronic - Joe Coyne;
Jacobs: hard copy & electronic - Steve Fox, Mark Gouveia, Anita Rigassio Smith, Josh Cummings, Caroline Roberts, site file, Document Control; electronic - Mike Anderson, Carl Wilson, Lonnie Fallin:

CONTINUED ON LAST PAGE

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

ANITA RIGASSIO SMITH

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 5/18/2009	TRANSMITTAL NO. 0350-3

SECTION I - REMARKS CONTINUED... (This section will be initiated by the contractor)

Sevenson: hard copy & electronic - Mike Crystal; Battelle: hard copy & electronic - Paul Dragos; Cashins: electronic - Bob Cashins; EQ Northeast: electronic - Kevin Franklin; H&S: electronic - Debi Heims; DCN: ACE-J23-35BB0702-G2-0021

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Sevenson Environmental Services, Inc.

JACOBS

US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
Total Environmental Restoration Contract
USACE Contract Number: DACW33-03-D-0006
Task Order No. 0007

2008 DREDGE SEASON DATA SUBMITTAL
NEW BEDFORD HARBOR
REMEDIAL ACTION

New Bedford Harbor Superfund Site
New Bedford, MA

May 2009

Prepared by
Jacobs Engineering Group
6 Otis Park Drive
Bourne, MA 02532-3870

ACE-J23-35BG0702-M17-0001

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DATA SUBMITTAL INTRODUCTION

The purpose of this 2008 Dredge Season Data Submittal is to provide documentation of key activities from the New Bedford Harbor Superfund Site 2008 field season. As directed by the U.S. Environmental Protection Agency (EPA) this submittal, similar to the 2007 and 2006 Dredge Season Data Submittals, does not contain a text summary section; information is summarized in tabular or graphic format. Some non-dredging activities however are summarized in brief paragraphs.

SECTION 1.0

Summary of 2008 Activities

Section 1
Summary of 2008 Activities
New Bedford Harbor Superfund Site - 2008 Season

Date	Activity	Summary
Revise/Submit Planning Documents		
Draft April 2004, Final July 2004, Addendum No. 1 May 2005 Addendum No. 2 April 2006 Addendum No. 3 March 2007 Addendum No. 4 March 2008 Addendum No. 5 April 2008	Prepare and submit revised plan.	Preparation and submittal of *Addendums No. 4 & 5 to the Execution Plan* outlining the remediation of the New Bedford Harbor Superfund Site to be accomplished for the 2008 field season.
Draft April 2004, Final September 2004, Revised August 2007, Revised April 2008	Prepare and submit revised plan.	Revision and submittal of Site Specific Safety & Health Plan.
Draft September 2004 Revised August 2005 Addendum No. 1 June 2008	Prepare and submit revised plan.	Revision and submittal of Addendum No.1, Task Specific Transportation & Temporary Storage Plan, Land Based Excavation, and Sediment Stabilization.
Submittal of Initial Task Order/Subsequent Modifications		
5/9/2008	Modification 006-06	**Tasks under Modification 006-06 were for the following:** Mechanical excavation of the Aerovox shoreline - Project 36BG0603. (Tasks 1, 2, and 3 - The mobilization, excavation, and stabilization of VOC impacted sediments; placement into Cell #1 at Area C; and demobilization).
6/10/2008	Modification 006-07	**Tasks under Modification 006-07 were for the following**: Increase O&M funding for the period of 01-July-2008 through 31-December-2008 - Project 35BG0602. Also extended the Task Order's period of performance to 31-December-2008 (Tasks 6B).
7/3/2008	Modification 006-08	**Tasks under Modification 006-08 were for the following:** Additional 7 days of mechanical excavation of the Aerovox shoreline - Project 35BG0603.
7/14/2008	Original D007	**Tasks under TO 07 were for the following:** Original funding TO 07 and Project 35BG0701 (Tasks 1, 2, and 3: The mobilization, 40 days of hydraulic dredging of Pierce Mill Cove, and demobilization/winterization).
7/18/2008	FCN #065	**Tasks under FCN #065:** Additional work associated with mobilization, stand down, and weekends for mechanical excavation of the Aerovox shoreline (RFP #17). Moved funds from 35BG0601 to 35BG0603 to cover additional costs.
9/29/2008	Modification 007-01	**Tasks under Modification 007-01 were for the following:** 5 additional days of hydraulic dredging of Pierce Mill Cove. (Task 6)
10/16/2008	Modification 006-09	**Tasks under Modification 006-09 were for the following:** Construction of a sheet piling bulkhead at Northern Landing, Sawyer Street (Job Change #000012)
11/19/2008	Modification 006-10	**Tasks under Modification 006-10 were for the following:** No cost period of performance extension to 31-March-2009.

Section 1
Summary of 2008 Activities
New Bedford Harbor Superfund Site - 2008 Season

Date	Activity	Summary
Aerovox Shoreline Mobilization Activities		
5/12 -5/30/08	Stabilization building construction	Constructed mixing pad in parking lot of former Aerovox facility, dense grade covered with sealed HDPE liner covered with additional dense grade, edges bermed for containment. Constructed scaffold stabilization building, Covered three sides and roof of building with tarps. Installed carbon filtration system to help control airborne VOC emissions.
5/12 -5/30/08	Temporary road construction	Installed temporary road over protective cap at shoreline of former Aerovox facility. Road constructed of geotextile layer over cap covered in dense grade, wooden crane mats placed over dense grade.
5/12 -5/30/08	Moveable dock and ramp construction	Assembled 40-foot x 80-foot Flexi-Float dock with spuds. Attached hinged ramp to dock and covered work surface with wooden wafer mats. Installed rip-rap and dense grade over shoreline sheet pile cut off wall to prevent wall damage.
5/12 -5/30/08	OSHA Level B system construction	Installed and tested vehicle mounted Level B breathing air systems in roll off trucks, excavators, and bulldozer. Installed and tested Level B breathing air systems for dock area, stabilization building, and Area C Cell 1 support zone.
Aerovox Shoreline Mechanical Dredging and Associated Activities		
6/2-7/22/08	Aerovox shoreline mechanical excavation	Mechanically excavated contaminated sediment from shoreline of former Aerovox facility. Excavated sediment was placed in truck mounted roll off cans for stabilization. Excavation was performed from both a floating dock system and land based. All work performed in OSHA Level B.
6/2-7/22/08	Aerovox shoreline sediment stabilization	Decanted free water from unstabilized sediment with pumps, water stored in frac tank. Stabilized sediment with Portland cement. Sediment stabilized in truck mounted rolloff cans for over the road transportation. All work performed in OSHA Level B.
6/2-7/22/08	Aerovox shoreline sediment placement	Mechanically removed stabilized sediment from roll off cans at Area C. Stabilized sediment placed in Cell 1, graded and capped with clean material. All work performed in OSHA Level B.
Aerovox Shoreline Mechanical Dredging Demobilization		
7/23 - 8/6/08	Install rip rap	Approximately 50 cubic yards of 6-8 inch rip rap installed over geotextile fabric in northern cove area of Aerovox shoreline.
7/23 - 8/6/08	Remove excess rip rap and dense grade from shoreline.	Rip rap and dense grade installed during mobilization and dredging is removed to extent practical. Rip rap is reused as slope stabilization in northern cove area, dense grade is trucked to Area C for reuse.
7/23 - 8/6/08	Stabilization building disassembly and removal.	Building disassembled and removed from site. Dense grade removed for reuse at Area C, visibly stained material placed in Cell 1.
7/23 - 8/6/08	Move flexi float dock to Area C	Flexi float dock and ramps moved to Area C dock.
7/23 - 8/6/08	Reinstall fence along shoreline	Fence along shoreline reinstalled, original fabric reused.

Section 1
Summary of 2008 Activities
New Bedford Harbor Superfund Site - 2008 Season

Date	Activity	Summary
Aerovox Shoreline Mechanical Dredging Demobilization (Continued)		
7/23 - 8/6/08	Sweep parking lot of former Aerovox facility	A mechanical sweeper is used to clean paved lot where shoreline excavation activities were conducted. Sweepings disposed of in Cell 1.
9/1/2008	Re-seal protective cap on east side of former Aerovox facility	Re-seal protective cap on east side of former Aerovox facility.
Hydraulic Dredging Mobilization Activities		
7/28 - 8/12/08	Mobilization of equipment and personnel associated with 2008 hydraulic dredging activities	2008 mobilization activities included the installation of sheet piles in Dredge Area I, mobilizing dredges, pipelines, boats, debris removal platform and scows, servicing pumps, inspecting electrical systems, and constructing a block wall in the Dewatering Building load out area.
7/28 - 8/12/08	Booster pump and ferric system setup	2008 mobilization activities included the setup of a booster pump station at Manomet Street. Constructing the booster pump station included construction of a containment pad, setup of booster pumps and associated piping, installation of inline grinder and ferric system.
7/28 - 8/12/08	Transportation and disposal preparation	2008 mobilization activities included mobilization of Track mobile, railcars and liners. Mobilization activities also included calibration of truck scales, check of rail scale, rail worker training and liner training.
8/13 - 8/15/08	Hydraulic Dredging Shakedown	Hydraulic shakedown activities included service testing pipelines, pumps and dredges. Three press drops completed.
Hydraulic Dredging and Associated Activities		
8/18 - 10/21/08	Debris Removal Activities	Debris removal performed with barge mounted excavator equipped with a rake. On 9/3/08 debris rake is modified to retain smaller debris due to large amounts of brick fragments encountered.
8/18 - 10/21/08	Hydraulic Dredging	Dredge Area I subdivided into 3 areas, 2008 dredging activities focus mainly on western and center section.
9/16 - 9/19/08	Pipeline break and repairs	During a moon low tide period (9/15 or 9/16/08) vessel propeller strikes and severs HDPE pipeline off Area D bulkhead. Pipeline break identified with compressed air on 9/16, repair efforts begin immediately. Divers, support barges, crane, excavator, tug, HDPE welding machine, and personnel are mobilized to repair pipeline. Dredging and debris removal activities are halted during repair efforts.
9/19 - 9/21	Pipeline repair pressure test	Repaired pipeline service test performed.
9/22/2008	Resumption of normal dredging activities	Dredging and debris removal activities resumed for remainder of dredge season.
Air Monitoring Activities (Ambient PCBs)		
6/8/2008	1st round weekly air sampling	Aerovox shoreline excavation, two locations sampled.
6/12/2008	2nd round weekly air sampling	Aerovox shoreline excavation, two locations sampled.
6/19/2008	3rd round weekly air sampling	Aerovox shoreline excavation, one location sampled.

Section 1
Summary of 2008 Activities
New Bedford Harbor Superfund Site - 2008 Season

Date	Activity	Summary
Air Monitoring Activities (Ambient PCBs) (Continued)		
6/25/2008	4th round weekly air sampling	Aerovox shoreline excavation, one location sampled.
7/8/2008	5th round weekly air sampling	Aerovox shoreline excavation, two locations sampled.
7/16/2008	6th round weekly air sampling	Aerovox shoreline excavation, two locations sampled.
Not conducted in 2008	Pre-dredge background sampling	In 2008 pre-dredge (hydraulic) sampling activities were not conducted.
8/21/2008	1st round monthly air sampling	Dredge Area I Hydraulic dredging. Air samples were collected from six locations.
9/24/2008	2nd round monthly air sampling	Dredge Area I Hydraulic dredging. Air samples were collected from five locations.
11/10/2008	3rd round monthly air sampling, post-dredge	Dredge Area I Hydraulic dredging, post-dredge. Air samples were collected from four locations.
Bathymetric Survey		
6/12/2008	Pre-Dredge Survey in Dredge Area I	Survey Conducted by CR Environmental.
8/13/2008	Post-Dredge Survey at Aerovox Shoreline	Survey Conducted by CR Environmental.
8/23/2008	Progress Survey in Dredge Area I	Survey Conducted by CR Environmental.
9/7/2008	Progress Survey in Dredge Area I	Survey Conducted by CR Environmental.
9/13/2008	Progress Survey in Dredge Area I	Survey Conducted by CR Environmental.
10/4/2008	Progress Survey in Dredge Area I	Survey Conducted by CR Environmental.
10/18/2008	Progress Survey in Dredge Area I	Survey Conducted by CR Environmental.
11/17/2008	Post-Dredge Survey in Dredge Area I	Survey Conducted by CR Environmental.
11/21/2008	Post-Dredge Survey in Dredge Area I	Survey Conducted by CR Environmental.
Former Waste Water Treatment Plant Conversion		
2008	Remove remaining WWTP appurtences from building	Appurtences inventoried and removed from building, damaged or obsolete items discarded or recycled, reusable items inventoried stored.
October 2008	Install piping for new sanitary and water service	Install piping for new sanitary and water service.
10/14/2008	Prepare and install new concrete floor in building	Prepare and install new concrete floor in building.
10/7/2008	Remove electrical switchgear from building	Remove electrical switchgear from building.
12/5/2008	Install new electrical switch gear in building	Install new electrical switch gear in building.
Northern Landing Bulkhead Construction		
October - November 2008	Site work for Northern Landing	Site work for Northern Landing included rearrangement of bin blocks, initial grading, and compaction.
October - November 2008	Mobilize equipment for Northern Landing construction	Equipment mobilized for the construction of the Northern Landing includes 82 ton crane, 90 ton hydraulic hammer, man-lift, and vibratory roller.
October - November 2008	Construct Northern Landing	Northern Landing Bulkhead constructed by driving sheet piles to refusal, cutting at approximately 7.9 feet (NGVD 29), tying sheets together with internal H-Beams and welding a steel cap over the sheets. Bulkhead was back filled with rip rap and dense grade then sloped to promote adequate drainage.

Section 1
Summary of 2008 Activities
New Bedford Harbor Superfund Site - 2008 Season

Date	Activity	Summary
Demobilization and Winterization Activities		
10/21 - 11/5	Demobilization and winterization	Demobilization activities included flushing lines, disassembly of dredge lines, stowing pipelines, removing dredge area cables, removing boats, dredges and scows from water, disassembly and demobilization and storage of booster pump station equipment. Demobilization also includes a general cleaning of dewatering and desanding plants.
10/21 - 11/5	Capping and grading Cell 1.	Aerovox stabilized sediment and desander material placed in Cell 1and graded for drainage towards weir gate. Cell 1 dredged material capped with clean fill and stone dust, graded for drainage towards weir gate.

Notes:
CDF = confined disposal facility
DDA = dredge disposal area
EPA = U.S. Environmental Protection Agency
FCN = field change notice
GAC = granular activated carbon
NAE = U.S. Army Corps of Engineers - New England District
O&M = operations and maintenance
QCR = quality control report
T&D = transportation and disposal
TSCA = Toxic Substances Control Act

SECTION 2.0

Aerovox Facility Activities

SUBSECTION 2.1

Mercury Removal

2.0 AEROVOX FACILITIES ACTIVITIES

Two removal activities were performed at the former Aerovox facility, named Mercury Removal and Annex Contaminated Building Material Removal.

2.1 MERCURY REMOVAL

Between November 26, 2007 and December 18, 2007 Jacobs removed, collected, and sorted Mercury Containing Manufactured Articles (MCMA) within the former Aerovox Facility. On January 15, 2008 electricians removed previously identified MCMA from potentially energized equipment within the former Aerovox Facility. Collected MCMA included but was not limited to ignitrons, thermostats, thermometers, switches, and flow meters. The collected MCMA as well as some elemental mercury was lab packed and shipped out for recycling/disposal on December 11, 2007 and February 11, 2008.

Several small spills of elemental mercury were identified during previous inspections of the former Aerovox Facility, the most significant being in the Boiler Room. The spills were addressed on February 18 and 19, 2008. The mercury containing equipment in the Boiler Room was drained, removed, and packed for disposal. The floor area and associated floor drainage trenches of the Boiler Room were cleaned of all visible fugitive elemental mercury. The clean up effort also required the removal of floor sweepings, debris, paint chips, etc.; all such debris was properly drummed for disposal. Following clean up; a mercury amalgamating powder was spread over the spill area, moistened, and worked into the surfaces in order to immobilize any remaining mercury. Other small spills were also cleaned up in a similar manner with mercury amalgamating powder being used to immobilize any remaining. Clean up debris and lab-packed elemental mercury was picked up for disposal on March 10, 2008.

In total, approximately 198.7 pounds of MCMA and elemental mercury, and 1050 pounds of mercury contaminated debris were removed from the former Aerovox Facility for recycling/disposal during the 2007-2008 mercury removal effort. Additional and more detailed information can be found in Project Note ACE-J23-35BG0602-P1-0001, Aerovox Mercury Removal Summary.

SUBSECTION 2.2

Aerovox Annex Contaminated Building Material Removal

2.2 AEROVOX ANNEX CONTAMINATED BUILDING MATERIAL REMOVAL

In May 2006, building material samples were collected within the Annex of the former Aerovox Facility for PCB analysis. A memorandum authored by ENSR dated June 14, 2006 and titled Results of Building Materials Sampling - Aerovox Building - May 2006 presents and discusses the analytical results of that sampling event.

During the week of April 28, 2008, Jacobs removed building materials within the Aerovox Annex found to be above the TSCA threshold of 50 milligrams per kilogram (mg/Kg). Removed building materials included all floor carpeting and select plywood wall paneling. All offices furnishings, such as desks and chairs, were also removed from the annex to simplify removal of TSCA building materials. The floor was swept following the removal of building materials. Removed building materials and furnishings were stockpiled in the office section of the Aerovox Facility immediately east of the Annex.

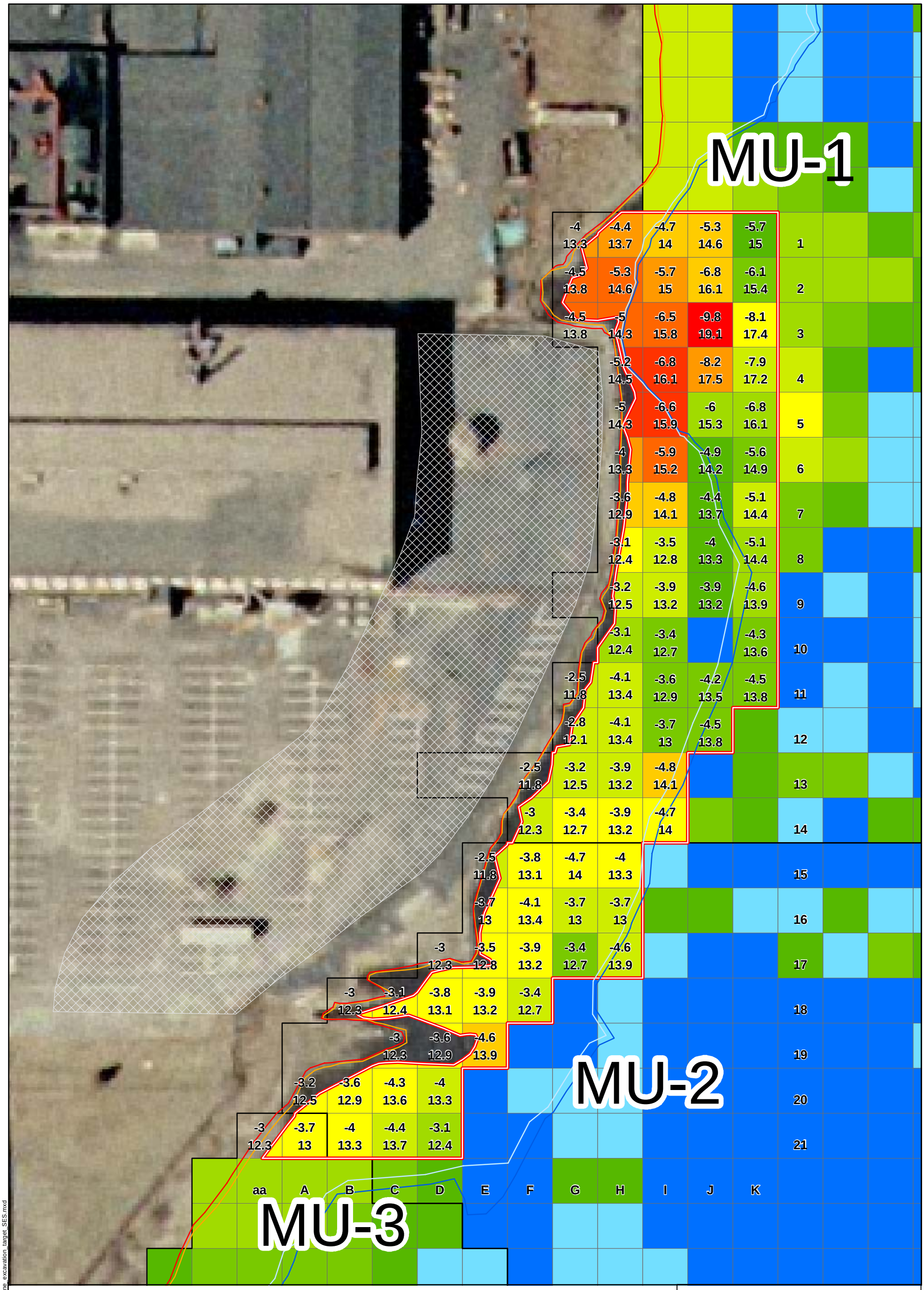
SECTION 3.0

Aerovox Mechanical Dredging

3.0 SUMMARY

Section 3 summarizes mechanical dredging activities conducted at the shore line of the former Aerovox facility.

- **Figure 3-1** illustrates the dredge plan developed for the Aerovox shoreline. Dredging direction was modified in the field based on observations and measurements; actual dredging removed a significantly larger volume of impacted sediment than originally planned.
- **Figure 3-2** graphically depicts the amount of sediment removed during the Aerovox shoreline mechanical dredging effort, a post dredge bathymetric survey was performed to calculate the volume removed.
- **Figure 3-3** graphically illustrates the post dredge bathymetry at the Aerovox shoreline.
- **Figure 3-4** identifies the placement area within the Sawyer Street Cell 1 for the placement of stabilized sediment from the Aerovox shore line dredging activity.
- **Figure 3-5** identifies sub sample locations for the two rounds of TCLP testing conducted on the stabilized Aerovox shoreline sediment. More information on the TCLP sampling and testing is provided in Table 3-6.
- **Figure 3-6** depicts perimeter air sampling locations tested before and during the placement of the Aerovox shoreline sediment in Cell 1. Dara is presented in Table 3-1 and 3-2.
- **Figure 3-7** depicts perimeter air sampling locations tested before and during the Aerovox mechanical dredging activities. Data is presented in Table 3-1 and 3-2.
- **Table 3-1** tabulates the baseline perimeter air sampling results for Sawyer Street and the former Aerovox facility.
- **Table 3-2** summarizes the perimeter air sampling results for Sawyer Street and the former Aerovox facility; these samples were collected during mechanical dredging activities.
- **Table 3-3** is the final production report for the Aerovox mechanical dredging activity.
- **Table 3-4** is a tabulated summary of PCB Aroclor concentrations observed in the unstabilized sediment as it was excavated from the Aerovox shoreline. The samples were composites of sediment collected from roll off containers prior to stabilization.
- **Table 3-5** is a calculation of the estimated mass of PCB Aroclors removed during the Aerovox shoreline mechanical dredging activity.
- **Table 3-6** provides a summary of the analytical results of the two rounds of TCLP testing conducted on the stabilized mechanically dredged sediment.
- **Table 3-7** is a summary of the water quality monitoring activities conducted during mechanical dredging activities.



Legend

Proposed Aerovox Excavation Area (Zstar Plus One Foot)

Construction Buffer Zone (100 ft from fence line)

Management Units

Feet of Sediment to Remove (ft)

0
0 - 0.5
0.5 - 1.0
1.0 - 1.5
1.5 - 2.0
2.0 - 2.5
2.5 - 3.0
3.0 - 3.5
3.5 - 4.0
4.0 - 4.5
4.5 - 5.0
5.0 - 5.5

2008 Aerovox Dredge Grid Blocks

-3.1
12.4

Target Elevations in feet NGVD 29 (ft)

SES Rod Reading in feet; Rod readings are based on an instrument height of 9.3', NGVD 29 (ft).

MLLW
MLW
MHW
MHHW

0 25 50
Feet
1:600

Aerial Photography MASSGIS 2003

Y:\NBH\Projects\35BG06021\20080523\ArcGIS\aerovox_shoreline_excavation_target_SES.mxd

JACOBS

Aerovox Shoreline Excavation Area and SES Rod Elevations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 05/23/2008

Figure 3-1

2008 Aerovox Excavation Volume	6,892 CY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

MU 2

Legend

Feet of Sediment Removed (ft)

Sediment Accreted	3 - 2.5	6 - 5.5
0.5 - 0	3.5 - 3	6.5 - 6
1 - 0.5	4 - 3.5	6.727 - 6.5
1.5 - 1	4.5 - 4	
2 - 1.5	5 - 4.5	
2.5 - 2	5.5 - 5	

Aerial Photography MASSGIS 2003

0 25 50 Feet

1:464

JACOBS

Aerovox Post Excavation Feet of Sediment Removed

New Bedford Harbor Superfund Site

NAME: croberts DATE: 09/03/2008

Figure 3-2

Y:\NBH\Projects\35BG0602\20080903\ArcGIS\aerovox_post_dredge_ft_sed_removed2.mxd

2008 Aerovox Excavation Volume	6,892 CY

MU-1

MU-2

MU-3

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

aa A B C D E F G H I J K

Legend

Bathymetry Elevation, NGVD, feet

- -0.5 - 0
- -1 - -0.5
- -1.5 - -1
- -2 - -1.5
- -2.5 - -2
- -3 - -2.5
- -3.5 - -3
- -4 - -3.5
- -4.5 - -4
- -5 - -4.5
- -5.5 - -5
- -6 - -5.5
- -6.5 - -6
- -7 - -6.5
- -7.5 - -7
- -8 - -7.5
- -8.19 - -8

- MLLW
- MLW
- MHW
- MHHW

0 25 50 Feet 1:600

Aerial Photography MASSGIS 2003

JACOBS

Aerovox Post Excavation Bathymetry; 08/13/08 Survey

New Bedford Harbor Superfund Site

NAME: croberts DATE: 09/03/2008

Figure 3-3

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Legend

2007 Material

Aerovox Material

Aerial Photography MASSGIS 2005

0 25 50

Feet

1:600

JACOBS

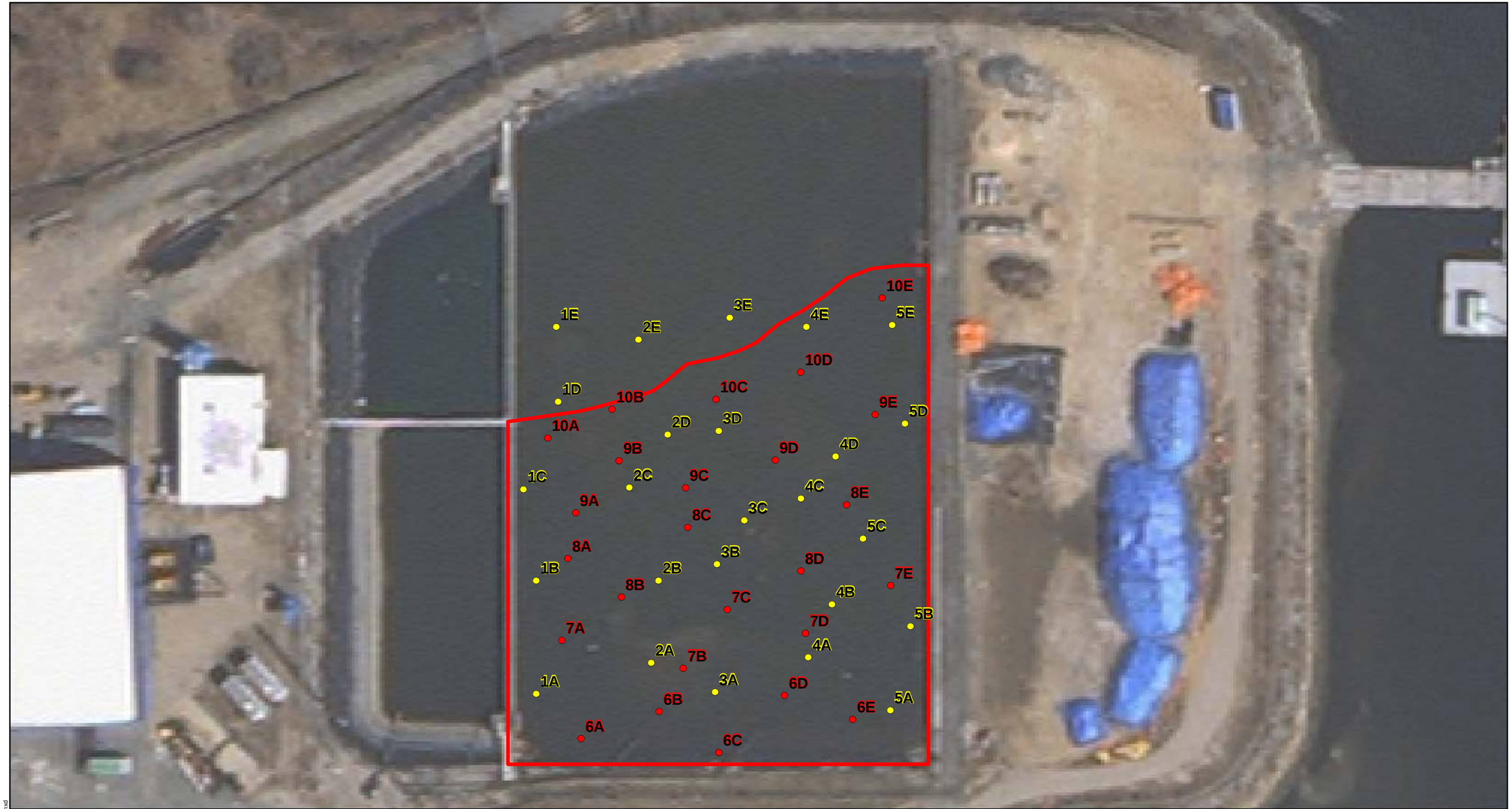
Cell 1 Material Placement

New Bedford Harbor Superfund Site

NAME: croberts DATE: 03/12/2009

Figure 3-4

Y:\NBH\Projects\358G060220080312\ArcGIS\Ce11.mxd



Legend

- TCLP Samples Round 1
- TCLP Samples Round 2
- Aerovox Material

Aerial Photography MASSGIS 2005

0 25 50 Feet

1:600

JACOBS

TCLP Sub Sample Locations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 03/12/2009

Figure 3-5

Y:\NBH\Projects\358G060\20090312\ArcGIS\TCLP.mxd

Legend

Sawyer St. Air Sampling Stations
Location 5 = Ropeworks Building
Location 6 = North Perimeter Fence
Location 7 = South Perimeter Fence

Aerial Photography MASSGIS 2003

0 50 100
Feet

1:1,200

JACOBS

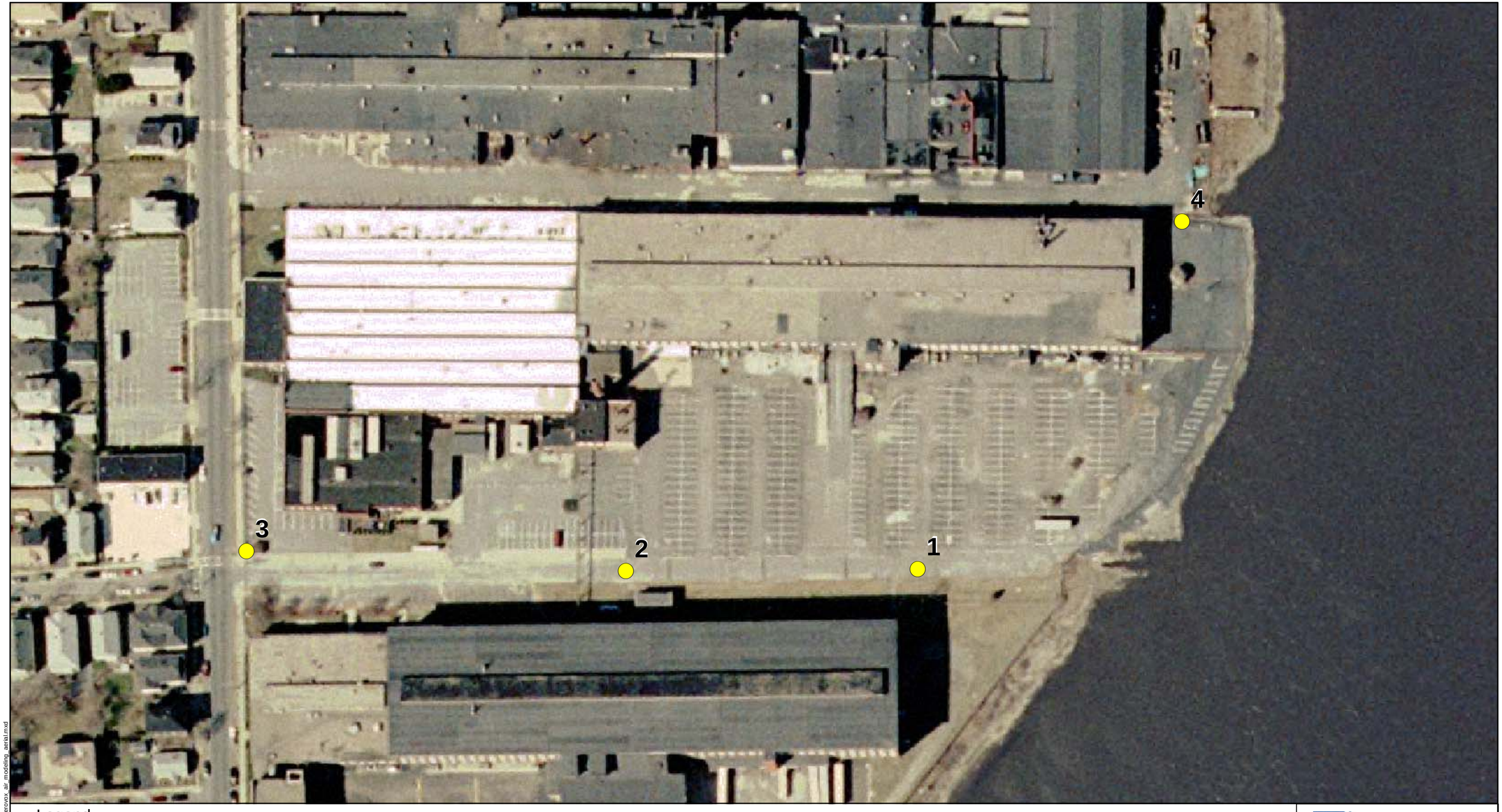
Air Sampling
Station Locations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 06/17/2008

Figure 3-6

X:\NH\Projects\35EG060\2008061\ArcGIS\mxd\F_air_modeling_aerial.mxd



Legend

Aerovox Air Sampling Stations
Location 1 = Southern Fenceline
Location 2 = Southwest Fence
Location 3 = Belleville Avenue
Location 4 = Northern Fenceline

0 100 Feet

N

1:1,200

JACOBS

Air Sampling
Station Locations

NAME: croberts DATE: 06/17/2008

Figure 3-7

Y:\NBH\Projects\35BG01010\80\20070617\ArcGIS\aerovox_air_modeling_aerial.mxd

Table 3-1
Perimeter Baseline Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1	0.2
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
PCBs	0.5 mg/m3	0.05 mg/m^3	0.1 mg/m^3
Particulates	0.3 mg/m3	0.3 mg/m^3	0.3 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt corrective action.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S[1]	VOC ppmv[2]	Draeger Tube[3]	Particulates[4] mg/m^3	Lab Sample Results[5] ppbv
SE Corner of trailer Deck at Area C	5/29/2008	1600	NA	NA	NA	NA	all ND
Aerovox South gate	5/29/2008	1620	NA	NA	NA	NA	all ND
Aerovox perimeter fence at SE Building corner	5/29/2008	1625	NA	NA	NA	NA	all ND
Duplicate with Aerovox perimeter fence at SE Building corner	5/29/2008	1625	NA	NA	NA	NA	all ND
Aerovox perimeter fence at combined sewer outfall	5/29/2008	1630	ND	NA	NA	NA	all ND
Southern Fence line	6/2/2008	1400	ND	0.6	NA	NA	PCE=0.216
Southwest Fence line	6/2/2008	1420	ND	0.6	NA	NA	PCE=0.254

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) The first five listed Laboratory samples were collected in Summa Canisters over 4 hour collection time. The analytical method used was TO-14 for 37 compounds. The last 2 listed samples were collected in tedlar bags using a pump. These were analyzed for 9 compounds. Only detected VOCs are listed.

1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.25 mg/m^3	0.25 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt corrective action.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line	6/3/2008	1010	ND	1.4-3.2	VC< 0.5 PCE < 2	0.012	ND	NA
	6/4/2008	1655	ND	ND	NA	NA	NA	NA
	6/5/2008	1011	ND	ND	NA	0.034	ND	NA
	6/6/2008	1310	ND	ND	NA	NA	NA	0.0000344
Southwest Fence	6/3/2008	1120	ND	1.1	NA	NA	ND	NA
by Aerovox gate	6/4/2008	1458	ND	ND	NA	NA	NA	NA
	6/5/2008	1127	ND	1.3	NA	NA	ND	NA
	6/6/2008	1319	ND	ND	NA	NA	NA	NA
Belleville Avenue	6/2/2008	1522	NA	NA	NA	NA	ND	NA
	6/3/2008	1522	ND	ND	NA	NA	ND	NA
	6/4/2008	1720	ND	1.1	NA	NA	NA	NA
	6/5/2008	1325	ND	ND	NA	NA	ND	NA
	6/6/2008	1340	ND	ND	NA	NA	NA	0.0000259
Northern Fence line	6/2/2008	1600	NA	NA	NA	NA	PCE = 0.241	NA
adjacent to Precix	6/3/2008	1600	ND	ND	NA	NA	cis-1,2-DCE=0.664 TCE=0.68 VC=0.232	NA
	6/4/2008	1645	ND	ND	NA	NA	NA	NA
	6/5/2008	1400	ND	1.3	NA	0.024	ND	NA
	6/6/2008	1400	ND	ND	NA	NA	NA	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Sawyer Street Location	Date	Time	H_2S [1] ppmv	VOCs [2] ppmv	Draeger Tube [3] ppmv	Particulates [4] mg/m^3	Lab Sample Results [5] ppbv	Total PCBs mg/m^3
Ropeworks Building	6/4/2008	1020	0	0	NA	NA	ND	NA
Southeast corner of building	6/6/2008	940	0	0	NA	NA		NA
North Perimeter Fence		949	0	0	NA	NA		NA
North of Cell #1 at perimeter fence	6/4/2008	1120	ND	ND	NA	NA	cis-1,2-DCE=3.45 TCE=2.52 VC=1.13	NA
		1127	ND	ND	NA	NA	NA	NA
	6/6/2008	1027	ND	ND	NA	NA	cis-1,2-DCE=14.2 PCE=0.262 TCE=9.38 VC=5.02	NA
		1030	ND	ND	NA	NA		NA
East Fence	6/4/2008	1140	ND	ND	NA	NA	NA	NA
East gate to office trailers	6/6/2008	1008	ND	ND	NA	NA	TCE=0.210	NA
		1018	ND	ND	NA	NA		NA
South Perimeter Fence	6/4/2008	1210	ND	ND	NA	NA	ND	NA
between Cell #1 and Sawyer Street	6/6/2008	955	ND	ND	NA	NA	PCE=0.206	NA
		1000	ND	ND	NA	NA		NA

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

cis-1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S [1] ppmv	VOC [2] ppmv	Draeger Tube [3] ppmv	Particulates[4] mg/m^3	Lab Sample Results[5] ppbv	Total PCBs mg/m^3
Southern Fence line Hadley Street, adjacent NE corner of Titleist	6/9/2008	1125	ND	2.5	VC < 0.5 TCE < 2	NA	PCE = 0.454	NA
	6/10/2008	1030	ND	1.0	NA	0.087	PCE = 0.564 TCE = 0.684 VC = 0.309	NA
	6/11/2008	1540	ND	ND	NA	NA	PCE = 0.219	NA
	6/12/2008	1430	ND	ND	NA		NA	0.0000431
	6/13/2008	1100	ND	ND	NA	NA	NA	NA
Southwest Fence by Aerovox gate	6/9/2008	1140	ND	3.5	VC < 0.5 TCE < 2 PCE < 2	NA	PCE = 0.573	NA
	6/10/2008	1046	ND	1.0	NA	NA	PCE = 0.302 TCE = 0.228 VC = 0.210	NA
	6/11/2008	1527	ND	ND	NA	0.017	PCE = 0.220	NA
	6/12/2008	1530	ND	ND	NA		NA	NA
	6/13/2008	1120	ND	ND	NA	NA	NA	NA
Belleville Avenue corner of Hadley and Belleville	6/9/2008	1100	ND	1.9	VC < 0.5	NA	PCE = 0.729	NA
	6/10/2008	1105	ND	1.0	NA	NA	1,2-DCA = 0.252 PCE = 0.324 t-1,2-DCE = 0.202	NA
	6/11/2008	1510	ND	ND	NA	NA	PCE = 0.225	NA
	6/12/2008	1630	ND	ND	NA		NA	0.0000073
	6/13/2008	1145	ND	ND	NA	NA	NA	NA
	6/14/2008	900	ND	ND	NA	NA	cis-1,2-DCE=0.268 PCE=0.333 TCE=2.30	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOC (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Northern Fence line adjacent to Precix	6/9/2008	1110	ND	1.6	VC < 0.5	NA	PCE = 0.535	NA
	6/10/2008	1425	ND	2.3	VC < 0.5 TCE < 2	NA	PCE = 0.264	NA
	6/11/2008	1450	ND	1.1	NA	NA	PCE = 0.361 TCE = 0.366	NA
	6/12/2008	1730	ND	ND	NA		NA	NA
	6/13/2008	1230	ND	ND	NA	NA	NA	NA
	6/14/2008	800	ND	ND	NA	0.017	cis-1,2-DCE=0.643 PCE=0.455 TCE=5.94	NA
		1130	ND	ND	NA		cis-1,2-DCE=1.11 PCE=0.366 TCE=5.88	NA
		1400	ND	ND	NA		cis-1,2-DCE=1.60 PCE=0.254 TCE=6.94 VC=1.40	NA
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOC (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	6/12/2008	1640	ND	ND	NA	NA	NA	
North Perimeter Fence North of Cell #1 at perimeter fence	6/12/2008	1650	ND	ND	NA	NA	NA	
South Perimeter Fence between Cell #1 and Sawyer Street	6/12/2008	1640 TWA	ND ND	ND ND	NA	NA	NA	
	6/13/2008	TWA	0.1	ND				
	6/14/2008	TWA	ND	ND				

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here. Units are ppbv.

1,2-DCA = 1,2-dichloroethane
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
t-1,2-DCE = trans-1,2-dichloroethene
TCE = trichloroethene
TWA = time weighted average; readiings collected continuously over an 10 to 12-hour period to measure exposure for one day.
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists)

Aerovox Site Location	Date	Time	H_2S [1] ppmv	VOCs [2] ppmv	Draeger Tube [3] ppmv	Particulates [4] mg/m^3	Lab Sample Results [5] ppbv	Total PCBs mg/m^3
Southern Fence line	6/14/2008	Not Sampled						
	6/16/2008	1349	ND	ND	NA	0.039	NA	NA
		1438	ND	1.00	NA	NA	NA	NA
	6/17/2008	1420	ND	1.00	NA	NA	1,2-DCA=0.205 cis-1,2-DCE=0.641 TCE=0.674 VC=0.416	NA
	6/18/2008	1455	ND	1.5	NA	NA	NA	NA
		1502	ND	1.8	VC<0.5 PCE<2	NA	NA	NA
	6/19/2008	1445	ND	ND	NA	NA	NA	NA
		1700	ND	ND	NA	NA	NA	NA
	6/20/2008	1000	ND	ND	NA	NA	NA	NA
		1645	ND	ND	NA	NA	NA	NA
Southwest Fence	6/14/2008	Not Sampled						NA
by Aerovox gate	6/16/2008	1357	ND	ND	NA	NA	NA	NA
		1458	ND	3.2 [6]	NA	NA	NA	NA
	6/17/2008	1400	ND	1.6	VC<0.5 PCE<2	NA	cis-1,2-DCE=0.247 TCE=0.361 VC=0.210	NA
	6/18/2008	1445	ND	1.1	NA	NA	NA	NA
		1450	ND	1.4	NA	NA		NA
	6/19/2008	1415	ND	ND	NA	NA	NA	NA
		1650	ND	ND	NA	NA	NA	NA
	6/20/2008	1045	ND	ND	NA	NA	NA	NA
		1700	ND	ND	NA	NA	NA	NA
Belleville Avenue	6/14/2008	900	ND	ND	NA	NA	PCE = 0.333 cis-1,2-DCE=0.268 TCE=2.30	NA
	6/16/2008	1405	ND	ND	NA	NA	NA	NA
		1552	ND	ND	NA		NA	NA
	6/17/2008	1344	ND	4.1	VC<0.5 PCE<2	NA	TCE=0.233	NA
		1354	ND	4.8	NA	NA		NA
	6/18/2008	1435	ND	ND	NA	NA	NA	NA
		1440	ND	ND	NA	NA	NA	NA
	6/19/2008	1400	ND	ND	NA	NA	NA	NA
		1630	ND	ND	NA	NA	NA	NA
		1145	ND	ND	NA	NA	NA	NA
	6/20/2008	1100	ND	ND	NA	NA	NA	0.0000089
		1715	ND	ND	NA	NA	Na	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Northern Fence line adjacent to Precix	6/14/2008	800	ND	ND	NA	0.017	PCE = 0.455 cis-1,2-DCE=0.643 TCE=5.94	NA
		1130	ND	ND	NA	NA	cis-1,2-DCE=1.11 PCE=0.366 TCE=5.88 VC=2.12	NA
		1400	ND	ND	NA	NA	cis-1,2-DCE=1.60 PCE=0.254 TCE=6.94 VC=1.40	NA
	6/16/2008	1415	ND	ND	NA	NA	NA	NA
		1559	ND	ND	NA	NA	NA	NA
	6/17/2008	1300	ND	ND	NA	0.05	cis-1,2 DCE=1.02 TCE=1.42 VC=0.765	NA
	6/18/2008	1415	ND	ND	NA	0.018	NA	NA
		1429	ND	1.1	NA	NA	NA	NA
	6/19/2008	1510	ND	ND	NA	NA	NA	NA
		1715	ND	ND	NA			NA
	6/20/2008	1110	ND	ND	NA	NA	NA	NA
		1730	ND	ND	NA	NA		NA
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOCs (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	No Sampling or Monitoring at this location during subject time period.							
North Perimeter Fence North of Cell #1 at perimeter fence	6/18/2008	1518	ND	1.4	NA	NA	NA	NA
		1520	ND	1.2	NA	NA	NA	NA
South Perimeter Fence Between Cell #1 and Sawyer Street	No Sampling or Monitoring at this location during subject time period.							

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

1,2-DCA = 1,2-dichloroethane
1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
TWA = time weighted average; readiings collected continuously over a 10 to 12-hour period to measure exposure for one day.
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.

Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates

TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line	6/23/2008	1625	ND	ND	NA	NA	NA	NA
		1630	ND	ND	NA	NA	NA	NA
	6/24/2008	1105	ND	ND	NA	NA		NA
		1115	ND	ND	NA	NA	PCE=0.228	NA
	6/25/2008	1330	ND	ND	NA	NA	NA	NA
	6/26/2008	1410	ND	ND	NA	NA	ND	NA
	6/27/2008	NR	ND	ND	NA	NA	NA	NA
Southwest Fence by Aerovox gate	6/23/2008	1615	ND	ND	NA	NA	NA	NA
		1620	ND	ND	NA	NA	NA	NA
	6/24/2008	1048	ND	ND	NA	NA		NA
		1100	ND	ND	NA	NA	PCE=0.223	NA
	6/25/2008	1310	ND	ND	NA	NA	NA	NA
	6/26/2008	1340	ND	ND	NA	NA	ND	NA
	6/27/2008	NR	ND	ND	NA	NA	NA	NA
Belleville Avenue	6/23/2008	1605	ND	ND	NA	NA	NA	NA
		1610	ND	ND	NA	NA	NA	NA
	6/24/2008	1035	ND	ND	NA	NA		NA
		1042	ND	ND	NA		PCE=0.253	NA
	6/25/2008	1255	ND	ND	NA	NA	NA	0.00000552
	6/26/2008	1325	ND	ND	NA	NA	ND	NA
	6/27/2008	NR	ND	ND	NA	NA	NA	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Aerovox Site Location	Date	Time	H_2S [1] ppmv	VOCs [2] ppmv	Draeger Tube [3] ppmv	Particulates [4] mg/m^3	Lab Sample Results [5] ppbv	Total PCBs mg/m^3
Northern Fence line adjacent to Precix	6/23/2008	1600	ND	ND	NA	0.029	NA	NA
	6/24/2008	1015	ND	ND	NA			NA
		1027	ND	ND	NA	0.048	PCE=0.275	NA
	6/25/2008	1240	ND	ND	NA	NA	NA	NA
	6/26/2008	709	ND	ND	NA	0.027	cis-1,2-DCE=0.25	NA
							TCE=0.322	
	6/27/2008	NR	ND	ND	NA	0.17	NA	NA
Sawyer Street Location	**Date**	**Time**	**H_2S [1] ppmv**	**VOCs [2] ppmv**	**Draeger Tube [3] ppmv**	**Particulates [4] mg/m^3**	**Lab Sample Results [5] ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	6/26/2008	725	ND	ND	NA	NA	NA	NA
North Perimeter Fence North of Cell #1 at perimeter fence	6/23/2008	1655	ND	ND	NA	NA	NA	NA
	6/26/2008	735	ND	ND	NA	NA	NA	NA
South Perimeter Fence Between Cell #1 and Sawyer Street	6/26/2008	740	ND	ND	NA	NA	NA	NA

Notes:
(1) H_2S - hydrogen sulfide
(2) PID - photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in parts per million by volume (ppmv).
(3) Draeger Tube - real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants

1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
NR = not recorded
ppbv = parts per billion by volume
ppmv = parts per million by volume
PCE = perchloroethene (also called tetrachloroethene)
TCE = trichloroethene
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line No field activities this week so no sampling.	June 30 - July 4	Not Sampled						
Southwest Fence by Aerovox gate No field activities this week so no sampling.	June 30 - July 4	Not Sampled						
Belleville Avenue No field activities this week so no sampling.	June 30 - July 4	Not Sampled						
Northern Fence line adjacent to Precix No field activities this week so no sampling.	June 30 - July 4	Not Sampled						
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOCs (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	June 30 - July 4	No Sampling or Monitoring at this location during subject time period.						
North Perimeter Fence North of Cell #1 at perimeter fence	June 30 - July 4	No Sampling or Monitoring at this location during subject time period.						
South Perimeter Fence Between Cell #1 and Sawyer Street	June 30 - July 4	No Sampling or Monitoring at this location during subject time period.						

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

1,2-DCA = 1,2-dichloroethane
1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
TWA = time weighted average; readiings collected continuously over a 10 to 12-hour period to measure exposure for one day.
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt corrective action.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line	7/7/2008	915	ND	ND	NA	NA	NA	NA
		1600	ND	ND	NA	NA	NA	NA
	7/8/2008	1200	ND	ND	NA	NA	1,2-DCA=0.436 PCE=0.473	0.0000261
	7/9/2008	1400	ND	ND	NA	NA	NA	NA
	7/10/2008	1045	ND	ND	NA	NA		NA
		1111	ND	ND	NA	NA	1,2-DCA=0.288 PCE=0.753	NA
	7/11/2008	945	ND	ND	NA	NA	NA	NA
Southwest Fence by Aerovox gate	7/7/2008	900	ND	ND	NA	NA	NA	NA
		1515	ND	ND	NA	NA	NA	NA
	7/8/2008	1115	ND	ND	NA	NA	PCE=0.504 1,2-DCA=0.422	NA
	7/9/2008	1230	ND	ND	NA	NA	NA	NA
	7/10/2008	1000	ND	ND	NA	NA		NA
		1038	ND	ND	NA	NA	1,2-DCA=0.363 PCE=0.708 TCE=0.205	NA
	7/11/2008	1000	ND	ND	NA	NA	NA	NA
Belleville Avenue	7/7/2008	826	ND	ND	NA	NA	NA	NA
		1500	ND	ND	NA	NA	Na	NA
	7/8/2008	1030	ND	0.5	NA	NA	1,2-DCA=0.687 PCE=0.667	0.0000087
	7/9/2008	1030	ND	ND	NA	NA	NA	NA
	7/10/2008	1415 1425	ND ND	ND ND	NA NA	NA NA	 1,2-DCA=0.254 PCE=0.378	NA NA
	7/11/2008	NR	ND	ND	NA	NA	NA	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Northern Fence line adjacent to Precix	7/7/2008	800	ND	ND	NA			NA
		1445	ND	ND	NA	0.026	NA	NA
	7/8/2008	1243	ND	ND	NA	0.048	1,2-DCA=0.300 PCE=0.278	NA
	7/9/2008	830	ND	ND	NA	NA	NA	NA
	7/10/2008	1130	ND	2.5	PCE < 2	NA		NA
		1151	ND	3.5	VC < 0.5		1,2-DCA=0.391 PCE=0.579	NA
	7/11/2008	NR	ND	ND	NA	0.000	NA	NA
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOCs (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	No measurements taken							
North Perimeter Fence North of Cell #1 at perimeter fence	No measurements taken							
South Perimeter Fence Between Cell #1 and Sawyer Street	No measurements taken							

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

1,2-DCA = 1,2-dichloroethane
1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
NR = not recorded
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.

Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.

TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists).

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line	7/14/2008	1104	ND	ND	NA	NA	NA	NA
	7/15/2008	1140	ND	ND	NA	NA	NA	NA
	7/16/2008	1500	ND	ND	NA	NA	NA	0.0002865
	7/17/2008	1630	ND	ND	NA	NA	NA	NA
Southwest Fence	7/14/2008	1101	ND	ND	NA	NA	NA	NA
	7/15/2008	1128	ND	ND	NA	NA	1,2-DCA=0.45 cis-1,2-DCE=0.549 PCE=0.504 TCE=3..22	NA
	7/16/2008	1510	ND	2.3	TCE < 50 VC < 0.5	NA	NA	NA
	7/17/2008	1605	ND	ND	NA	NA	1,2-DCA=0.375 PCE=0.459 TCE=1.46	NA
Belleville Avenue	7/14/2008	1115	ND	ND	NA	NA	NA	NA
	7/15/2008	1113	ND	ND	NA	NA	1,2-DCA=0.444 cis-1,2-DCE=0.589 PCE=0.711 TCE=6.03	NA
	7/16/2008	1600	ND	ND	NA	NA	NA	0.0000686
	7/17/2008	1530	ND	ND	NA	NA	1,2-DCA=0.678 cis-1,2-DCE=0.380 PCE=0.908 TCE=5.89	NA

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Northern Fence line adjacent to Precix	7/14/2008	1120	ND	ND	NA	0.011	NA	NA
	7/15/2008	1056	ND	ND	NA	0.019	1,2-DCA=0.42 cis-1,2-DCE=2.34 PCE=0.783 TCE=8.29	NA
	7/16/2008	1605	ND	ND	NA	NA	NA	NA
	7/17/2008	1445	ND	ND	NA	0.034	1,2-DCA=0.445 cis-1,2-DCE=1.44 PCE=0.937 TCE=9.16	NA
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOCs (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	No measurements taken							
North Perimeter Fence North of Cell #1 at perimeter fence	7/14/2008	1150	ND	ND	NA	NA	NA	NA
South Perimeter Fence Between Cell #1 and Sawyer Street	7/14/2008	1145	ND	ND	NA	NA	NA	NA

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

1,2-DCA = 1,2-dichloroethane
1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
VC = vinyl chloride

Table 3-2
Perimeter Air Monitoring Results
New Bedford Harbor Superfund Site - 2008 Season

Action Levels

Air Contaminant	8-Hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m^3	0.3 mg/m^3	0.3 mg/m^3
PCBs	0.5 mg/m^3	0.05 mg/m^3	0.1 mg/m^3

Perimeter Action Limit = 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.
Perimeter Assessment Value = 1/10th of TLV for VOCs; TLV for particulates.
TLV = threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists)

Aerovox Site Location	Date	Time	H_2S (1) ppmv	VOCs (2) ppmv	Draeger Tube (3) ppmv	Particulates (4) mg/m^3	Lab Sample Results (5) ppbv	Total PCBs mg/m^3
Southern Fence line	7/21/2008	1715	ND	ND	NA	NA	NA	NA
	7/22/2008	1723	ND	ND	NA	NA	TCE=0.235	NA
End Of Perimeter Monitoring								
Southwest Fence	7/21/2008	1651	ND	ND	NA	NA	NA	NA
	7/22/2008	1352	ND	ND	NA	NA	PCE=0.295 TCE=0.901	NA
End Of Perimeter Monitoring								
Belleville Avenue	7/21/2008	1645	ND	ND	NA	NA	NA	NA
	7/22/2008	1408	ND	ND	NA	NA	TCE=0.215	NA
End Of Perimeter Monitoring								
Northern Fence line adjacent to Precix	7/21/2008	1620	ND	ND	NA	0.085	NA	NA
	7/22/2008	1620	ND	1.8	TCE < 2 VC < 0.5	0.015	1,2-DCA=0.241 cis-1,2-DCE=0.259 PCE=0.649 TCE=4.30	NA
End Of Perimeter Monitoring								
Sawyer Street Location	**Date**	**Time**	**H_2S (1) ppmv**	**VOCs (2) ppmv**	**Draeger Tube (3) ppmv**	**Particulates (4) mg/m^3**	**Lab Sample Results (5) ppbv**	**Total PCBs mg/m^3**
Ropeworks Building Southeast corner of building	No measurements taken							
North Perimeter Fence North of Cell #1 at perimeter fence	No measurements taken							
South Perimeter Fence Between Cell #1 and Sawyer Street	No measurements taken							

Notes:
(1) H_2S = hydrogen sulfide
(2) PID = photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in ppmv.
(3) Draeger Tube = real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.
(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.
(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.
(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants.

1,2-DCA = 1,2-dichloroethane
1,2-DCE = cis-1,2-dichloroethene
mg/m^3 = milligrams of respirable dust per cubic meter of air
NA = not analyzed
ND = nondetect
PCE = perchloroethene (also called tetrachloroethene)
ppbv = parts per billion by volume
ppmv = parts per million by volume
TCE = trichloroethene
VC = vinyl chloride

Table 3-3
2008 Mechanical Dredging Daily Production Report
New Bedford Harbor Superfund Site -2008 Season

			Estimated In-Situ Stabilized Sediment						Estimated Portland Cement Added				
Date:	Day	Grid Location	Cubic Yards	Total Cubic Yards	Tons	Total Tons	Number of Trucks Hauled to Area C	Total Number of Trucks Hauled to Area C	Cubic Yards	Total Cubic Yards	Tons	Total Tons	% Additive
2-Jun	Monday	J11 & K11	60	60	65	65	5	5	2	4	3	3	3.88%
3-Jun	Tuesday	H10- K10	108	168	118	183	9	14	4	7	5	8	3.88%
4-Jun	Wednesday	G14, H14, I14	204	372	222	405	17	31	8	15	10	18	4.51%
5-Jun	Thursday	G13-H14	240	612	262	667	20	51	14	29	18	36	6.89%
6-Jun	Friday	J11-10, H1 & I1	264	876	288	954	22	73	16	45	20	56	6.97%
9-Jun	Monday	J12	96	972	105	1,059	8	81	6	51	8	64	7.52%
10-Jun	Tuesday	I12, I13	192	1,164	209	1,268	16	97	18	69	23	86	10.91%
11-Jun	Wednesday	H12, I13, K9-10	240	1,404	262	1,530	20	117	32	101	41	127	15.52%
12-Jun	Thursday	J8-9, H1, H2	240	1,644	262	1,792	20	137	32	133	41	168	15.52%
13-Jun	Friday	H1, J8-9	228	1,872	249	2,040	19	156	27	160	34	201	13.58%
14-Jun	Saturday	Northern Property Line at Aerovox	312	2,184	340	2,380	26	182	37	197	47	248	13.73%
16-Jun	Monday	K7-8, J7	240	2,424	262	2,642	20	202	27	224	35	283	13.19%
17-Jun	Tuesday	I7, J7, K7	288	2,712	314	2,956	24	226	29	253	36	319	11.56%
18-Jun	Wednesday	J3, J4	288	3,000	314	3,270	24	250	32	285	41	359	12.94%
19-Jun	Thursday	I3, I4	264	3,264	288	3,557	22	272	34	319	43	403	14.99%
20-Jun	Friday	J6, J7, H4	108	3,372	118	3,675	9	281	16	335	20	423	17.25%
23-Jun	Monday	H5, H6, J5, I5	276	3,648	301	3,976	23	304	37	372	47	470	15.69%
24-Jun	Tuesday	I5	156	3,804	170	4,146	13	317	23	395	29	499	17.16%
25-Jun	Wednesday	I5, J5, I4, J4	312	4,116	340	4,486	26	343	40	435	51	551	15.08%
26-Jun	Thursday	I3, J3	312	4,428	340	4,826	26	369	34	469	43	594	12.69%
27-Jun	Friday	J3, I1, I2	264	4,692	288	5,114	22	391	35	504	45	638	15.52%
28-Jun	Saturday	G1-3, H1-3	240	4,932	262	5,375	20	411	23	528	29	668	11.25%
7-Jul	Monday	H1-2, I1	288	5,220	314	5,689	24	435	35	563	45	712	14.23%
8-Jul	Tuesday	H1-2, I1, J1	252	5,472	275	5,964	21	456	31	594	39	752	14.23%
9-Jul	Wednesday	K9, J9, I9	264	5,736	288	6,252	22	478	42	636	53	805	18.52%
10-Jul	Thursday	I9, H9, H12-13	324	6,060	353	6,605	27	505	49	684	62	867	17.54%
11-Jul	Friday	H12, H13, J10	360	6,420	392	6,997	30	535	49	734	62	929	15.91%
14-Jul	Monday	H10, H11, G13, H13	360	6,780	392	7,390	30	565	50	784	64	993	16.30%
15-Jul	Tuesday	H13, I14, G13, G14	192	6,972	209	7,599	16	581	26	810	34	1,027	16.01%
16-Jul	Wednesday	I10, G13, H13-15, I14-15	216	7,188	235	7,835	18	599	33	844	42	1,069	17.89%
17-Jul	Thursday	H14, I14, G15, H15	324	7,512	353	8,188	27	626	41	885	53	1,121	14.88%
18-Jul	Friday	F14-15, G14-15	264	7,776	288	8,475	22	648	36	921	46	1,168	16.05%
21-Jul	Monday	G16, H16	360	8,136	392	8,868	30	678	53	974	67	1,235	17.08%
22-Jul	Tuesday	E16-17, F16-17, G16-17, H16-17, I14, C18, D18	300	8,436	327	9,195	25	703	44	1,018	56	1,290	17.08%
23-Jul	Wednesday	D17, E17, G11, G12	96	8,532	105	9,299	8	711	18	1,036	22	1,313	21.34%
24-Jul	Thursday		0	8,532	0	9,299		711		1,036	0	1,313	NA
25-Jul	Friday		0	8,532	0	9,299		711		1,036	0	1,313	NA
		AVERAGE	**231**		**251**		**20**		**30**		**35**		**13.64%**

Table 3-4
Unstabilized Sediment Analytical Data Summary
New Bedford Harbor Superfund Site - 2008 Season

Date	Total Aroclors (mg/kg)	Percent Solids
6/5/2008	1000	40.9
6/6/2008	1070	43.1
6/11/2008	1900	42.0
6/13/2008	7600	40.3
6/16/2008	11200	57.8
6/18/2008	930	41.2
6/20/2008	1480	41.5
6/25/2008	1750	47.6
6/27/2008	2190	49.5
7/9/2008	1460	47.2
7/11/2008	3600	37.8
7/17/2008	2300	43.2
7/18/2008	520	43.2
7/23/2008	234	51.2

Notes:
Samples are composites of untabilized sediment.
mg/kg = miligrams per kilogram

Table 3-5
PCB Mass Removed for 2008 Season Mechanical Dredging
New Bedford Harbor Superfund Site - 2008 Season

Date	Total Aroclors (mg/kg)	Percent Solids
6/5/2008	1000	40.9
6/6/2008	1070	43.1
6/11/2008	1900	42.0
6/13/2008	7600	40.3
6/16/2008	11200	57.8
6/18/2008	930	41.2
6/20/2008	1480	41.5
6/25/2008	1750	47.6
6/27/2008	2190	49.5
7/9/2008	1460	47.2
7/11/2008	3600	37.8
7/17/2008	2300	43.2
7/18/2008	520	43.2
7/23/2008	234	51.2
Average	2660	44.8

Total Unstabilized Sediment	9299	wet tons
Total Unstabilized Sediment	4161	dry tons
Total Unstabilized Sediment	3775070	dry kg
Calculated Aroclor Mass Removed	10042	kg
Calculated Aroclor Mass Removed	11.1	tons

Notes:
Dry weight of material calculation based on average of laboratory observed percent solids.
Wet weight of material taken from SES 2008 Mechanical Dredging.
kg = kilograms

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
1	8/7/2008	SW6010B	ARSENIC	ND	U	11.9	24.5	µg/L
1	8/7/2008	SW6010B	BARIUM	103	J	1.7	200	µg/L
1	8/7/2008	SW6010B	CADMIUM	ND	UJ	0.13	5	µg/L
1	8/7/2008	SW6010B	CHROMIUM, TOTAL	13.3	J	0.14	10	µg/L
1	8/7/2008	SW6010B	COPPER	446		0.5	25	µg/L
1	8/7/2008	SW6010B	LEAD	ND	U	4.2	40	µg/L
1	8/7/2008	SW7470A	MERCURY	ND	U	1	0.2	µg/L
1	8/7/2008	SW6010B	SELENIUM	ND	U	12.7	57.35	µg/L
1	8/7/2008	SW6010B	SILVER	ND	U	0.53	10	µg/L
1	8/7/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	3143	48000	µg/kg
1	8/7/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	10571	48000	µg/kg
1	8/7/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	3714	48000	µg/kg
1	8/7/2008	SW8082	PCB-1242 (AROCLOR 1242)	440000		3429	48000	µg/kg
1	8/7/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	3143	48000	µg/kg
1	8/7/2008	SW8082	PCB-1254 (AROCLOR 1254)	340000		9714	48000	µg/kg
1	8/7/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	3143	48000	µg/kg
1	8/7/2008	SW8270C	1,4-DICHLOROBENZENE	18	J	0.67	50	µg/L
1	8/7/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
1	8/7/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
1	8/7/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
1	8/7/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
1	8/7/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	6.9	J	0.24	50	µg/L
1	8/7/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
1	8/7/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
1	8/7/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
1	8/7/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
1	8/7/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
1	8/7/2008	SW8270C	PYRIDINE	15	J	0.51	50	µg/L
1	8/7/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
1	8/7/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
1	8/7/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
1	8/7/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
1	8/7/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
1	8/7/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
1	8/7/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
1	8/7/2008	SW8260B	TETRACHLOROETHENE(PCE)	62		2.2	44	µg/L
1	8/7/2008	SW8260B	TRICHLOROETHENE(TCE)	1600		1.23	44	µg/L
1	8/7/2008	SW8260B	VINYL CHLORIDE	9.8	J	2.64	44	µg/L
2	8/8/2008	SW6010B	ARSENIC	ND	U	18.9	24.5	µg/L
2	8/8/2008	SW6010B	BARIUM	184	J	1.7	200	µg/L
2	8/8/2008	SW6010B	CADMIUM	ND	UJ	0.13	5	µg/L
2	8/8/2008	SW6010B	CHROMIUM, TOTAL	ND	U	3.9	10	µg/L
2	8/8/2008	SW6010B	COPPER	187		0.5	25	µg/L
2	8/8/2008	SW6010B	LEAD	ND	U	5.9	40	µg/L
2	8/8/2008	SW7470A	MERCURY	ND	U	1	0.2	µg/L
2	8/8/2008	SW6010B	SELENIUM	ND	U	9.9	57.35	µg/L
2	8/8/2008	SW6010B	SILVER	ND	U	0.53	10	µg/L
2	8/8/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	4799	73000	µg/kg
2	8/8/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	16141	73000	µg/kg
2	8/8/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	5671	73000	µg/kg
2	8/8/2008	SW8082	PCB-1242 (AROCLOR 1242)	730000		5235	73000	µg/kg
2	8/8/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	4799	73000	µg/kg
2	8/8/2008	SW8082	PCB-1254 (AROCLOR 1254)	850000		14832	73000	µg/kg
2	8/8/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	4799	73000	µg/kg
2	8/8/2008	SW8270C	1,4-DICHLOROBENZENE	37	J	0.67	50	µg/L
2	8/8/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
2	8/8/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
2	8/8/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
2	8/8/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
2	8/8/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	17	J	0.24	50	µg/L
2	8/8/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
2	8/8/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
2	8/8/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
2	8/8/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
2	8/8/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
2	8/8/2008	SW8270C	PYRIDINE	19	J	0.51	50	µg/L
2	8/8/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
2	8/8/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
2	8/8/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
2	8/8/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
2	8/8/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
2	8/8/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
2	8/8/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	87	261	µg/L
2	8/8/2008	SW8260B	TETRACHLOROETHENE(PCE)	140		2.2	44	µg/L
2	8/8/2008	SW8260B	TRICHLOROETHENE(TCE)	23000		17.1	610	µg/L
2	8/8/2008	SW8260B	VINYL CHLORIDE	25	J	2.64	44	µg/L
3	8/8/2008	SW6010B	ARSENIC	ND	U	17.5	24.5	µg/L
3	8/8/2008	SW6010B	BARIUM	113	J	1.7	200	µg/L
3	8/8/2008	SW6010B	CADMIUM	ND	UJ	0.13	5	µg/L
3	8/8/2008	SW6010B	CHROMIUM, TOTAL	11.7	J	0.14	10	µg/L
3	8/8/2008	SW6010B	COPPER	403		0.5	25	µg/L
3	8/8/2008	SW6010B	LEAD	ND	U	4.6	40	µg/L
3	8/8/2008	SW7470A	MERCURY	ND	U	1	0.2	µg/L
3	8/8/2008	SW6010B	SELENIUM	ND	U	10.9	57.35	µg/L
3	8/8/2008	SW6010B	SILVER	ND	U	0.97	10	µg/L
3	8/8/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	3373	51000	µg/kg
3	8/8/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	11347	51000	µg/kg
3	8/8/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	3987	51000	µg/kg
3	8/8/2008	SW8082	PCB-1242 (AROCLOR 1242)	450000		3680	51000	µg/kg
3	8/8/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	3373	51000	µg/kg
3	8/8/2008	SW8082	PCB-1254 (AROCLOR 1254)	490000		10427	51000	µg/kg
3	8/8/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	3373	51000	µg/kg
3	8/8/2008	SW8270C	1,4-DICHLOROBENZENE	42	J	0.67	50	µg/L
3	8/8/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
3	8/8/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
3	8/8/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
3	8/8/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
3	8/8/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	9.9	J	0.24	50	µg/L
3	8/8/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
3	8/8/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
3	8/8/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
3	8/8/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
3	8/8/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
3	8/8/2008	SW8270C	PYRIDINE	12	J	0.51	50	µg/L
3	8/8/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
3	8/8/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
3	8/8/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
3	8/8/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
3	8/8/2008	SW8260B	CHLOROBENZENE	8.8	J	1.23	44	µg/L
3	8/8/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
3	8/8/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	84	261	µg/L
3	8/8/2008	SW8260B	TETRACHLOROETHENE(PCE)	240		2.2	44	µg/L
3	8/8/2008	SW8260B	TRICHLOROETHENE(TCE)	23000		24.6	880	µg/L
3	8/8/2008	SW8260B	VINYL CHLORIDE	62		2.64	44	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
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TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
4	8/8/2008	SW6010B	ARSENIC	ND	U	15.4	24.5	µg/L
4	8/8/2008	SW6010B	BARIUM	158	J	1.7	200	µg/L
4	8/8/2008	SW6010B	CADMIUM	ND	UJ	0.13	5	µg/L
4	8/8/2008	SW6010B	CHROMIUM, TOTAL	12.4	J	0.14	10	µg/L
4	8/8/2008	SW6010B	COPPER	373		0.5	25	µg/L
4	8/8/2008	SW6010B	LEAD	ND	U	4.3	40	µg/L
4	8/8/2008	SW7470A	MERCURY	ND	U	1	0.2	µg/L
4	8/8/2008	SW6010B	SELENIUM	ND	U	11.9	57.35	µg/L
4	8/8/2008	SW6010B	SILVER	ND	U	1.5	10	µg/L
4	8/8/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	1833	28000	µg/kg
4	8/8/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	6167	28000	µg/kg
4	8/8/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	2167	28000	µg/kg
4	8/8/2008	SW8082	PCB-1242 (AROCLOR 1242)	370000		2000	28000	µg/kg
4	8/8/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	1833	28000	µg/kg
4	8/8/2008	SW8082	PCB-1254 (AROCLOR 1254)	400000		5667	28000	µg/kg
4	8/8/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	1833	28000	µg/kg
4	8/8/2008	SW8270C	1,4-DICHLOROBENZENE	10	J	0.67	50	µg/L
4	8/8/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
4	8/8/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
4	8/8/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
4	8/8/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
4	8/8/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	8.7	J	0.24	50	µg/L
4	8/8/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
4	8/8/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
4	8/8/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
4	8/8/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
4	8/8/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
4	8/8/2008	SW8270C	PYRIDINE	9.7	J	0.51	50	µg/L
4	8/8/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
4	8/8/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
4	8/8/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
4	8/8/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
4	8/8/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
4	8/8/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
4	8/8/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
4	8/8/2008	SW8260B	TETRACHLOROETHENE(PCE)	25	J	2.2	44	µg/L
4	8/8/2008	SW8260B	TRICHLOROETHENE(TCE)	660		1.23	44	µg/L
4	8/8/2008	SW8260B	VINYL CHLORIDE	21	J	2.64	44	µg/L
5	8/11/2008	SW6010B	ARSENIC	ND	U	20.3	24.5	µg/L
5	8/11/2008	SW6010B	BARIUM	152	J	1.7	200	µg/L
5	8/11/2008	SW6010B	CADMIUM	ND	UJ	0.13	5	µg/L
5	8/11/2008	SW6010B	CHROMIUM, TOTAL	4.9	J	0.14	10	µg/L
5	8/11/2008	SW6010B	COPPER	203		0.5	25	µg/L
5	8/11/2008	SW6010B	LEAD	ND	U	5.6	40	µg/L
5	8/11/2008	SW7470A	MERCURY	ND	U	1	0.2	µg/L
5	8/11/2008	SW6010B	SELENIUM	ND	U	9.1	57.35	µg/L
5	8/11/2008	SW6010B	SILVER	ND	U	0.53	10	µg/L
5	8/11/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	1447	22000	µg/kg
5	8/11/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	4868	22000	µg/kg
5	8/11/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	1711	22000	µg/kg
5	8/11/2008	SW8082	PCB-1242 (AROCLOR 1242)	180000		1579	22000	µg/kg
5	8/11/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	1447	22000	µg/kg
5	8/11/2008	SW8082	PCB-1254 (AROCLOR 1254)	130000		4474	22000	µg/kg
5	8/11/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	1447	22000	µg/kg
5	8/11/2008	SW8270C	1,4-DICHLOROBENZENE	3	J	0.67	50	µg/L
5	8/11/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
5	8/11/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
5	8/11/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
5	8/11/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
5	8/11/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	5.8	J	0.24	50	µg/L
5	8/11/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
5	8/11/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
5	8/11/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
5	8/11/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
5	8/11/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
5	8/11/2008	SW8270C	PYRIDINE	2.3	J	0.51	50	µg/L
5	8/11/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
5	8/11/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
5	8/11/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
5	8/11/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
5	8/11/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
5	8/11/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
5	8/11/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
5	8/11/2008	SW8260B	TETRACHLOROETHENE(PCE)	11	J	2.2	44	µg/L
5	8/11/2008	SW8260B	TRICHLOROETHENE(TCE)	200		1.23	44	µg/L
5	8/11/2008	SW8260B	VINYL CHLORIDE	ND	U	2.64	44	µg/L
6	10/24/2008	SW6010B	ARSENIC	ND	U	12.9	30	µg/L
6	10/24/2008	SW6010B	BARIUM	210	J	3.4	200	µg/L
6	10/24/2008	SW6010B	CADMIUM	47.9	J	0.12	5	µg/L
6	10/24/2008	SW6010B	CHROMIUM, TOTAL	85.9		0.18	10	µg/L
6	10/24/2008	SW6010B	COPPER	102		0.7	25	µg/L
6	10/24/2008	SW6010B	LEAD	983		0.93	10	µg/L
6	10/24/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
6	10/24/2008	SW6010B	SELENIUM	ND	UJ	2	35	µg/L
6	10/24/2008	SW6010B	SILVER	ND	UJ	0.51	10	µg/L
6	10/24/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	369	5600	µg/kg
6	10/24/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	1242	5600	µg/kg
6	10/24/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	436	5600	µg/kg
6	10/24/2008	SW8082	PCB-1242 (AROCLOR 1242)	83000		403	5600	µg/kg
6	10/24/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	369	5600	µg/kg
6	10/24/2008	SW8082	PCB-1254 (AROCLOR 1254)	83000		1141	5600	µg/kg
6	10/24/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	369	5600	µg/kg
6	10/24/2008	SW8270C	1,4-DICHLOROBENZENE	ND	UJ	0.67	50	µg/L
6	10/24/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
6	10/24/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
6	10/24/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
6	10/24/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	U	0.32	50	µg/L
6	10/24/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	ND	U	0.24	50	µg/L
6	10/24/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
6	10/24/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
6	10/24/2008	SW8270C	HEXACHLOROETHANE	ND	UJ	0.66	50	µg/L
6	10/24/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
6	10/24/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
6	10/24/2008	SW8270C	PYRIDINE	ND	U	0.51	50	µg/L
6	10/24/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
6	10/24/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
6	10/24/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
6	10/24/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
6	10/24/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
6	10/24/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
6	10/24/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
6	10/24/2008	SW8260B	TETRACHLOROETHENE(PCE)	ND	U	2.2	44	µg/L
6	10/24/2008	SW8260B	TRICHLOROETHENE(TCE)	130		1.23	44	µg/L
6	10/24/2008	SW8260B	VINYL CHLORIDE	ND	U	2.64	44	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
7	10/24/2008	SW6010B	ARSENIC	ND	U	16.2	30	µg/L
7	10/24/2008	SW6010B	BARIUM	255	J	3.4	200	µg/L
7	10/24/2008	SW6010B	CADMIUM	ND	UJ	0.7	5	µg/L
7	10/24/2008	SW6010B	CHROMIUM, TOTAL	ND	U	4.3	10	µg/L
7	10/24/2008	SW6010B	COPPER	196		0.7	25	µg/L
7	10/24/2008	SW6010B	LEAD	ND	U	7.8	10	µg/L
7	10/24/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
7	10/24/2008	SW6010B	SELENIUM	ND	UJ	13.6	35	µg/L
7	10/24/2008	SW6010B	SILVER	ND	UJ	0.8	10	µg/L
7	10/24/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	1608	24000	µg/kg
7	10/24/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	5409	24000	µg/kg
7	10/24/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	1901	24000	µg/kg
7	10/24/2008	SW8082	PCB-1242 (AROCLOR 1242)	360000		1754	24000	µg/kg
7	10/24/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	1608	24000	µg/kg
7	10/24/2008	SW8082	PCB-1254 (AROCLOR 1254)	350000		4971	24000	µg/kg
7	10/24/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	1608	24000	µg/kg
7	10/24/2008	SW8270C	1,4-DICHLOROBENZENE	26	J	0.67	50	µg/L
7	10/24/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
7	10/24/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
7	10/24/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
7	10/24/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	UJ	0.32	50	µg/L
7	10/24/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	3.8	J	0.24	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
7	10/24/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
7	10/24/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
7	10/24/2008	SW8270C	PYRIDINE	6.1	J	0.51	50	µg/L
7	10/24/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
7	10/24/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
7	10/24/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
7	10/24/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
7	10/24/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
7	10/24/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
7	10/24/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
7	10/24/2008	SW8260B	TETRACHLOROETHENE(PCE)	29	J	2.2	44	µg/L
7	10/24/2008	SW8260B	TRICHLOROETHENE(TCE)	710		1.23	44	µg/L
7	10/24/2008	SW8260B	VINYL CHLORIDE	ND	U	2.64	44	µg/L
7	10/24/2008	SW6010B	ARSENIC	ND	UJ	11.4	30	µg/L
7	10/24/2008	SW6010B	BARIUM	236		3.4	200	µg/L
7	10/24/2008	SW6010B	CADMIUM	ND	UJ	0.65	5	µg/L
7	10/24/2008	SW6010B	CHROMIUM, TOTAL	6	J	0.18	10	µg/L
7	10/24/2008	SW6010B	COPPER	259		0.7	25	µg/L
7	10/24/2008	SW6010B	LEAD	ND	U	6.9	10	µg/L
7	10/24/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
7	10/24/2008	SW6010B	SELENIUM	ND	UJ	5.5	35	µg/L
7	10/24/2008	SW6010B	SILVER	ND	UJ	0.51	10	µg/L
7	10/24/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	3250	49000	µg/kg
7	10/24/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	10931	49000	µg/kg
7	10/24/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	3840	49000	µg/kg
7	10/24/2008	SW8082	PCB-1242 (AROCLOR 1242)	480000		3545	49000	µg/kg
7	10/24/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	3250	49000	µg/kg
7	10/24/2008	SW8082	PCB-1254 (AROCLOR 1254)	500000		10044	49000	µg/kg
7	10/24/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	3250	49000	µg/kg
7	10/24/2008	SW8270C	1,4-DICHLOROBENZENE	11	J	0.67	50	µg/L
7	10/24/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
7	10/24/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
7	10/24/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
7	10/24/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	UJ	0.32	50	µg/L
7	10/24/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	3.2	J	0.24	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
7	10/24/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
7	10/24/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
7	10/24/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
7	10/24/2008	SW8270C	PYRIDINE	5.7	J	0.51	50	µg/L
7	10/24/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
7	10/24/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
7	10/24/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
7	10/24/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
7	10/24/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
7	10/24/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
7	10/24/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
7	10/24/2008	SW8260B	TETRACHLOROETHENE(PCE)	28	J	2.2	44	µg/L
7	10/24/2008	SW8260B	TRICHLOROETHENE(TCE)	870		1.23	44	µg/L
7	10/24/2008	SW8260B	VINYL CHLORIDE	ND	U	2.64	44	µg/L
8	10/24/2008	SW6010B	ARSENIC	ND	U	17.4	30	µg/L
8	10/24/2008	SW6010B	BARIUM	198	J	3.4	200	µg/L
8	10/24/2008	SW6010B	CADMIUM	ND	UJ	0.33	5	µg/L
8	10/24/2008	SW6010B	CHROMIUM, TOTAL	6.1	J	0.18	10	µg/L
8	10/24/2008	SW6010B	COPPER	216		0.7	25	µg/L
8	10/24/2008	SW6010B	LEAD	ND	U	6.6	10	µg/L
8	10/24/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
8	10/24/2008	SW6010B	SELENIUM	ND	UJ	10.5	35	µg/L
8	10/24/2008	SW6010B	SILVER	ND	UJ	0.51	10	µg/L
8	10/24/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	1639	25000	µg/kg
8	10/24/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	5514	25000	µg/kg
8	10/24/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	1937	25000	µg/kg
8	10/24/2008	SW8082	PCB-1242 (AROCLOR 1242)	360000		1788	25000	µg/kg
8	10/24/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	1639	25000	µg/kg
8	10/24/2008	SW8082	PCB-1254 (AROCLOR 1254)	250000		5067	25000	µg/kg
8	10/24/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	1639	25000	µg/kg
8	10/24/2008	SW8270C	1,4-DICHLOROBENZENE	9.9	J	0.67	50	µg/L
8	10/24/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
8	10/24/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
8	10/24/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
8	10/24/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	UJ	0.32	50	µg/L
8	10/24/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	3.2	J	0.24	50	µg/L
8	10/24/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
8	10/24/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
8	10/24/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
8	10/24/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
8	10/24/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
8	10/24/2008	SW8270C	PYRIDINE	4.7	J	0.51	50	µg/L
8	10/24/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	0.801	44	µg/L
8	10/24/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	1.06	44	µg/L
8	10/24/2008	SW8260B	BENZENE	ND	U	1.5	44	µg/L
8	10/24/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	1.06	44	µg/L
8	10/24/2008	SW8260B	CHLOROBENZENE	ND	U	1.23	44	µg/L
8	10/24/2008	SW8260B	CHLOROFORM	ND	U	0.862	44	µg/L
8	10/24/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	6.6	44	µg/L
8	10/24/2008	SW8260B	TETRACHLOROETHENE(PCE)	28	J	2.2	44	µg/L
8	10/24/2008	SW8260B	TRICHLOROETHENE(TCE)	870		1.23	44	µg/L
8	10/24/2008	SW8260B	VINYL CHLORIDE	ND	U	2.64	44	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
9	10/24/2008	SW6010B	ARSENIC	ND	UJ	8.6	30	µg/L
9	10/24/2008	SW6010B	BARIUM	276	J	3.4	200	µg/L
9	10/24/2008	SW6010B	CADMIUM	2.9	J	0.12	5	µg/L
9	10/24/2008	SW6010B	CHROMIUM, TOTAL	5	J	0.18	10	µg/L
9	10/24/2008	SW6010B	COPPER	271		0.7	25	µg/L
9	10/24/2008	SW6010B	LEAD	ND	U	8.7	10	µg/L
9	10/24/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
9	10/24/2008	SW6010B	SELENIUM	ND	UJ	11.8	35	µg/L
9	10/24/2008	SW6010B	SILVER	ND	UJ	2.1	10	µg/L
9	10/24/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	5132	78000	µg/kg
9	10/24/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	17263	78000	µg/kg
9	10/24/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	6065	78000	µg/kg
9	10/24/2008	SW8082	PCB-1242 (AROCLOR 1242)	1100000		5599	78000	µg/kg
9	10/24/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	5132	78000	µg/kg
9	10/24/2008	SW8082	PCB-1254 (AROCLOR 1254)	830000		15863	78000	µg/kg
9	10/24/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	5132	78000	µg/kg
9	10/24/2008	SW8270C	1,4-DICHLOROBENZENE	32	J	0.67	50	µg/L
9	10/24/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
9	10/24/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L
9	10/24/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
9	10/24/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	UJ	0.32	50	µg/L
9	10/24/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	5.3	J	0.24	50	µg/L
9	10/24/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
9	10/24/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
9	10/24/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
9	10/24/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
9	10/24/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
9	10/24/2008	SW8270C	PYRIDINE	10	J	0.51	50	µg/L
9	10/24/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	26.7	1500	µg/L
9	10/24/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	35.2	1500	µg/L
9	10/24/2008	SW8260B	BENZENE	ND	U	49.8	1500	µg/L
9	10/24/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	35.2	1500	µg/L
9	10/24/2008	SW8260B	CHLOROBENZENE	ND	U	41	1500	µg/L
9	10/24/2008	SW8260B	CHLOROFORM	ND	U	28.7	1500	µg/L
9	10/24/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	220	1500	µg/L
9	10/24/2008	SW8260B	TETRACHLOROETHENE(PCE)	320	J	73.3	1500	µg/L
9	10/24/2008	SW8260B	TRICHLOROETHENE(TCE)	43000		41	1500	µg/L
9	10/24/2008	SW8260B	VINYL CHLORIDE	ND	U	87.9	1500	µg/L
10	10/27/2008	SW6010B	ARSENIC	ND	U	13.1	30	µg/L
10	10/27/2008	SW6010B	BARIUM	293	J	3.4	200	µg/L
10	10/27/2008	SW6010B	CADMIUM	2.7	J	0.12	5	µg/L
10	10/27/2008	SW6010B	CHROMIUM, TOTAL	5.9	J	0.18	10	µg/L
10	10/27/2008	SW6010B	COPPER	126		0.7	25	µg/L
10	10/27/2008	SW6010B	LEAD	11.8		0.93	10	µg/L
10	10/27/2008	SW7470A	MERCURY	ND	UJ	1	2	µg/L
10	10/27/2008	SW6010B	SELENIUM	ND	UJ	10.3	35	µg/L
10	10/27/2008	SW6010B	SILVER	ND	UJ	0.51	10	µg/L
10	10/27/2008	SW8082	PCB-1016 (AROCLOR 1016)	ND	U	1615	25000	µg/kg
10	10/27/2008	SW8082	PCB-1221 (AROCLOR 1221)	ND	U	5433	25000	µg/kg
10	10/27/2008	SW8082	PCB-1232 (AROCLOR 1232)	ND	U	1909	25000	µg/kg
10	10/27/2008	SW8082	PCB-1242 (AROCLOR 1242)	220000		1762	25000	µg/kg
10	10/27/2008	SW8082	PCB-1248 (AROCLOR 1248)	ND	U	1615	25000	µg/kg
10	10/27/2008	SW8082	PCB-1254 (AROCLOR 1254)	160000		4993	25000	µg/kg
10	10/27/2008	SW8082	PCB-1260 (AROCLOR 1260)	ND	U	1615	25000	µg/kg
10	10/27/2008	SW8270C	1,4-DICHLOROBENZENE	9.5	J	0.67	50	µg/L
10	10/27/2008	SW8270C	2,4,5-TRICHLOROPHENOL	ND	U	0.91	130	µg/L
10	10/27/2008	SW8270C	2,4,6-TRICHLOROPHENOL	ND	U	0.49	50	µg/L

Table 3-6
Cell 1 Stabilized Material Validated TCLP Summary
New Bedford Harbor Superfund Site - 2008 Season

TCLP Composite Number	Collection Date	Test Method	Analyte	Result	Quallifier	Detection Limit	Report Limit	Units
10	10/27/2008	SW8270C	2,4-DINITROTOLUENE	ND	U	0.51	50	µg/L
10	10/27/2008	SW8270C	2-METHYLPHENOL (O-CRESOL)	ND	UJ	0.32	50	µg/L
10	10/27/2008	SW8270C	4-METHYLPHENOL (P-CRESOL)	5.9	J	0.24	50	µg/L
10	10/27/2008	SW8270C	HEXACHLOROBENZENE	ND	U	0.36	50	µg/L
10	10/27/2008	SW8270C	HEXACHLOROBUTADIENE	ND	U	0.65	50	µg/L
10	10/27/2008	SW8270C	HEXACHLOROETHANE	ND	U	0.66	50	µg/L
10	10/27/2008	SW8270C	NITROBENZENE	ND	U	0.38	50	µg/L
10	10/27/2008	SW8270C	PENTACHLOROPHENOL	ND	U	0.5	130	µg/L
10	10/27/2008	SW8270C	PYRIDINE	4.5	J	0.51	50	µg/L
10	10/27/2008	SW8260B	1,1-DICHLOROETHENE	ND	U	1.6	88	µg/L
10	10/27/2008	SW8260B	1,2-DICHLOROETHANE	ND	U	2.11	88	µg/L
10	10/27/2008	SW8260B	BENZENE	ND	U	2.99	88	µg/L
10	10/27/2008	SW8260B	CARBON TETRACHLORIDE	ND	U	2.11	88	µg/L
10	10/27/2008	SW8260B	CHLOROBENZENE	ND	U	2.46	88	µg/L
10	10/27/2008	SW8260B	CHLOROFORM	ND	U	1.72	88	µg/L
10	10/27/2008	SW8260B	METHYL ETHYL KETONE (2-BUTANONE)	ND	U	13.2	88	µg/L
10	10/27/2008	SW8260B	TETRACHLOROETHENE(PCE)	34	J	4.4	88	µg/L
10	10/27/2008	SW8260B	TRICHLOROETHENE(TCE)	2700		2.46	88	µg/L
10	10/27/2008	SW8260B	VINYL CHLORIDE	28	J	5.28	88	µg/L

Notes:

Data source: Jacobs, 12 March 2009, New Bedford Harbor Site Environmental Evaluation (SEE) Database.

J= qualifier denoting estimated data

TCLP = Toxicity Characteristic Leaching Procedure

U = qualifier denoting analyte not detected above detection limit

UJ= qualifier denoting estimated non-detect above detection limit

µg/kg = micrograms per kilogram

µg/L = micrograms per liter

Table 3-7
Mechanical Dredging Water Quality Monitoring Summary
New Bedford Harbor Superfund Site - 2008 Season

Date	Background Data										Monitoring Data						
	Time	Station	Turbidity 1 (ntu)	Turbidity 2 (ntu)	Average Turbidity (ntu)	Background + 50 (ntu)	Temperature (°C)	Dissolved Oxygen (mg/l)	Dissolved Oxygen Surface (mg/L)	Dissolved Oxygen Bottom (mg/L)	Time	Transect (feet from activities)	Location (N or S)	Water Depth (feet)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temperature (°C)
6/2/2008	15:30	S	1.0	0.8	0.9	50.9	20.63	7.81	NA	NA	15:40	300	N	3.0	2.9	8.00	22.59
											17:45	300	N	4.0	2.8	8.60	22.10
6/3/2008	11:30	N	0.8	1.2	1.0	51.0	21.40	6.71	NA	NA	11:40	300	S	2.0	1.8	5.55	21.20
	16:45	S	4.4	4.2	4.3	54.3	21.76	7.98	NA	NA	16:55	300	N	3.0	17.2	8.90	22.61
											17:45	300	N	3.5	8.1	8.48	22.64
6/4/2008	9:30	N	-0.5	-0.6	-0.6	49.4	17.66	7.65	NA	NA	9:40	300	S	3.0	3	6.18	17.96
											11:30	300	S	3.0	3.1	7.11	18.70
	14:30	S	12.1	10.2	11.2	61.2	18.19	7.49	NA	NA	14:45	300	N	3.0	6.1	7.60	17.90
											16:30	300	N	3.0	5.9	7.60	17.90
6/5/2008	9:25	S	1.2	1.3	1.3	51.3	17.36	6.17	NA	NA	9:30	300	N	3.0	5	5.30	17.90
	11:25	N	1.0	1.2	1.1	51.1	17.89	5.18	NA	NA	11:35	300	S	3.0	5.9	6.18	17.94
	18:10	S	1.3	1.5	1.4	51.4	17.65	5.60	NA	NA	18:20	300	N	3.0	9.1	6.50	17.51
6/6/2008	10:00	S	-0.1	0.1	0.0	50.0	16.91	5.03	NA	NA	10:05	300	N	3.0	1.5	5.65	16.90
	11:30	N	0.1	0.3	0.2	50.2	16.81	5.69	NA	NA	11:40	300	S	3.0	6.9	5.60	16.29
											14:30	300	S	3.0	7.9	5.35	16.79
	18:10	S	2.6	2.3	2.5	52.5	17.50	8.04	NA	NA	18:15	300	N	3.0	13	8.50	16.90
6/10/2008	8:05	S	-0.3	-0.2	-0.2	49.8	24.12	8.64	NA	NA	8:10	300	N	3.0	0.8	5.30	24.19
											10:15	300	N	3.0	2.7	8.47	25.17
											12:30	300	N	3.0	9	8.50	27.90
6/11/2008	7:45	N	0.1	0.0	0.0	50.0	25.36	8.09	NA	NA	7:55	300	S	2.5	0.8	8.22	25.32
	9:25	S	0.4	0.3	0.3	50.3	25.51	6.80	NA	NA	9:35	300	N	2.5	3	7.64	25.45
											13:00	300	N	2.5	1.1	8.50	26.97
	16:30	N	3.6	3.2	3.4	53.4	26.87	10.30	NA	NA	16:40	300	S	2.5	0.8	7.07	26.10
6/13/2008	8:25	N	-1.0	-1.3	-1.1	48.9	24.91	7.15	NA	NA	9:30	300	S	3.0	7.7	4.79	23.98
	14:45	S	-0.5	-0.6	-0.6	48.4	24.47	8.34	NA	NA	14:55	300	N	3.0	2.7	5.60	25.48
											16:00	300	N	3.0	3.3	8.40	25.55
	17:00	N	2.9	2.7	2.8	52.8	25.40	7.26	NA	NA	17:10	300	S	3.0	4.1	5.10	24.41
6/14/2008	8:25	N	-0.7	-0.7	-0.7	49.3	25.01	7.13	NA	NA	8:30	300	S	3.0	-0.7	5.80	23.95
	11:40	S	-2.3	-2.1	-2.2	47.8	26.22	9.23	NA	NA	11:50	300	N	3.0	2.2	5.05	27.00
	14:05	S	-1.7	-1.8	-1.7	48.3	26.00	8.74	NA	NA	14:15	300	N	3.0	3.3	5.63	27.05
											17:00	300	N	3.0	3.7	7.88	28.88
6/17/2008	8:50	N	2.0	2.2	2.1	52.1	20.96	8.53	NA	NA	8:55	300	S	3.0	9.5	7.61	20.49
											11:35	300	S	3.0	0.6	7.10	22.41
	14:30	S	-0.1	-0.1	-0.1	49.9	23.92	9.86	NA	NA	16:40	300	N	3.0	4.4	7.67	25.24
											17:30	300	N	3.0	3.4	7.37	25.09
6/18/2008	8:30	N	3.2	3.3	3.3	53.3	22.52	10.40	NA	NA	8:35	300	S	3.0	0.7	5.35	22.10
											11:00	300	S	3.0	2.8	9.72	23.49
	14:20	S	3.2	3.6	3.4	53.4	22.43	10.52	NA	NA	14:25	300	N	3.0	10.6	7.16	25.20
											17:00	300	N	3.0	17.1	9.86	25.74
6/19/2008	8:00	S	2.0	2.1	2.1	52.1	21.28	9.91	NA	NA	8:00	300	N	3.0	1.6	8.70	20.20
	11:00	N	-1.0	-1.1	-1.0	49.0	22.24	10.97	NA	NA	11:05	300	S	3.0	6.1	7.31	22.57
											13:40	300	S	3.0	2.6	9.35	24.35
	16:20	S	3.5	3.5	3.5	53.5	24.18	9.13	NA	NA	16:30	300	N	3.0	12.8	10.92	25.32
6/24/2008	7:30	S	0.7	0.6	0.7	50.7	22.75	10.71	NA	NA	7:35	300	N	3.0	2.4	9.69	21.75
											9:30	300	N	3.0	2.7	9.90	23.72

Table 3-7
Mechanical Dredging Water Quality Monitoring Summary
New Bedford Harbor Superfund Site - 2008 Season

Date	Background Data										Monitoring Data						
	Time	Station	Turbidity 1 (ntu)	Turbidity 2 (ntu)	Average Turbidity (ntu)	Background + 50 (ntu)	Temperature (°C)	Dissolved Oxygen (mg/l)	Dissolved Oxygen Surface (mg/L)	Dissolved Oxygen Bottom (mg/L)	Time	Transect (feet from activities)	Location (N or S)	Water Depth (feet)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temperature (°C)
6/25/2008	10:50	S	0.3	0.2	0.3	50.3	23.96	5.74	NA	NA	10:55	300	N	3.0	2	4.50	23.79
											11:45	300	N	3.0	4.5	5.35	23.95
	14:00	N	0.9	1.1	1.0	51.0	24.70	6.02	NA	NA	14:05	300	S	3.0	1.1	4.49	25.07
											16:10	300	S	3.0	1.6	5.06	24.92
6/27/2008	8:05	S	6.0	5.8	5.9	55.9	23.62	6.85	NA	NA	9:00	300	N	3.0	15.5	4.50	23.90
											11:15	300	N	3.0	14.9	6.20	25.17
											13:45	300	N	3.0	13.1	3.98	25.01
	16:00	N	10.1	1.1	10.6	60.6	24.82	5.85	NA	NA	16:05	300	S	3.0	5.2	3.90	24.89
7/8/2008	10:30	S	6.0	4.3	5.2	55.2	26.72	4.20	NA	NA	10:40	300	N	2.0	5.6	3.49	26.78
											11:45	300	N	3.0	4.8	4.88	27.49
	14:10	N	7.7	6.0	6.9	56.9	28.70	6.00	NA	NA	14:15	300	S	3.0	8.3	3.62	27.39
											15:40	300	S	3.0	5.9	4.99	28.35
7/10/2008	7:10	N	8.5	6.2	7.4	57.4	26.58	3.99	NA	NA	7:15	300	S	2.5	7.9	2.99	26.70
	11:05	S	7.0	6.5	6.8	56.8	27.09	3.73	4.93	3.76	11:15	300	N	2.0	9	3.00	26.78
											14:15	300	N	3.0	5.8	4.81	28.89
	16:00	N	7.3	3.5	5.4	55.4	28.95	4.97	5.77	4.97	16:10	300	S	2.0	22.9	5.27	28.70
7/11/2008	8:40	S	10.7	8.1	9.4	59.4	26.95	3.83	3.20	3.33	8:50	300	N	2.0	25.1	2.75	27.01
											10:00	300	N	2.5	15	3.60	27.41
											14:50	300	N	3.0	8.9	4.99	28.48
	16:30	N	12.1	11.0	11.6	61.6	28.62	4.28	3.56	4.28	16:40	300	S	3.0	4.7	2.99	26.70
7/15/2008	8:55	N	13.1	12.5	12.8	62.8	27.36	2.82	2.34	2.47	9:05	300	S	3.0	23.4	2.26	27.45
											10:45	300	S	3.0	24.7	3.05	28.87
7/17/2008	8:45	N	14.8	15.7	15.3	65.3	27.46	3.08	2.67	3.08	8:55	300	S	2.0	13.5	2.56	27.26
											11:25	300	S	2.0	19.5	2.13	28.36
	16:00	S	6.9	7.2	7.1	57.1	29.69	3.04	3.12	3.26	16:10	300	N	2.0	15.7	2.26	30.19
											16:50	300	N	2.5	14.9	2.75	30.03
7/18/2008	7:40	S	13.3	14.1	13.7	63.7	27.15	3.50	2.19	1.96	7:45	300	N	3.0	14.8	1.90	28.16
	9:45	N	9.8	12.2	11.0	61.0	27.94	2.14	2.10	3.10	9:55	300	S	3.0	27.9	1.26	27.70
											12:55	300	S	2.0	10.4	2.77	30.11
7/22/2009	8:10	S	11.8	10.9	11.4	61.4	26.77	2.09	2.05	2.03	8:15	300	N	3.0	5.3	1.47	27.31
											10:40	300	N	3.0	11.5	2.56	26.88
	13:00	N	11.9	12.9	12.4	62.4	27.06	2.20	3.16	2.90	13:10	300	S	3.0	6	2.24	NR
											15:45	300	S	3.0	15.6	2.97	27.78

Notes:
°C = degrees celsius
mg/L = milligrams per liter
N = north
ntu = Nephlomatic turbidity units
S = south

SECTION 4.0

Hydraulic Dredging

4.0 SUMMARY

Section 4 summarizes the 2008 hydraulic dredging activities conducted at the New Bedford Harbor Superfund Site.

- **Figure 4.1-1** is the dredge plan for Dredge Area I.
- **Figure 4.1-2** is a depiction of areas dredged from 2004 to 2007 in the upper New Bedford Harbor.
- **Figure 4.1-3** is a figure illustrating the proposed routing of pipelines, booster pump station, and ferric injection for the 2008 hydraulic dredge season.
- **Figure 4.1-4** is an example of the daily dredge tracking figure, this figure graphically depicts dredge progress cumulatively and daily for the season. The daily dredge tracking figure is produced with dredge operators' daily reports and GPS tracking data.
- **Figure 4.1-5** is an evaluation of dredge accuracy comparing the dredge plan to the final 2008 bathymetry. The figure also provides a tabulation of the dredged volume to date in 2008 per bathymetric survey.
- **Attachment 4.1-1** is a copy of the Jacobs "Quality Control Report Final Dredge Accuracy 2008."
- **Table 4.2-1** provides a summary of analytical data for the sand generated at the Sawyer Street desanding facility.
- **Table 4.2-2** is a summary of the grain size data for material generated at both Sawyer Street (sand and oversize) and Area D (filter cake).
- **Table 4.2-3** provides a summary of analytical data for the filter cake generated at the Area D dewatering facility.
- **Table 4.2-4** is a summary table of the analytical results for samples collected at the Area D waste water treatment facility.
- **Table 4.2-5** is a summary of waste water treatment plant effluent water quality data.
- **Table 4.2-6** is a summary of waste water treatment plant influent and midpoint water quality data.
- **Table 4.3-1** is a tabulated record of sand and oversize material transported from the Sawyer Street desanding facility to Cell 1 for placement.
- **Table 4.3-2** is a tabulated record of all rail shipments of filter cake from the Area D dewatering facility to the disposal facility in Michigan.
- **Subsection 4.4** is a summary of personnel PCB monitoring conducted during the 2008 season.
- **Figure 4.5-1** identifies ambient PCB air monitoring stations.

- **Table 4.5-1** is a summary table of ambient air monitoring for PCB homologues.
- **Attachment 4.5-1** is the updated air sampling status reports (PETS Curves).
- **Table 4.6-1** is the 2008 hydraulic dredging mass balance calculation and tabulation. It provides an accounting for all process inputs and outputs.
- **Table 4.6-2** compares pre-season predicted production quantities to actual production quantities.
- **Table 4.6-3** provides a tabulation for all metered and estimated water used during the 2008 hydraulic dredging season.
- **Table 4.6-4** is a calculation of the estimated mass of PCB Aroclors removed during the 2008 hydraulic dredging activity.
- **Table 4.6-5** is an estimated calculation of the total amount of PCB Aroclors removed during 2004 - 2008 dredging activities.
- **Subsection 4.7** is the final Sevenson production report for 2008 hydraulic dredging activities.
- **Table 4.8-1** is a tabulation of analytical measurements collected on the desanding facility air filtration system.
- **Table 4.8-2** is a tabulation of analytical measurements collected on the dewatering facility air filtration system.
- **Table 4.8-3** is a tabulation of filter cake percent solids analysis by Jacobs.
- **Table 4.8-4** is a tabulation of filter cake density analysis as measured by Jacobs.
- **Subsection 4.9** is the Jacobs project note documenting the September 16, 2008 pipeline break and estimating the PCB release because of the break.
- **Subsection 4.10** is a summarization of lessons learned or conclusions that may make the project more efficient, safer, or simpler.

SUBSECTION 4.1

Dredge Area Plans and Execution

CBI

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SUBSECTION 4.2

Sample Analytical Summary Tables

CBI

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SUBSECTION 4.3

Transportation and Disposal Reports

CBI

CBI

CBI

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CBI

SUBSECTION 4.4

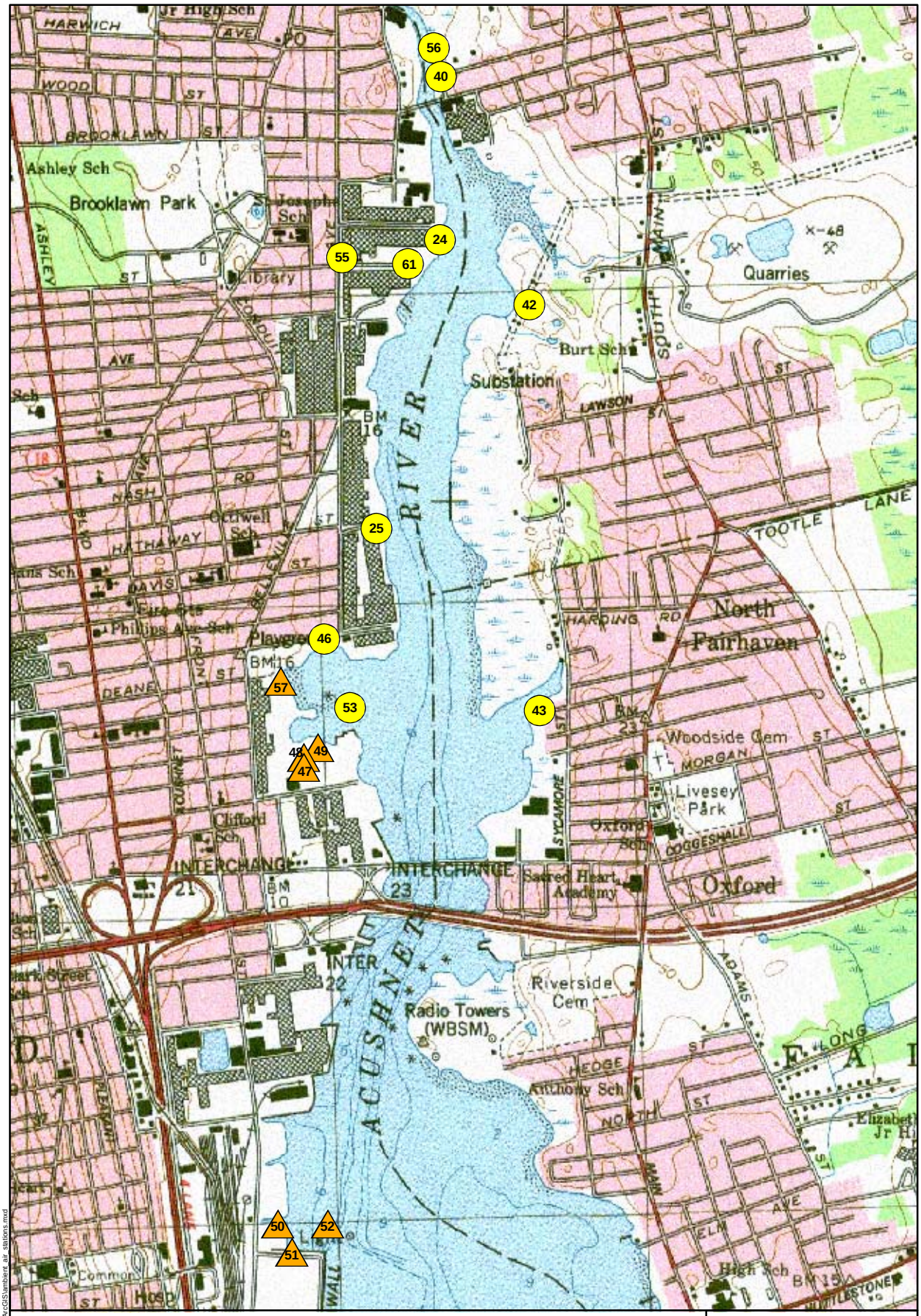
NBH Occupational PCB Exposure Evaluation for 2008 Season

SECTION 4.4 NBH OCCUPATIONAL PCB EXPOSURE EVALUATION FOR 2008 SEASON

Personnel and work area monitoring for PCBs and ambient dust remained well below OSHA limits once again for the 2008 season. Improved housekeeping practices at the dewatering facility load out area have been identified to have reduced ambient dust levels below that of previous dredge seasons. The Jacobs Site Safety and Health Officer

SUBSECTION 4.5

Ambient Air Monitoring Information



Legend

Ambient Air Sampling Locations

- Mobile Station
- Stationary Station

0 750 1,500 Feet

1:18,000

JE JACOBS

2008 Ambient Air Sampling Station Locations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 12/16/2008

Figure 4.5-1

Y:\NBH\Projects\3580\70\1\20081216\ArcGIS\ambient_air_stations.mxd

Table 4.5-1
Ambient Air Monitoring Program - Total Detectable PCB Homologues
New Bedford Harbor Superfund Site - 2008 Season

Note	Sampling Date	PCB Concentration (ng/m^3 in 24-hour time-weighted average)																Activity Period
		24 Aerovox	25 Cliftex	42 NSTARN	43 Veranda	46 Coffin	47	48	49	50	51	52	55 Aerovox West	56 Acushnet Park	53 Dredge	57 Riverside Park	61 South Fence	
1	Sept-Nov 1999	67	22	24	NA	22	43	43	43	5.9	5.9	5.9	5.2	5.2	NA	NA	NA	No Dredging Activities. Data from Foster-Wheeler
1	Dec 1999-Feb 2000	32	3.2	9.9	NA	3.2	89	89	89	3.4	3.4	3.4	NS	NS	NA	NA	NA	
1	March-May 2000	76	35	29	NA	35	61	61	61	6.8	6.8	6.8	NS	NS	NA	NA	NA	
1	June-August 1999	130	46	31	NA	46	33	33	33	12	12	12	NS	NS	NA	NA	NA	
2	06/29/04	2286	NS	NS	NA	NS	NS	NS	NS	NS	56	NS	NS	NS	NA	NA	NA	No Dredging Activities.
2	09/09/04	1024	167	NS	NA	145	28	37	56	20	16	47	NS	NS	723	NA	NA	Initial MU-2 Dredging During Startup
2	09/14/04	1449	229	NS	NA	48	64	64	86	38	39	61	NS	NS	98	NA	NA	
2	09/23/04	588	97	NS	NA	5	7	10	17	6	5	19	NS	NS	1212	NA	NA	2004 Dredging Operation
2	09/28/04	9557	423	NS	NA	342	35	165	207	80	75	115	NS	NS	2734	NA	NA	
2	10/19/04	559	259	NS	NA	36	47	48	66	17	74	100	NS	NS	704	NA	NA	
2	11/05/04	578	61	73	NA	80	NS	NS	28	NS	NS	NS	28.42	39.08	351	NA	NA	
2	12/03/04	30	27	40	NA	15	22	NS	26	22	NS	31	9.33	1.52	NA	NA	NA	After 2004 Dredge Operation
2	8/11/2005	216.0	103.0	25.9	NA	37.2	NS	NS	29.3	NS	NS	21.3	42.1	49.9	NA	NA	NA	Before 2005 Dredge Operation
2	9/15/2005	1490.0	58.2	22.5	NA	99.8	NS	14.9	83.6	0.5	NS	NS	37.6	102.0	1280.0	NA	NA	2005 Dredging Operation
2	9/23/2005	178.0	35.2	83.3	NA	115.0	NS	19.1	97.0	0.3	NS	NS	2.6	23.9	780.0	NA	NA	
2	9/29/2005	383.0	104.0	5.3	NA	124.0	NS	17.3	44.2	24.2	NS	NS	87.0	77.9	391.0	NA	NA	
2	10/6/2005	1822.0	251.0	119.0	NA	130.0	NS	60.1	114.0	81.7	NS	NS	222.0	180.0	6315.0	NA	NA	
2	10/28/2005	15.4	NS	32.3	NA	2.1	NS	4.6	12.3	0.0	NS	NS	4.0	2.7	505.0	NA	NA	
2	11/18/2005	15.9	0.1	63.6	NA	0.1	NS	0.1	3.7	NS	NS	NS	0.1	3.8	913.0	NA	NA	
2	12/29/2005	83.2	10.9	21.4	NA	65.1	7.4	NS	NS	NS	2.2	NS	10.8	13.5	NA	NA	NA	After 2005 Dredge Operation
2	8/31/2006	1,629	176	NS	NA	70.4	39.2	NS	NS	NS	67.3	NS	NS	NS	2336	NA	NA	2006 Dredge Operation
2	10/6/2006	2,357	451	NS	NA	108	NS	NS	157	NS	NS	197	NS	NS	13430	NA	NA	
2	11/19/2006	41.1	0.14	NS	NA	4.05	NS	NS	81.4	2.6	NS	NS	NS	NS	NA	NA	NA	After 2006 Dredge Operation
2	8/21/2007	282	147	19.2	NA	36.1	46.9	NS	NS	36.7	NS	NS	NS	NS	138	NA	NA	2007 Dredge Operation
2	9/18/2007	176	120	16.3	NA	21.4	57.1	NS	NS	48.7	NS	NS	NS	NS	130	NA	NA	
2	11/9/2007	19.7	20.2	15.7	NA	1.86	9.29	NS	NS	NS	4.39	NS	NS	NS	NA	NA	NA	After 2007 Dredge Operation
2	6/8/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	20	NS	NA	NA	34.4	2008 Land-based Excavation of Shoreline at Aerovox
2	6/12/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	7.3	NS	NA	NA	43.1	
2	6/19/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	9	NS	NA	NA	NS	
2	6/25/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	2.1	NS	NA	NA	NS	
2	7/8/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	7	NS	NA	NA	26	
2	7/16/2008	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	69	NS	NA	NA	290	
2	8/21/2008	NS	NS	NS	31.66	121.9	NS	NS	123.4	NS	2.85	NS	NS	NS	178.0	37.46	NS	2008 Hydraulic Dredging
2	8/21/2008	NA	NA	NA	NA	NA	NA	NA	116.4	NA	NA	NA	NA	NA	NA	NA	NA	duplicate
2	9/24/2008	NS	NS	NS	18	NS	NS	NS	42	NS	NS	NS	NS	NS	1.5	15.0	NS	2008 Hydraulic Dredging
2	10/7/2008	NS	NS	NS	NS	5.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2008 Hydraulic Dredging
2	11/10/2008	NS	NS	NS	15	1.3	NS	NS	6.2	NS	0.020U	NS	NS	NS	NS	0.11	NS	2008 Hydraulic Dredging

Notes:
1 = Foster Wheeler background data
2 = field sampling data
NA = not applicable
ng/m3 = nanograms per cubic meter
NS = not sampled
PCB = polychlorinated biphenyl

ATTACHMENT 4.5-1

Air Sampling Status Reports (PETS Curves)

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 24 Aerovox
Exposure Budget Slope (EBS) = 344 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2008

Construction Activity: The 200 Excavation dredging activities were initiated on June 2, 2008 and completed on July 22, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 4 and 5.

Summary of This Sampling Period:

The results from the Foster Wheeler, Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. For Station 24 Aerovox, the Foster Wheeler quarterly average ambient air PCB concentrations for the June 1999 through May 2000 baseline sampling were used as background concentrations. These background concentrations were used to project the PCB concentrations during for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, from 12/28/05 through 8/15/06, and from 11/19/06 through 8/6/07 to close the recent inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used as the concentrations detected at Station 24 Aerovox from August 16, 2006 (the start of dredging activities). To better simulate the 2007 dredging season, the ambient air concentrations from the August 21, 2007 sampling event were used as the concentrations detected at Station 24 Aerovox from August 7, 2007 (the start of dredging activities).

Coordinating the sampling date with the start of dredging better simulates the ambient air PCB concentrations present at Station 24 Aerovox during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the background concentrations were projected to be at background levels at Station 24 Aerovox on October 19, 2006, which is the day after the 2006 dredging activities were completed. For the 2007 season, the PCB concentrations were projected to be at background levels at Station 24 Aerovox on October 13, 2007, which is the day after the 2007 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 and 2007 dredging activities. No triggers were identified, therefore, no action is required.

but Station number 61 (South Fence) was sampled through July 16, 2008. Due to the close proximity of the two stations, Station 61's sample results are inputted for this season. Hydraulic dredging occurred in the Pierce Mill Cove area starting on August 18, 2008. Station 24 was not sampled as dredging did not take place in this part of the Acushnet River, which ended on October 21, 2008.

Monitoring Station		24 Aerovox
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	75
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limits		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
24 Aerovox Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	67	67.00	67.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	67	67.00	67.00	6192	6192	1206.0	1,206.0	19.5%	19.5%
3	12/1/2002	1	19	9476	32	49.50	66.08	344	6536	49.5	1,255.5	14.4%	19.2%
4	2/28/2003	89	108	9387	32	32.00	38.00	30616	37152	2848.0	4,103.5	9.3%	11.0%
5	5/31/2003	92	200	9295	76	54.00	45.36	31648	68800	4968.0	9,071.5	15.7%	13.2%
6	8/31/2003	92	292	9203	130	103.00	63.52	31648	100448	9476.0	18,547.5	29.9%	18.5%
7	11/30/2003	91	383	9112	67	98.50	71.83	31304	131752	8963.5	27,511.0	28.6%	20.9%
8	2/28/2004	90	473	9022	32	49.50	67.58	30960	162712	4455.0	31,966.0	14.4%	19.6%
9	5/31/2004	93	566	8929	76	54.00	65.35	31992	194704	5022.0	36,988.0	15.7%	19.0%
10	8/31/2004	92	658	8837	130	103.00	70.61	31648	226352	9476.0	46,464.0	29.9%	20.5%
11	9/8/2004	8	666	8829	67	98.50	70.95	2752	229104	788.0	47,252.0	28.6%	20.6%
12	9/9/2004	1	667	8828	1024	545.50	71.66	344	229448	545.5	47,797.5	158.6%	20.8%
13	9/14/2004	5	672	8823	1449	1236.50	80.33	1720	231168	6182.5	53,980.0	359.4%	23.4%
14	9/23/2004	9	681	8814	588	1018.50	92.73	3096	234264	9166.5	63,146.5	296.1%	27.0%
15	9/27/2004	4	685	8810	9557	5072.50	121.81	1376	235640	20290.0	83,436.5	1474.6%	35.4%
16	10/19/2004	22	707	8788	559	5058.00	275.41	7568	243208	111276.0	194,712.5	1470.3%	80.1%
17	11/5/2004	17	724	8771	578	568.50	282.29	5848	249056	9664.5	204,377.0	165.3%	82.1%
18	12/3/2004	28	752	8743	30	304.00	283.10	9632	258688	8512.0	212,889.0	88.4%	82.3%
19	2/28/2005	87	839	8656	32	31.00	256.96	29928	288616	2697.0	215,586.0	9.0%	74.7%
20	5/31/2005	92	931	8564	76	54.00	236.90	31648	320264	4968.0	220,554.0	15.7%	68.9%
21	8/10/2005	71	1002	8493	130	103.00	227.41	24424	344688	7313.0	227,867.0	29.9%	66.1%
22	8/11/2005	1	1003	8492	216	173.00	227.36	344	345032	173.0	228,040.0	50.3%	66.1%
23	9/15/2005	35	1038	8457	1490	853.00	248.45	12040	357072	29855.0	257,895.0	248.0%	72.2%
24	9/23/2005	8	1046	8449	178	834.00	252.93	2752	359824	6672.0	264,567.0	242.4%	73.5%
25	9/29/2005	6	1052	8443	383	280.50	253.09	2064	361888	1683.0	266,250.0	81.5%	73.6%
26	10/6/2005	7	1059	8436	1822	1102.50	258.70	2408	364296	7717.5	273,967.5	320.5%	75.2%
27	10/28/2005	22	1081	8414	15.4	918.70	272.14	7568	371864	20211.4	294,178.9	267.1%	79.1%
28	11/18/2005	21	1102	8393	15.9	15.65	267.25	7224	379088	328.7	294,507.6	4.5%	77.7%
29	12/29/2005	41	1143	8352	83.2	49.55	259.44	14104	393192	2031.6	296,539.1	14.4%	75.4%
30	2/28/2006	61	1204	8291	32	57.60	249.21	20984	414176	3513.6	300,052.7	16.7%	72.4%
31	5/31/2006	92	1296	8199	76	54.00	235.36	31648	445824	4968.0	305,020.7	15.7%	68.4%
32	8/15/2006	76	1372	8123	130	103.00	228.02	26144	471968	7828.0	312,848.7	29.9%	66.3%
33	8/16/2006	1	1373	8122	1629	879.50	228.50	344	472312	879.5	313,728.2	255.7%	66.4%
34	8/31/2006	15	1388	8107	1629	1629.00	243.63	5160	477472	24435.0	338,163.2	473.5%	70.8%
35	10/5/2006	35	1423	8072	2357	1993.00	286.66	12040	489512	69755.0	407,918.2	579.4%	83.3%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
24 Aerovox Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
36	10/19/2006	14	1437	8058	41.1	1199.05	295.55	4816	494328	16786.7	424,704.9	348.6%	85.9%
37	11/19/2006	31	1468	8027	41.1	41.10	290.18	10664	504992	1274.1	425,979.0	11.9%	84.4%
38	11/30/2006	11	1479	8016	67	54.05	288.42	3784	508776	594.6	426,573.6	15.7%	83.8%
39	2/28/2007	90	1569	7926	32	49.50	274.72	30960	539736	4455.0	431,028.6	14.4%	79.9%
40	5/31/2007	92	1661	7834	76	54.00	262.49	31648	571384	4968.0	435,996.6	15.7%	76.3%
41	8/6/2007	67	1728	7767	130	103.00	256.31	23048	594432	6901.0	442,897.6	29.9%	74.5%
42	8/7/2007	1	1729	7766	282	206.00	256.28	344	594776	206.0	443,103.6	59.9%	74.5%
43	8/21/2007	14	1743	7752	282	282.00	256.48	4816	599592	3948.0	447,051.6	82.0%	74.6%
44	9/18/2007	28	1771	7724	176	229.00	256.05	9632	609224	6412.0	453,463.6	66.6%	74.4%
45	10/13/2007	25	1796	7699	67	121.50	254.18	8600	617824	3037.5	456,501.1	35.3%	73.9%
46	11/9/2007	27	1823	7672	19.7	43.35	251.05	9288	627112	1170.5	457,671.5	12.6%	73.0%
47	11/30/2007	21	1844	7651	67	43.35	248.69	7224	634336	910.4	458,581.9	12.6%	72.3%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

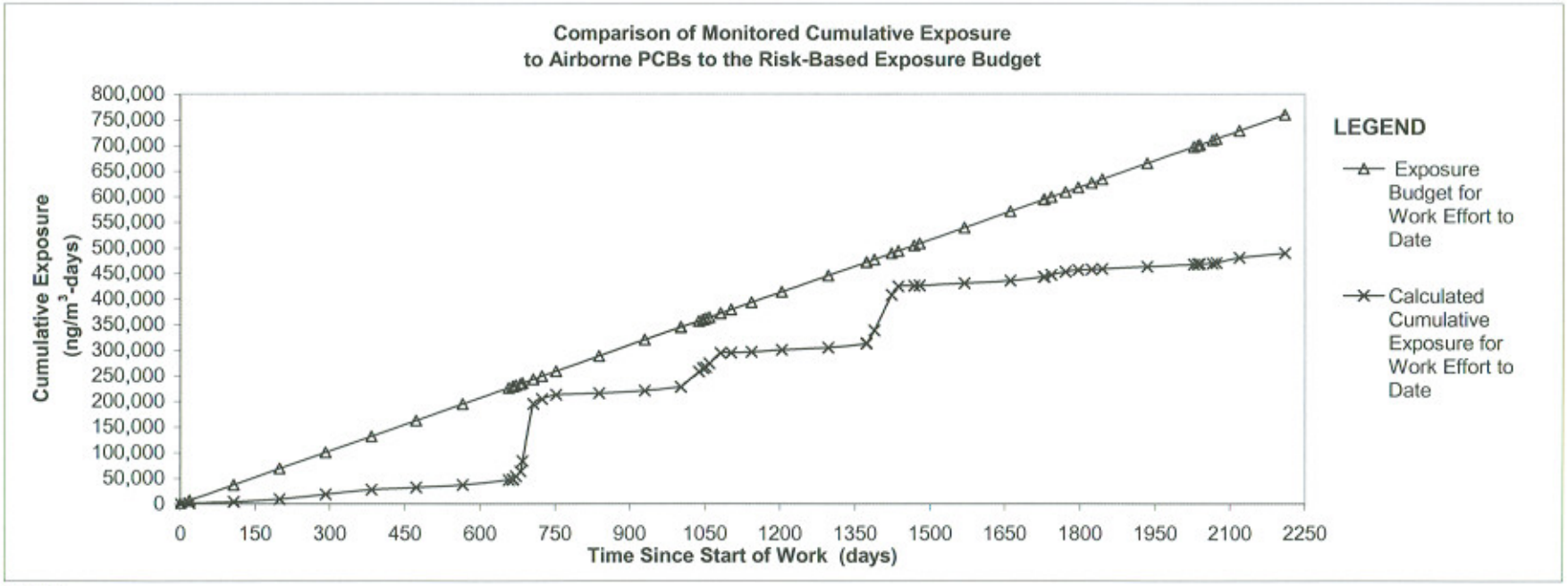
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	24 Aerovox
Collection Date:	11/30/2008
Measured PCB Concentration (ng/m^3):	67
Exposure Budget Expended During This Period:	28.6%
Cumulative Exposure Budget Expended to Date:	64.4%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre-and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season which did not include a pre-dredge sampling event was from 1934 to 2119 days since start of work (June 1 through November 5, 2008).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 25 Cliftex
Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2008

Construction Activity: The 2008 Aerovox excavation activities were initiated on June 2, 2008 and were completed on July 22, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 4 and 5.

Summary of This Sampling Period:

The results from the Foster Wheeler Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. For Station 25 Cliftex, the quarterly average ambient air PCB concentrations were used as a background concentration, which represent the quarterly baseline averages for the period of June 1999 through May 2000. These background concentrations were used to project the PCB concentrations during the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, from 12/28/05 through 8/15/06, and from 11/19/06 through 8/6/07 to close the recent inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used as the concentrations detected at Station 25 Cliftex from August 16, 2006 (the start of dredging activities). To better simulate the 2007 dredging season, the ambient air concentrations from the August 21, 2007 sampling event were used as the concentrations detected at Station 25 Cliftex from August 7, 2007 (the start of dredging activities).

Coordinating the sampling date with the start of dredging better simulates the ambient air PCB concentrations at Station 25 Cliftex during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the concentrations were projected to be at background levels at Station 25 Cliftex on October 19, 2006, which is the day after the 2006 dredging activities were completed. For the 2007 season, the PCB concentrations were projected to be at background levels at Station 25 Cliftex on October 13, 2007, which is the day after the 2007 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 and 2007 dredging activities. No triggers were identifed, therefore, no action is required.

During the 2008 dredge season no samples were collected from this location. However, four rounds of quarterly background data were inputted to the Time Trend Sheet. The quarterly data is greater than the annual baseline background data thus giving an artificially elevated trigger. Recognizing

Time Trend Sheet. The quarterly data is greater than the annual baseline background data thus giving an artificially elevated trigger. Recognizing this, no action is necessary.

Monitoring Station		25 Cliftex
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	23
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
25 Cliftex Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	3636	3636	396.0	396.0	10.9%	10.9%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	202	3838	12.6	408.6	6.2%	10.6%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	17978	21816	284.8	693.4	1.6%	3.2%
5	5/31/2003	92	200	9295	35	19.10	12.25	18584	40400	1757.2	2,450.6	9.5%	6.1%
6	8/31/2003	92	292	9203	46	40.50	21.15	18584	58984	3726.0	6,176.6	20.0%	10.5%
7	11/30/2003	91	383	9112	22	34.00	24.21	18382	77366	3094.0	9,270.6	16.8%	12.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	18180	95546	1134.0	10,404.6	6.2%	10.9%
9	5/31/2004	93	566	8929	35	19.10	21.52	18786	114332	1776.3	12,180.9	9.5%	10.7%
10	8/31/2004	92	658	8837	46	40.50	24.17	18584	132916	3726.0	15,906.9	20.0%	12.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	1616	134532	272.0	16,178.9	16.8%	12.0%
12	9/9/2004	1	667	8828	167	94.50	24.40	202	134734	94.5	16,273.4	46.8%	12.1%
13	9/14/2004	5	672	8823	229	198.00	25.69	1010	135744	990.0	17,263.4	98.0%	12.7%
14	9/23/2004	9	681	8814	97	163.00	27.50	1818	137562	1467.0	18,730.4	80.7%	13.6%
15	9/28/2004	5	686	8809	423	260.00	29.20	1010	138572	1300.0	20,030.4	128.7%	14.5%
16	10/19/2004	21	707	8788	259	341.00	38.46	4242	142814	7161.0	27,191.4	168.8%	19.0%
17	11/15/2004	27	734	8761	61	160.00	42.93	5454	148268	4320.0	31,511.4	79.2%	21.3%
18	12/3/2004	18	752	8743	27	44.00	42.96	3636	151904	792.0	32,303.4	21.8%	21.3%
19	2/28/2005	87	839	8656	3.2	15.10	40.07	17574	169478	1313.7	33,617.1	7.5%	19.8%
20	5/31/2005	92	931	8564	35	19.10	38.00	18584	188062	1757.2	35,374.3	9.5%	18.8%
21	8/10/2005	71	1002	8493	46	40.50	38.17	14342	202404	2875.5	38,249.8	20.0%	18.9%
22	8/11/2005	1	1003	8492	103	74.50	38.21	202	202606	74.5	38,324.3	36.9%	18.9%
23	9/15/2005	35	1038	8457	58.2	80.60	39.64	7070	209676	2821.0	41,145.3	39.9%	19.6%
24	9/23/2005	8	1046	8449	35.2	46.70	39.69	1616	211292	373.6	41,518.9	23.1%	19.7%
25	9/29/2005	6	1052	8443	104	69.60	39.86	1212	212504	417.6	41,936.5	34.5%	19.7%
26	10/6/2005	7	1059	8436	251	177.50	40.77	1414	213918	1242.5	43,179.0	87.9%	20.2%
27	11/18/2005	43	1102	8393	0.12	125.56	44.08	8686	222604	5399.1	48,578.1	62.2%	21.8%
28	12/29/2005	41	1143	8352	10.9	5.51	42.70	8282	230886	225.9	48,804.0	2.7%	21.1%
29	2/28/2006	61	1204	8291	3.2	7.05	40.89	12322	243208	430.1	49,234.0	3.5%	20.2%
30	5/31/2006	92	1296	8199	35	19.10	39.35	18584	261792	1757.2	50,991.2	9.5%	19.5%
31	8/15/2006	76	1372	8123	46	40.50	39.41	15352	277144	3078.0	54,069.2	20.0%	19.5%
32	8/16/2006	1	1373	8122	176	111.00	39.46	202	277346	111.0	54,180.2	55.0%	19.5%
33	8/31/2006	15	1388	8107	176	176.00	40.94	3030	280376	2640.0	56,820.2	87.1%	20.3%
34	10/5/2006	35	1423	8072	451	313.50	47.64	7070	287446	10972.5	67,792.7	155.2%	23.6%
35	10/19/2006	14	1437	8058	0.14	225.57	49.37	2828	290274	3158.0	70,950.7	111.7%	24.4%
36	11/19/2006	31	1468	8027	0.14	0.14	48.33	6262	296536	4.3	70,955.1	0.1%	23.9%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
25 Cliftex Location

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
37	11/30/2006	11	1479	8016	22	11.07	48.06	2222	298758	121.8	71,076.8	5.5%	23.8%
38	2/28/2007	90	1569	7926	3.2	12.60	46.02	18180	316938	1134.0	72,210.8	6.2%	22.8%
39	5/31/2007	92	1661	7834	35	19.10	44.53	18584	335522	1757.2	73,968.0	9.5%	22.0%
40	8/6/2007	67	1728	7767	46	40.50	44.38	13534	349056	2713.5	76,681.5	20.0%	22.0%
41	8/7/2007	1	1729	7766	147	96.50	44.41	202	349258	96.5	76,778.0	47.8%	22.0%
42	8/21/2007	14	1743	7752	147	147.00	45.23	2828	352086	2058.0	78,836.0	72.8%	22.4%
43	9/18/2007	28	1771	7724	120	133.50	46.63	5656	357742	3738.0	82,574.0	66.1%	23.1%
44	10/13/2007	25	1796	7699	22	71.00	46.96	5050	362792	1775.0	84,349.0	35.1%	23.2%
45	11/9/2007	27	1823	7672	20.2	21.10	46.58	5454	368246	569.7	84,918.7	10.4%	23.1%
46	11/30/2007	21	1844	7651	22	21.10	46.29	4242	372488	443.1	85,361.8	10.4%	22.9%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

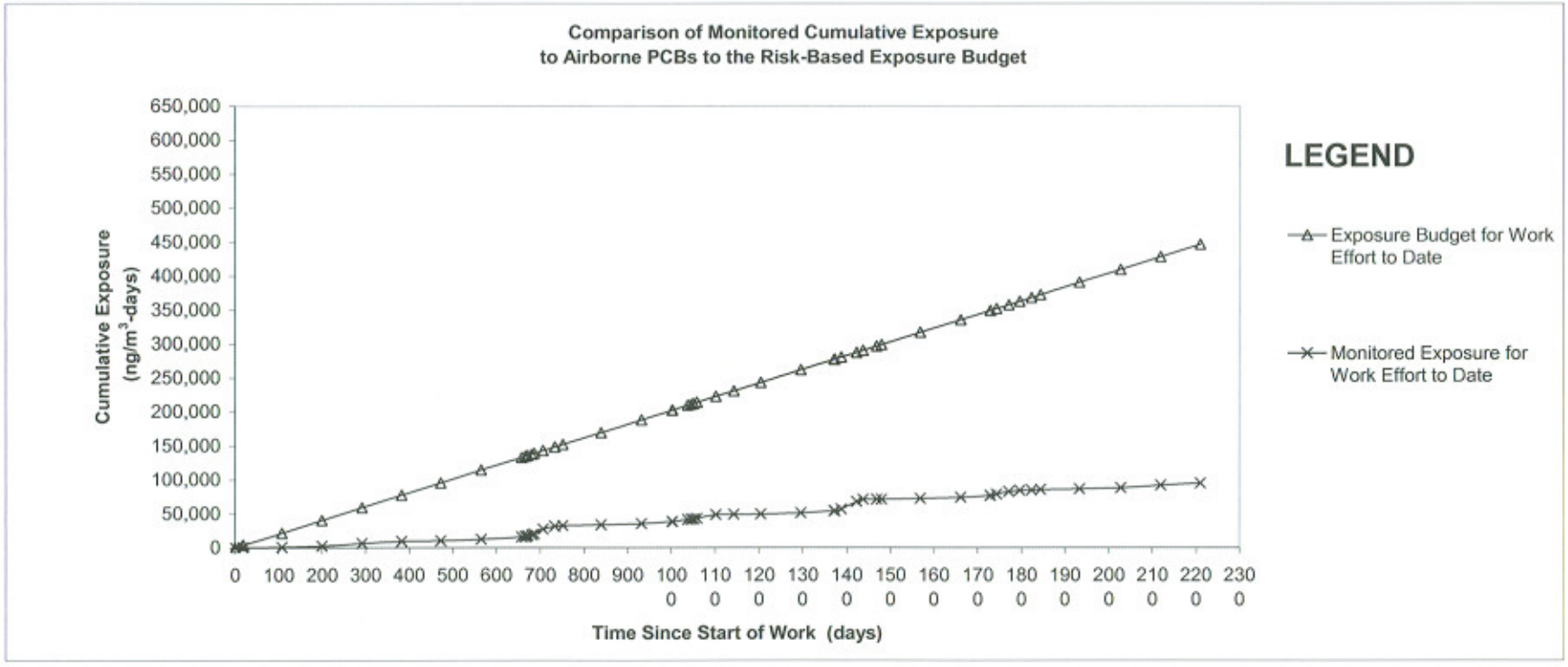
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	25 Cliftex
Collection Date:	11/30/2008
Measured PCB Concentration (ng/m^3):	22
Exposure Budget Expended During This Period:	16.8%
Cumulative Exposure Budget Expended to Date:	21.3%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:
a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season, did not include any sampling events for this station. Background quarterly estimates were inputted for this station.

Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 42 NSTAR N

Exposure Budget Slope (EBS) = 202 (ng/m^3-day)

Collection Date: 11/30/2008

Construction Activity: The hydraulic 2008 dredging activities were initiated on August 18, 2008 and demobilization activities were completed on October 21, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 4 and 5.

Summary of This Sampling Period:

The results from the Foster Wheeler Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. For Station 42 NSTAR N, the quarterly average ambient air PCB concentrations were used as a background concentration, which represent the quarterly baseline averages from Station 23 - Achusnet Substation, for the period of June 1999 through May 2000. These background concentrations were used to project the PCB concentrations during the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, 12/28/05 through 8/15/07, and from 11/19/06 through 8/6/07 to close the recent inactive field season. In addition, to better simulate the 2007 dredging season, the ambient air concentrations from the August 21, 2007 sampling event were used as the concentrations detected at Station 42 NSTAR from August 7, 2007 (the start of dredging activities).

Coordinating the sampling date with the start of dredging better simulates the ambient air PCB concentrations present at Station 42 during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006 and 2007, this new variation of the PETs curve was used for 2007. For the 2007 season, the PCB concentrations were projected to be at background levels at Station 42 NSTAR on October 13, 2007, which is the day after the 2007 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2007 dredging activities. No triggers were identified, therefore, no action is necessary.

Air Sampling Status

New Bedford Harbor Superfund Site

During the 2008 dredge season no samples were collected from this location. However, four rounds of quarterly background data were inputted to the Time Trend Sheet. No triggers were identified therefore, no action is necessary.

Monitoring Station		42 NSTAR N
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	23

Sample Results, Calculated Budget and Exposure Values
42 NSTAR North

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	24	24.00	24.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	24	24.00	24.00	3636	3636	432.0	432.0	11.9%	11.9%
3	12/1/2002	1	19	9476	9.9	16.95	23.63	202	3838	17.0	449.0	8.4%	11.7%
4	2/28/2003	89	108	9387	9.9	9.90	12.32	17978	21816	881.1	1,330.1	4.9%	6.1%
5	5/31/2003	92	200	9295	29	19.45	15.60	18584	40400	1789.4	3,119.5	9.6%	7.7%
6	8/31/2003	92	292	9203	31	30.00	20.14	18584	58984	2760.0	5,879.5	14.9%	10.0%
7	11/30/2003	91	383	9112	24	27.50	21.88	18382	77366	2502.5	8,382.0	13.6%	10.8%
8	2/28/2004	90	473	9022	9.9	16.95	20.95	18180	95546	1525.5	9,907.5	8.4%	10.4%
9	5/31/2004	93	566	8929	29	19.45	20.70	18786	114332	1808.9	11,716.3	9.6%	10.2%
10	8/31/2004	92	658	8837	31	30.00	22.00	18584	132916	2760.0	14,476.3	14.9%	10.9%
11	11/4/2004	65	723	8772	24	27.50	22.49	13130	146046	1787.5	16,263.8	13.6%	11.1%
12	11/5/2004	1	724	8771	73	48.50	22.53	202	146248	48.5	16,312.3	24.0%	11.2%
13	12/3/2004	28	752	8743	40	56.50	23.80	5656	151904	1582.0	17,894.3	28.0%	11.8%
14	2/28/2005	87	839	8656	9.9	24.95	23.92	17574	169478	2170.7	20,065.0	12.4%	11.8%
15	5/31/2005	92	931	8564	29	19.45	23.47	18584	188062	1789.4	21,854.4	9.6%	11.6%
16	8/10/2005	71	1002	8493	31	30.00	23.94	14342	202404	2130.0	23,984.4	14.9%	11.8%
17	8/11/2005	1	1003	8492	25.9	28.45	23.94	202	202606	28.5	24,012.8	14.1%	11.9%
18	9/15/2005	35	1038	8457	22.5	24.20	23.95	7070	209676	847.0	24,859.8	12.0%	11.9%
19	9/23/2005	8	1046	8449	83.3	52.90	24.17	1616	211292	423.2	25,283.0	26.2%	12.0%
20	9/29/2005	6	1052	8443	5.28	44.29	24.29	1212	212504	265.7	25,548.7	21.9%	12.0%
21	10/6/2005	7	1059	8436	119	62.14	24.54	1414	213918	435.0	25,983.7	30.8%	12.1%
22	10/28/2005	22	1081	8414	32.3	75.65	25.58	4444	218362	1664.3	27,648.0	37.5%	12.7%
23	11/18/2005	21	1102	8393	64.1	48.20	26.01	4242	222604	1012.2	28,660.2	23.9%	12.9%
24	12/29/2005	41	1143	8352	21.4	42.75	26.61	8282	230886	1752.8	30,413.0	21.2%	13.2%
25	2/28/2006	61	1204	8291	9.9	15.65	26.05	12322	243208	954.7	31,367.6	7.7%	12.9%
26	5/31/2006	92	1296	8199	29	19.45	25.58	18584	261792	1789.4	33,157.0	9.6%	12.7%
27	8/31/2006	92	1388	8107	31	30.00	25.88	18584	280376	2760.0	35,917.0	14.9%	12.8%
28	11/30/2006	91	1479	8016	24	27.50	25.98	18382	298758	2502.5	38,419.5	13.6%	12.9%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
42 NSTAR North

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
29	2/28/2007	90	1569	7926	9.9	16.95	25.46	18180	316938	1525.5	39,945.0	8.4%	12.6%
30	5/31/2007	92	1661	7834	29	19.45	25.13	18584	335522	1789.4	41,734.4	9.6%	12.4%
31	8/6/2007	67	1728	7767	31	30.00	25.32	13534	349056	2010.0	43,744.4	14.9%	12.5%
32	8/7/2007	1	1729	7766	19.2	25.10	25.31	202	349258	25.1	43,769.5	12.4%	12.5%
33	8/21/2007	14	1743	7752	19.2	19.20	25.27	2828	352086	268.8	44,038.3	9.5%	12.5%
34	9/18/2007	28	1771	7724	16.3	17.75	25.15	5656	357742	497.0	44,535.3	8.8%	12.4%
35	10/13/2007	25	1796	7699	24	20.15	25.08	5050	362792	503.8	45,039.1	10.0%	12.4%
36	11/9/2007	27	1823	7672	15.7	19.85	25.00	5454	368246	536.0	45,575.0	9.8%	12.4%
37	11/30/2007	21	1844	7651	24	19.85	24.94	4242	372488	416.9	45,991.9	9.8%	12.3%
38	2/28/2008	90	1934	7561	9.9	16.95	24.57	18180	390668	1525.5	47,517.4	8.4%	12.2%
39	5/31/2008	93	2027	7468	29	19.45	24.33	18786	409454	1808.9	49,326.2	9.6%	12.0%
40	8/31/2008	92	2119	7376	31	30.00	24.58	18584	428038	2760.0	52,086.2	14.9%	12.2%
41	11/30/2008	91	2210	7285	24	27.50	24.70	18382	446420	2502.5	54,588.7	13.6%	12.2%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

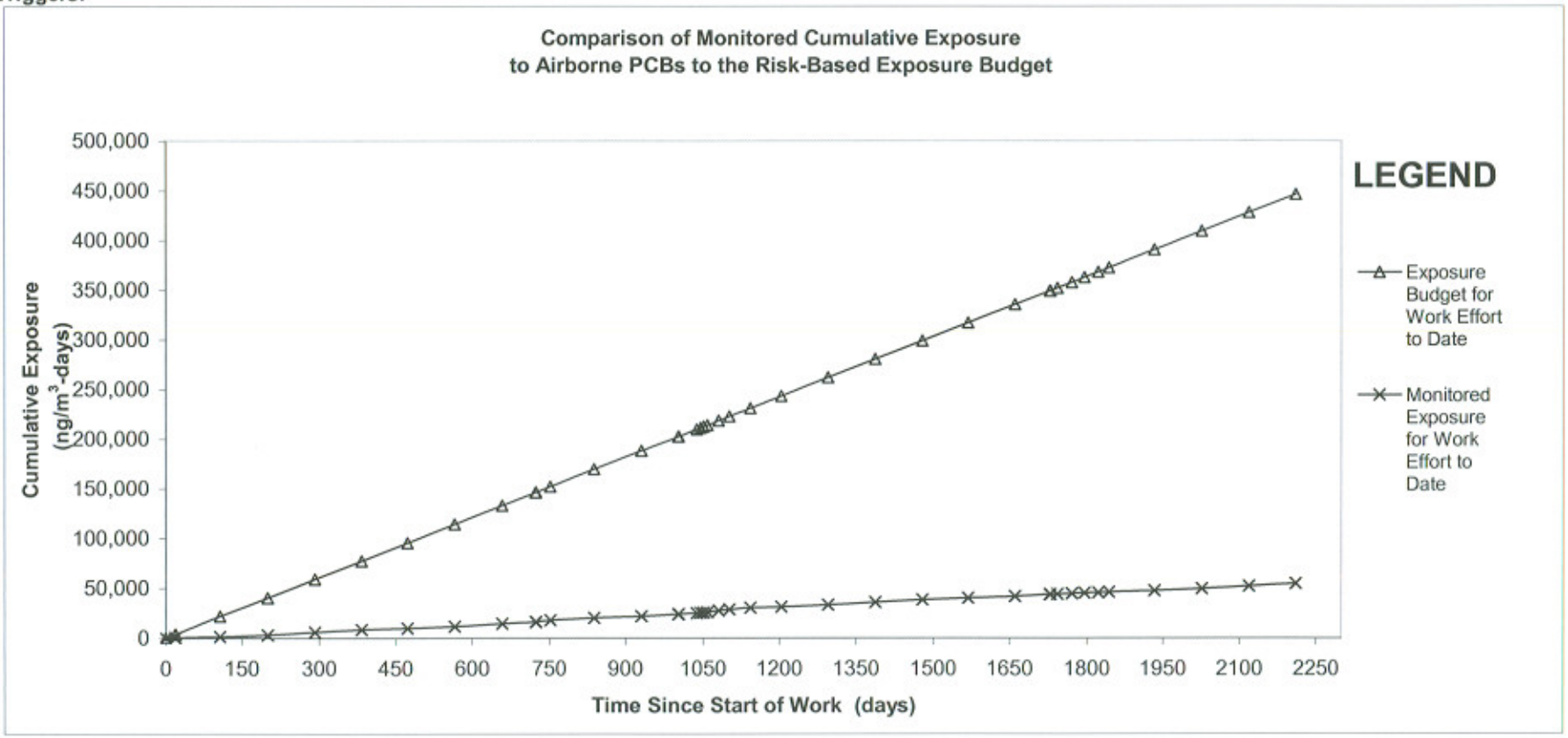
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	42 NSTAR N
Collection Date:	11/30/2008
Measured PCB Concentration (ng/m^3):	24
Exposure Budget Expended During This Period:	13.6%
Cumulative Exposure Budget Expended to Date:	12.2%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season, did not include any sampling event; quarterly average background data was inputted for this season.

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 46 Coffin Avenue
Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2008

Construction Activity: The 2008 dredging activities were initiated on August 18, 2008 and demobilization activities were completed on October 21, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Foster Wheeler Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. For Station 46 Coffin Ave., the quarterly ambient air PCB concentrations were used for background concentrations. These values represent the quarterly baseline averages from Stations 21 and 25 - Cliftex, for the period of June 1999 through May 2000. These background concentrations were used to project the PCB concentrations for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, from 12/28/05 through 8/15/06, and from 11/19/06 through 8/6/07 to close the inactive field season. In addition, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used as the concentrations detected at Station 46 Coffin Ave from August 16, 2006 (the start of dredging activities). To better simulate the 2007 dredging season, the ambient air concentrations from the August 21, 2007 sampling event were used as the concentrations detected at Station 46 Coffin Avenue from August 7, 2007

(the start of dredging activities). Coordinating the sampling data with the start of dredging better simulates the ambient air PCB concentrations at Station 46 Coffin Avenue during the active dredging season. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since monthly sampling was conducted in 2006, and the first 2006 sampling event was conducted two weeks after the start of dredging, this new variation of the PETs curve was used. Also, the PCB concentrations were projected to be at background levels at Station 46 Coffin Avenue on October 19, 2006, which is the day after the 2006 dredging activities were completed. For the 2007 season, the PCB concentrations were projected to be at background levels at Station 46 Coffin Avenue on October 13, 2007, which is the day after the 2007 dredging activities were completed. These changes in the background concentrations and associated active dredging concentrations better match the actual 2006 and 2007 dredging activities. No triggers were identified, therefore, no action is required.

Monitoring Station		46 Coffin Ave
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	26.1
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
46 Coffin Avenue

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	3636	3636	396.0	396.0	10.9%	10.9%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	202	3838	12.6	408.6	6.2%	10.6%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	17978	21816	284.8	693.4	1.6%	3.2%
5	5/31/2003	92	200	9295	35	19.10	12.25	18584	40400	1757.2	2,450.6	9.5%	6.1%
6	8/31/2003	92	292	9203	46	40.50	21.15	18584	58984	3726.0	6,176.6	20.0%	10.5%
7	11/30/2003	91	383	9112	22	34.00	24.21	18382	77366	3094.0	9,270.6	16.8%	12.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	18180	95546	1134.0	10,404.6	6.2%	10.9%
9	5/31/2004	93	566	8929	35	19.10	21.52	18786	114332	1776.3	12,180.9	9.5%	10.7%
10	8/31/2004	92	658	8837	46	40.50	24.17	18584	132916	3726.0	15,906.9	20.0%	12.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	1616	134532	272.0	16,178.9	16.8%	12.0%
12	9/9/2004	1	667	8828	145	83.50	24.38	202	134734	83.5	16,262.4	41.3%	12.1%
13	9/14/2004	5	672	8823	48	96.50	24.92	1010	135744	482.5	16,744.9	47.8%	12.3%
14	9/23/2004	9	681	8814	5	26.50	24.94	1818	137562	238.5	16,983.4	13.1%	12.3%
15	9/28/2004	5	686	8809	342	173.50	26.02	1010	138572	867.5	17,850.9	85.9%	12.9%
16	10/19/2004	21	707	8788	36	189.00	30.86	4242	142814	3969.0	21,819.9	93.6%	15.3%
17	11/5/2004	17	724	8771	80	58.00	31.50	3434	146248	986.0	22,805.9	28.7%	15.6%
18	12/3/2004	28	752	8743	15	47.50	32.10	5656	151904	1330.0	24,135.9	23.5%	15.9%
19	2/28/2005	87	839	8656	3.2	9.10	29.71	17574	169478	791.7	24,927.6	4.5%	14.7%
20	5/31/2005	92	931	8564	35	19.10	28.66	18584	188062	1757.2	26,684.8	9.5%	14.2%
21	8/10/2005	71	1002	8493	46	40.50	29.50	14342	202404	2875.5	29,560.3	20.0%	14.6%
22	8/11/2005	1	1003	8492	37.2	41.60	29.51	202	202606	41.6	29,601.9	20.6%	14.6%
23	9/15/2005	35	1038	8457	99.8	68.50	30.83	7070	209676	2397.5	31,999.4	33.9%	15.3%
24	9/23/2005	8	1046	8449	115	107.40	31.41	1616	211292	859.2	32,858.6	53.2%	15.6%
25	9/29/2005	6	1052	8443	124	119.50	31.92	1212	212504	717.0	33,575.6	59.2%	15.8%
26	10/6/2005	7	1059	8436	130	127.00	32.54	1414	213918	889.0	34,464.6	62.9%	16.1%
27	10/28/2005	22	1081	8414	2.06	66.03	33.23	4444	218362	1452.7	35,917.3	32.7%	16.4%
28	11/18/2005	21	1102	8393	0.14	1.10	32.61	4242	222604	23.1	35,940.4	0.5%	16.1%
29	12/29/2005	41	1143	8352	65.1	32.62	32.61	8282	230886	1337.4	37,277.8	16.1%	16.1%
30	2/28/2006	61	1204	8291	3.2	34.15	32.69	12322	243208	2083.2	39,360.9	16.9%	16.2%
31	5/31/2006	92	1296	8199	35	19.10	31.73	18584	261792	1757.2	41,118.1	9.5%	15.7%
32	8/15/2006	76	1372	8123	46	40.50	32.21	15352	277144	3078.0	44,196.1	20.0%	15.9%
33	8/16/2006	1	1373	8122	70.4	58.20	32.23	202	277346	58.2	44,254.3	28.8%	16.0%
34	8/31/2006	15	1388	8107	70.4	70.40	32.64	3030	280376	1056.0	45,310.3	34.9%	16.2%
35	10/5/2006	35	1423	8072	108	89.20	34.04	7070	287446	3122.0	48,432.3	44.2%	16.8%
36	10/19/2006	14	1437	8058	4.05	56.03	34.25	2828	290274	784.4	49,216.7	27.7%	17.0%
37	11/19/2006	31	1468	8027	4.05	4.05	33.61	6262	296536	125.6	49,342.2	2.0%	16.6%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
46 Coffin Avenue

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
38	11/30/2006	11	1479	8016	22	13.03	33.46	2222	298758	143.3	49,485.5	6.4%	16.6%
39	2/28/2007	90	1569	7926	3.2	12.60	32.26	18180	316938	1134.0	50,619.5	6.2%	16.0%
40	5/31/2007	92	1661	7834	35	19.10	31.53	18584	335522	1757.2	52,376.7	9.5%	15.6%
41	8/6/2007	67	1728	7767	46	40.50	31.88	13534	349056	2713.5	55,090.2	20.0%	15.8%
42	8/7/2007	1	1729	7766	36.1	41.05	31.89	202	349258	41.1	55,131.3	20.3%	15.8%
43	8/21/2007	14	1743	7752	36.1	36.10	31.92	2828	352086	505.4	55,636.7	17.9%	15.8%
44	9/18/2007	28	1771	7724	21.4	28.75	31.87	5656	357742	805.0	56,441.7	14.2%	15.8%
45	10/13/2007	25	1796	7699	22	21.70	31.73	5050	362792	542.5	56,984.2	10.7%	15.7%
46	11/9/2007	27	1823	7672	1.86	11.93	31.44	5454	368246	322.1	57,306.3	5.9%	15.6%
47	11/30/2007	21	1844	7651	22	11.93	31.21	4242	372488	250.5	57,556.8	5.9%	15.5%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

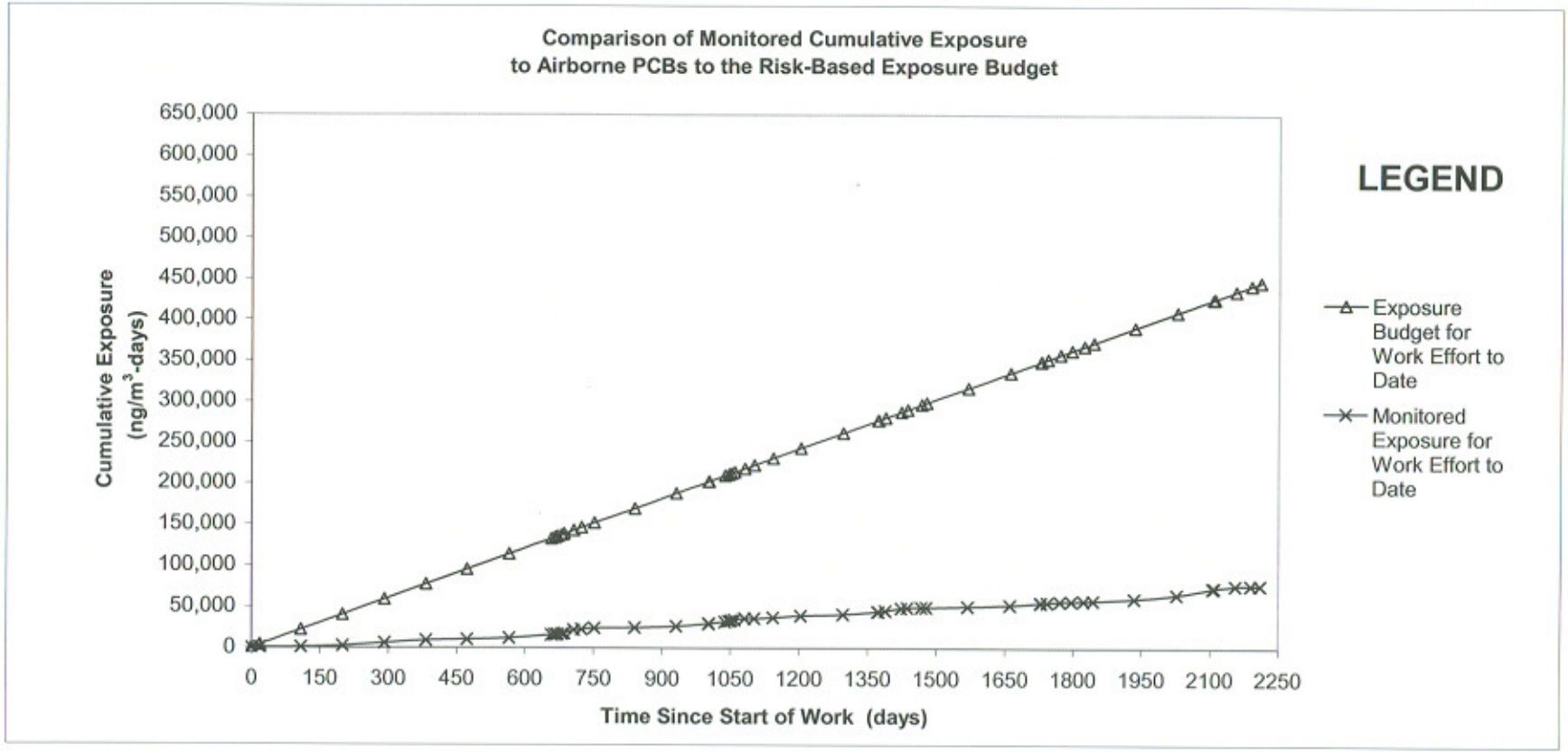
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	46 Coffin Ave
Collection Date:	11/30/2008
Measured PCB Concentration (ng/m^3):	22
Exposure Budget Expended During This Period:	5.8%
Cumulative Exposure Budget Expended to Date:	17.1%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, was from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, was from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season, which did not include a pre-dredge sampling event, was from 2106 to 2210 days since start of work (June 1 through November 5, 2008).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 49 Area C Downwind

Exposure Budget Slope (EBS) = 202 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/10/2008

Construction Activity: The 2008 dredging activities were initiated on August 18, 2008 and demobilization activities were completed on October 21, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 4 and 5.

The results from the Foster Wheeler Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. For Station 49 Area C Downwind, the quarterly average ambient air PCB concentrations were used for background. These represent the average quarterly baseline averages from Station 26 - Sawyer Street, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04, for the period from 12/4/04 through 8/10/05, from 12/28/05 through 8/15/06, and from 11/19/06 through 8/6/07 to close the recent inactive field season. For the December 2005 sampling event, based on wind direction for that day, the results from Station 47 were used to represent Area C downgradient air PCB concentrations. In 2006 and 2007, during each sampling event, ambient air data was collected from only one air sampling station at Area C. The location was selected based upon the predicted wind direction for that sampling event and was placed along the downwind portion of Area C.

Please refer to Table F-1 for the Area C stations used during the 2006 and 2007 sampling events. For the first month of the 2004 and 2005 seasons, the sampling was conducted on a weekly basis. However, since 2006, the active field season sampling has been conducted on a monthly basis. In addition, since the 2006 and 2007 first sampling events were conducted about two weeks after the start of dredging, a new variation of the PETs curve was used. To better simulate the 2006 dredging season, the sambient air concentrations from the August 31, 2006 sampling event were used as the concentrations detected at Station 47 from August 16, 2006 (start of dredging activities). For the 2007 dredge season, the August 21, 2007 sampling event was used as the concentrations detected downwind at Area C from August 7, 2007 (the start of dredging activities). Also, the background concentrations were used as the PCB concentration at Area C on October 19, 2006, which is the day after the 2006 dredging activities were completed.

For the 2007 season, the concentrations were projected to be at background levels at Area C from October 13, 2007, (the day after dredging activities were completed). Coordinating the sampling date with the start of dredging better simulates the ambient air PCB concentrations at Area C during active dredging season. No triggers were identified, therefore, no action is necessary.

Air Sampling Status Report

New Bedford Harbor Superfund Site

The 2008 season began with mechanical dredging (excavation) of the shoreline on June 1, 2008, which ended on July 22, 2008. Hydraulic dredging occurred in the Pierce Mill Cove area starting on August 18, 2008, ending November 5, 2008. No triggers were identified therefore, no action is necessary.

Monitoring Station		49 Area C Downwind
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	56
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
49 Area C Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	43	43.00	43.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	43	43.00	43.00	3636	3636	774.0	774.0	21.3%	21.3%
3	12/1/2002	1	19	9476	89	66.00	44.21	202	3838	66.0	840.0	32.7%	21.9%
4	2/28/2003	89	108	9387	89	89.00	81.12	17978	21816	7921.0	8,761.0	44.1%	40.2%
5	5/31/2003	92	200	9295	61	75.00	78.31	18584	40400	6900.0	15,661.0	37.1%	38.8%
6	8/31/2003	92	292	9203	33	47.00	68.44	18584	58984	4324.0	19,985.0	23.3%	33.9%
7	11/30/2003	91	383	9112	43	38.00	61.21	18382	77366	3458.0	23,443.0	18.8%	30.3%
8	2/28/2004	90	473	9022	89	66.00	62.12	18180	95546	5940.0	29,383.0	32.7%	30.8%
9	5/31/2004	93	566	8929	61	75.00	64.24	18786	114332	6975.0	36,358.0	37.1%	31.8%
10	8/31/2004	92	658	8837	33	47.00	61.83	18584	132916	4324.0	40,682.0	23.3%	30.6%
11	9/8/2004	8	666	8829	43	38.00	61.54	1616	134532	304.0	40,986.0	18.8%	30.5%
12	9/9/2004	1	667	8828	56	49.50	61.52	202	134734	49.5	41,035.5	24.5%	30.5%
13	9/14/2004	5	672	8823	86	71.00	61.59	1010	135744	355.0	41,390.5	35.1%	30.5%
14	9/23/2004	9	681	8814	17	51.50	61.46	1818	137562	463.5	41,854.0	25.5%	30.4%
15	9/28/2004	5	686	8809	207	112.00	61.83	1010	138572	560.0	42,414.0	55.4%	30.6%
16	10/19/2004	21	707	8788	66	136.50	64.05	4242	142814	2866.5	45,280.5	67.6%	31.7%
17	11/5/2004	17	724	8771	28	47.00	63.65	3434	146248	799.0	46,079.5	23.3%	31.5%
18	12/3/2004	28	752	8743	26	27.00	62.28	5656	151904	756.0	46,835.5	13.4%	30.8%
19	2/28/2005	87	839	8656	89	57.50	61.79	17574	169478	5002.5	51,838.0	28.5%	30.6%
20	5/31/2005	92	931	8564	61	75.00	63.09	18584	188062	6900.0	58,738.0	37.1%	31.2%
21	8/10/2005	71	1002	8493	33	47.00	61.95	14342	202404	3337.0	62,075.0	23.3%	30.7%
22	8/11/2005	1	1003	8492	29.3	31.15	61.92	202	202606	31.2	62,106.2	15.4%	30.7%
23	9/15/2005	35	1038	8457	83.6	56.45	61.74	7070	209676	1975.8	64,081.9	27.9%	30.6%
24	9/23/2005	8	1046	8449	97	90.30	61.95	1616	211292	722.4	64,804.3	44.7%	30.7%
25	9/29/2005	6	1052	8443	44.2	70.60	62.00	1212	212504	423.6	65,227.9	35.0%	30.7%
26	10/6/2005	7	1059	8436	114	79.10	62.12	1414	213918	553.7	65,781.6	39.2%	30.8%
27	10/28/2005	22	1081	8414	12.3	63.15	62.14	4444	218362	1389.3	67,170.9	31.3%	30.8%
28	11/18/2005	21	1102	8393	3.71	8.01	61.11	4242	222604	168.1	67,339.0	4.0%	30.3%
29	12/29/2005	41	1143	8352	7.42	5.57	59.11	8282	230886	228.2	67,567.2	2.8%	29.3%
30	2/28/2006	61	1204	8291	89	48.21	58.56	12322	243208	2940.8	70,508.0	23.9%	29.0%
31	5/31/2006	92	1296	8199	61	75.00	59.73	18584	261792	6900.0	77,408.0	37.1%	29.6%
32	8/15/2006	76	1372	8123	31	46.00	58.97	15352	277144	3496.0	80,904.0	22.8%	29.2%
33	8/16/2006	1	1373	8122	39.2	35.10	58.95	202	277346	35.1	80,939.1	17.4%	29.2%
34	8/31/2006	15	1388	8107	39.2	39.20	58.74	3030	280376	588.0	81,527.1	19.4%	29.1%
35	10/5/2006	35	1423	8072	157	98.10	59.71	7070	287446	3433.5	84,960.6	48.6%	29.6%
36	10/19/2006	14	1437	8058	81.4	119.20	60.28	2828	290274	1668.8	86,629.4	59.0%	29.8%
37	11/19/2006	31	1468	8027	81.4	81.40	60.73	6262	296536	2523.4	89,152.8	40.3%	30.1%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
49 Area C Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
38	11/30/2006	11	1479	8016	43	62.20	60.74	2222	298758	684.2	89,837.0	30.8%	30.1%
39	2/28/2007	90	1569	7926	89	66.00	61.04	18180	316938	5940.0	95,777.0	32.7%	30.2%
40	5/31/2007	92	1661	7834	61	75.00	61.82	18584	335522	6900.0	102,677.0	37.1%	30.6%
41	8/6/2007	67	1728	7767	31	46.00	61.20	13534	349056	3082.0	105,759.0	22.8%	30.3%
42	8/7/2007	1	1729	7766	46.9	38.95	61.19	202	349258	39.0	105,797.9	19.3%	30.3%
43	9/18/2007	42	1771	7724	57.1	52.00	60.97	8484	357742	2184.0	107,981.9	25.7%	30.2%
44	10/13/2007	25	1796	7699	43	50.05	60.82	5050	362792	1251.3	109,233.2	24.8%	30.1%
45	11/9/2007	27	1823	7672	9.29	26.15	60.31	5454	368246	705.9	109,939.1	12.9%	29.9%
46	11/30/2007	21	1844	7651	43	26.15	59.92	4242	372488	549.0	110,488.1	12.9%	29.7%
47	2/28/2008	90	1934	7561	89	66.00	60.20	18180	390668	5940.0	116,428.1	32.7%	29.8%
48	5/31/2008	93	2027	7468	61	75.00	60.88	18786	409454	6975.0	123,403.1	37.1%	30.1%
49	8/18/2008	79	2106	7389	123.4	92.20	62.05	15958	425412	7283.8	130,686.9	45.6%	30.7%
50	8/21/2008	3	2109	7386	116.4	119.90	62.14	606	426018	359.7	131,046.6	59.4%	30.8%
51	9/24/2008	34	2143	7352	42	79.20	62.41	6868	432886	2692.8	133,739.4	39.2%	30.9%
52	11/10/2008	47	2190	7305	6.2	24.10	61.59	9494	442380	1132.7	134,872.1	11.9%	30.5%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

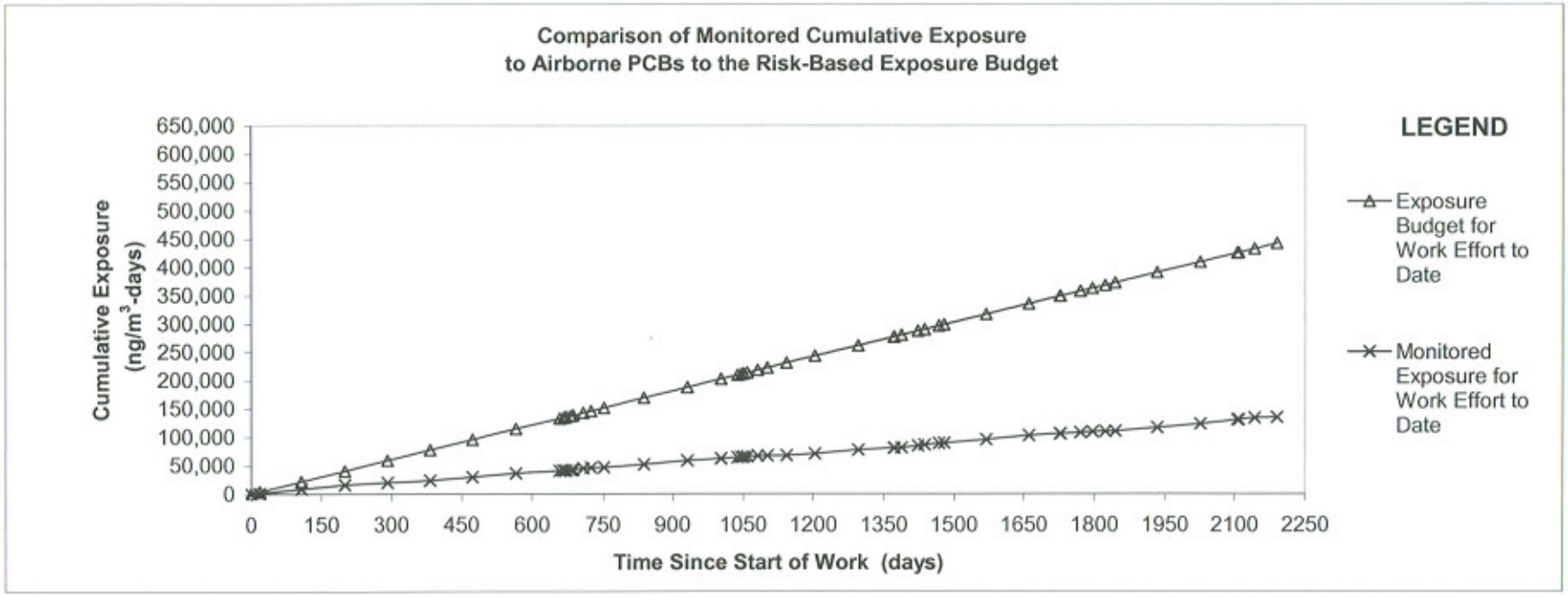
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	49 Area C Downwind
Collection Date:	11/10/2008
Measured PCB Concentration (ng/m^3):	6.2
Exposure Budget Expended During This Period:	11.9%
Cumulative Exposure Budget Expended to Date:	30.5%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season, which did not include a pre-dredge sampling event was from 2106 to 2109 days since start of work (August 18 through November 5, 2008).

Air Sampling Status Report

New Bedford Harbor Superfund Site

Station #: 50 Area D Downwind

Exposure Budget Slope (EBS) = 344 nanograms per cubic meter per day (ng/m^3-day)

Collection Date: 11/30/2008

Construction Activity: The 2008 dredging activities were initiated on August 18, 2007 and demobilization activities were completed on October 21, 2008.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Volume sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Harbor Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 4 and 5.

Summary of This Sampling Period:

The results from the Foster Wheeler Baseline Ambient Air Sampling program (June 1999 through May 2000) were used to assign background concentrations for each air sampling location. However, for the August 2005 background sampling event, based on wind direction for that day, the results from Station 52 were used to represent Area D downgradient air PCB concentrations. For Station 50 Area D, the average quarterly air PCB concentrations were used as background concentrations, which represent the average quarterly from Station 21 - New Bedford Welding, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 to 9/8/04, from 12/4/04 to 8/10/05, from 12/28/05 to 8/15/06, and from 11/19/06 to 8/6/07 to close the recent inactive field season. For the December 2005 post-dredging sampling event, based on wind direction for the day, the results from Station 51 were used to represent Area D downwind air PCB concentrations. In 2006 and 2007, during each sampling event, ambient air data was collected from only one air sampling station, which was placed downwind of Area D, based upon the predicted wind direction for the sampling event.

Please refer to Table F-1 for the Area D stations used during the 2006 and 2007 sampling events. In 2004 and 2005, air sampling was conducted on a weekly basis during the first month. However, since 2006, during the active field season, sampling has been conducted on a monthly basis. Since the first 2006 and 2007 sampling events were conducted about two weeks after the start of dredging, a new variation of the PETs curve was used. Therefore, to better simulate the 2006 dredging season, the ambient air concentrations from the August 31, 2006 sampling event were used to as the concentrations detected at Station 50 from August 16, 2006 (the start of dredging activities). For the 2007 dredge season, the August 21, 2007 sampling event was used to project concentrations detected downwind at Area D on August 7, 2007 (the start of dredging activities). Also, the PCB concentrations were projected to be at background levels at Station 50 Area D on October 19, 2006, which is the day after the 2006 dredging activities were completed.

For the 2007 season, the concentrations were used as the background levels at Area D from October 13, 2007, (the day after dredging activities were completed). Coordinating the sampling date with the start of dredging better simulates the actual 2006 and 2007 dredging activities. No triggers were identified, therefore, no action is necessary.

Air Sampling Status Report

New Bedford Harbor Superfund Site

The 2008 season began with mechanical dredging (excavation) of the Aerovox shoreline on June 1, 2008, which was completed on July 22, 2009. Station 50 was not sampled this season as the downwind location selected was Station 51. Station 51's data is inputted for this workbook. No triggers were identified therefore, no action is necessary.

Monitoring Station		50 Area D Downwind
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date (Per EPA)	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	16.7
Notes:		
TEL - Threshold Effects Exposure Limit		
NTEL - Non-Threshold Effects Exposure Limit		
The EPA periodically assesses this Projected Work End Date, which is subject to change.		

Sample Results, Calculated Budget and Exposure Values
50 Area D Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5.9	5.90	5.90	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	5.9	5.90	5.90	6192	6192	106.2	106.2	1.7%	1.7%
3	12/1/2002	1	19	9476	3.4	4.65	5.83	344	6536	4.7	110.9	1.4%	1.7%
4	2/28/2003	89	108	9387	3.4	3.40	3.83	30616	37152	302.6	413.5	1.0%	1.1%
5	5/31/2003	92	200	9295	6.8	5.10	4.41	31648	68800	469.2	882.7	1.5%	1.3%
6	8/31/2003	92	292	9203	12	9.40	5.98	31648	100448	864.8	1,747.5	2.7%	1.7%
7	11/30/2003	91	383	9112	5.9	8.95	6.69	31304	131752	814.5	2,561.9	2.6%	1.9%
8	2/28/2004	90	473	9022	3.4	4.65	6.30	30960	162712	418.5	2,980.4	1.4%	1.8%
9	5/31/2004	93	566	8929	6.8	5.10	6.10	31992	194704	474.3	3,454.7	1.5%	1.8%
10	8/31/2004	92	658	8837	12	9.40	6.56	31648	226352	864.8	4,319.5	2.7%	1.9%
11	9/8/2004	8	666	8829	5.9	8.95	6.59	2752	229104	71.6	4,391.1	2.6%	1.9%
12	9/9/2004	1	667	8828	20	12.95	6.60	344	229448	13.0	4,404.1	3.8%	1.9%
13	9/14/2004	5	672	8823	38	29.00	6.77	1720	231168	145.0	4,549.1	8.4%	2.0%
14	9/23/2004	9	681	8814	6	22.00	6.97	3096	234264	198.0	4,747.1	6.4%	2.0%
15	9/28/2004	5	686	8809	80	43.00	7.23	1720	235984	215.0	4,962.1	12.5%	2.1%
16	10/19/2004	21	707	8788	17	48.50	8.46	7224	243208	1018.5	5,980.6	14.1%	2.5%
17	12/3/2004	45	752	8743	22	19.50	9.12	15480	258688	877.5	6,858.1	5.7%	2.7%
18	2/28/2005	87	839	8656	3.4	12.70	9.49	29928	288616	1104.9	7,963.0	3.7%	2.8%
19	5/31/2005	92	931	8564	6.8	5.10	9.05	31648	320264	469.2	8,432.2	1.5%	2.6%
20	8/10/2005	71	1002	8493	12	9.40	9.08	24424	344688	667.4	9,099.6	2.7%	2.6%
21	8/11/2005	1	1003	8492	21.3	16.65	9.09	344	345032	16.7	9,116.2	4.8%	2.6%
22	9/15/2005	35	1038	8457	0.52	10.91	9.15	12040	357072	381.9	9,498.1	3.2%	2.7%
23	9/23/2005	8	1046	8449	0.26	0.39	9.08	2752	359824	3.1	9,501.2	0.1%	2.6%
24	9/29/2005	6	1052	8443	24.2	12.23	9.10	2064	361888	73.4	9,574.6	3.6%	2.6%
25	10/6/2005	7	1059	8436	81.7	52.95	9.39	2408	364296	370.7	9,945.2	15.4%	2.7%
26	10/28/2005	22	1081	8414	0.01	40.86	10.03	7568	371864	898.8	10,844.0	11.9%	2.9%
27	12/29/2005	62	1143	8352	2.18	1.10	9.55	21328	393192	67.9	10,911.9	0.3%	2.8%
28	2/28/2006	61	1204	8291	3.4	2.79	9.20	20984	414176	170.2	11,082.1	0.8%	2.7%
29	5/31/2006	92	1296	8199	6.8	5.10	8.91	31648	445824	469.2	11,551.3	1.5%	2.6%
30	8/15/2006	76	1372	8123	12	9.40	8.94	26144	471968	714.4	12,265.7	2.7%	2.6%
31	8/16/2006	1	1373	8122	67.3	39.65	8.96	344	472312	39.7	12,305.3	11.5%	2.6%
32	8/31/2006	15	1388	8107	67.3	67.30	9.59	5160	477472	1009.5	13,314.8	19.6%	2.8%
33	10/5/2006	35	1423	8072	197	132.15	12.61	12040	489512	4625.3	17,940.1	38.4%	3.7%
34	10/19/2006	14	1437	8058	2.6	99.80	13.46	4816	494328	1397.2	19,337.3	29.0%	3.9%
35	11/19/2006	31	1468	8027	2.6	2.60	13.23	10664	504992	80.6	19,417.9	0.8%	3.8%
36	11/30/2006	11	1479	8016	5.9	4.25	13.16	3784	508776	46.8	19,464.6	1.2%	3.8%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Sample Results, Calculated Budget and Exposure Values
50 Area D Downwind

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Running Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
37	2/28/2007	90	1569	7926	3.4	4.65	12.67	30960	539736	418.5	19,883.1	1.4%	3.7%
38	5/31/2007	92	1661	7834	6.8	5.10	12.25	31648	571384	469.2	20,352.3	1.5%	3.6%
39	8/6/2007	67	1728	7767	31	18.90	12.51	23048	594432	1266.3	21,618.6	5.5%	3.6%
40	8/7/2007	1	1729	7766	36.7	33.85	12.52	344	594776	33.9	21,652.5	9.8%	3.6%
41	8/21/2007	14	1743	7752	36.7	36.70	12.72	4816	599592	513.8	22,166.3	10.7%	3.7%
42	9/18/2007	28	1771	7724	48.7	42.70	13.19	9632	609224	1195.6	23,361.9	12.4%	3.8%
43	10/13/2007	25	1796	7699	5.9	27.30	13.39	8600	617824	682.5	24,044.4	7.9%	3.9%
44	11/9/2007	27	1823	7672	4.39	5.15	13.27	9288	627112	138.9	24,183.3	1.5%	3.9%
45	11/30/2007	21	1844	7651	5.9	5.15	13.17	7224	634336	108.0	24,291.4	1.5%	3.8%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

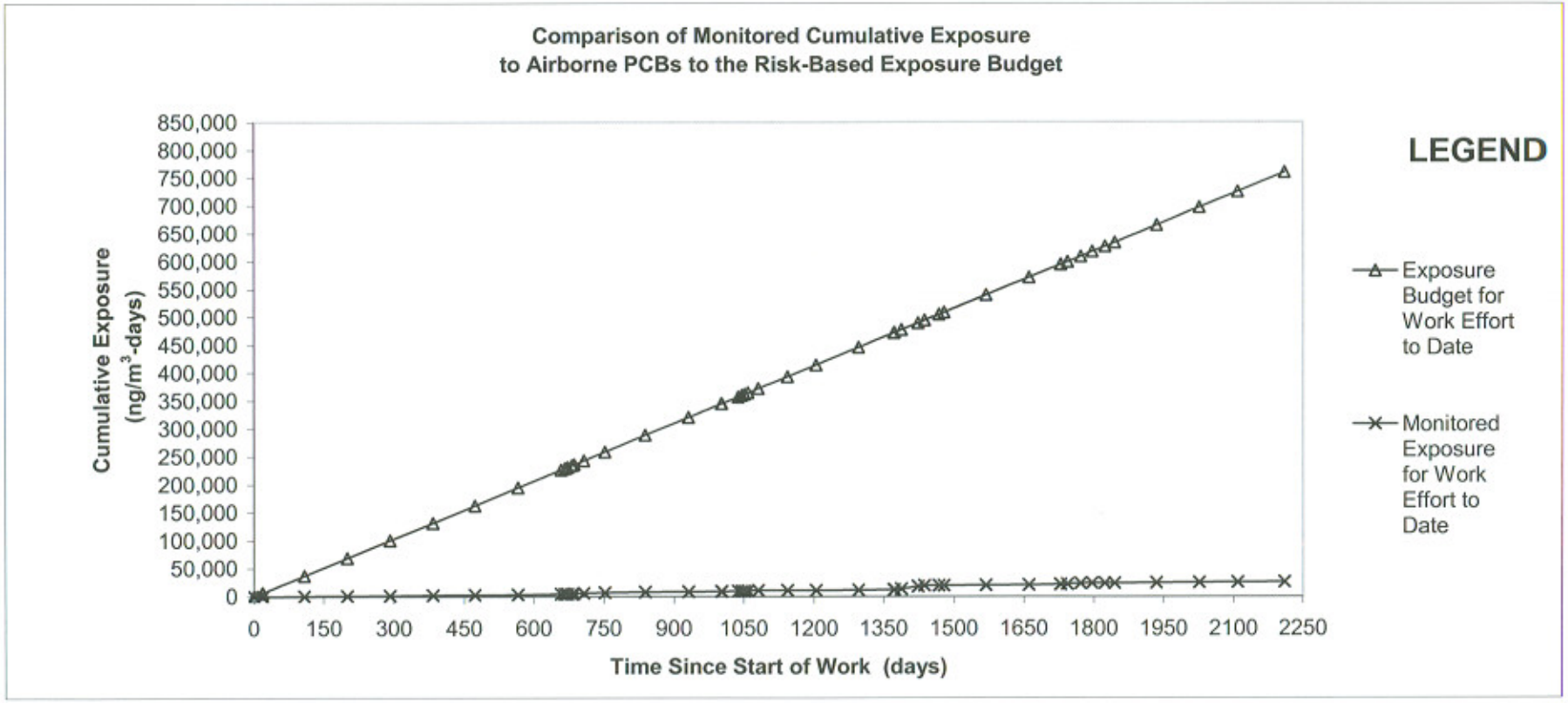
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	50 Area D Downwind
Collection Date:	11/30/2008
Measured PCB Concentration (ng/m^3):	5.9
Exposure Budget Expended During This Period:	1.3%
Cumulative Exposure Budget Expended to Date:	3.4%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Notes:

a) 2004 dredge season, including pre- and post-dredging sampling events, were from 667 to 752 days since start of work (September 9 through December 3, 2004).
b) 2005 dredge season, including pre- and post-dredging sampling events, were from 1003 to 1143 days since start of work (August 11 through December 29, 2005).
c) 2006 dredge season, which did not include a pre-dredge sampling event, was from 1388 to 1468 days since start of work (August 16 through October 18, 2006).
d) 2007 dredge season, which did not include a pre-dredge sampling event, was from 1729 to 1823 days since start of work (August 7 through November 9, 2007).
e) 2008 dredge season, which did not include a pre-dredge sampling event was from 2109 to 2210 days since start of work (August 18 through November 5, 2008).

Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 55 Aerovox West
Exposure Budget Slope (EBS) = 174 (ng/m^3-day)

Collection Date: 11/5/2004

Construction Activity: The DMU-2 dredging activities were completed on November 9, 2004 and the winterization activities were completed on November 18, 2004. No activities were completed in DMU-2 between November 9 and the December 3, 2004 sampling event. Remediation activities were not conducted in this area until the 2008 Aerovox shoreline excavation.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period is included on page 1. Sample Station Information is summarized in attached Table 1 and illustrated on Figure 1. Air concentration trigger information is presented in attached Table 2.

Summary of This Sampling Period:

This is a new sample location and the December 3, 20004 sample represented the second sampling event at this location. Due to elevated concentrations on the East side of the facility, this location was selected to demonstrate what a local resident receptor (child receptor) might be seeing during remedial work. The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 55 Aerovox West, the maximum baseline result of 5.2 ng/m3 was used, which represents the maximum baseline result from Station 40 - Wood Street (Titleist), during the pre-construction sampling round on 11/18/02. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/2/04 through 6/1/05 to close the inactive field season. The background concentrations were also used from 5/31/05 through 6/1/08, during which no activities were conducted in this area. No triggers identified, therefore, no action required.

Monitoring Station		55 Aerovox West
Exposure Budget Slope		174
Work Start Date		11/12/2002
Projected Work End Date		11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Miniumum of TEL/NTEL	[ng/m^3]	1,789
Background Concentration	[ng/m^3]	5.2

Sample Results, Calculated Budget and Exposure Values
55 Aerovox West

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5.2	5	5	NC	NC	NC	NC	NC	NC
2	11/4/2004	723	723	8772	5.2	5	5	125802	125802	3760	3760	3.0%	3.0%
3	11/5/2004	724	724	8771	28.4	17	17	125976	125976	12163	12163	9.7%	9.7%
4	12/3/2004	28	752	8743	9.33	19	17	4872	130848	528	12691	10.8%	9.7%
5	6/1/2005	180	932	8563	5	7	15	31320	162168	1308	13999	4.2%	8.6%
6	8/11/2005	71	1003	8492	42.1	24	16	12354	174522	1679	15678	13.6%	9.0%
7	9/15/2005	35	1038	8457	37.6	40	16	6090	180612	1395	17073	22.9%	9.5%
8	9/23/2005	8	1046	8449	2.6	20	16	1392	182004	161	17234	11.6%	9.5%
9	9/29/2005	6	1052	8443	87	45	17	1044	183048	269	17503	25.7%	9.6%
9	10/6/2005	7	1059	8436	222	155	18	1218	184266	1082	18584	88.8%	10.1%
10	10/28/2005	22	1081	8414	4	113	19	3828	188094	2486	21070	64.9%	11.2%
11	11/18/2005	21	1102	8393	0.1	2.05	19.16	3654	191748	43	21113	1.2%	11.0%
12	12/29/2005	41	1143	8352	10.8	5.45	18.67	7134	198882	223	21337	3.1%	10.7%
13	5/31/2008	884	2027	7468	5.2	8.00	14.02	153816	352698	7072	28409	4.6%	8.1%
14	6/1/2008	1	2028	7467	25.9	15.55	14.02	174	352872	16	28424	8.9%	8.1%
15	6/8/2008	7	2035	7460	25.9	25.90	14.06	1218	354090	181	28605	14.9%	8.1%
16	6/12/2008	4	2039	7456	7.3	16.60	14.06	696	354786	66	28672	9.5%	8.1%
17	6/19/2008	7	2046	7449	8.9	8.10	14.04	1218	356004	57	28729	4.7%	8.1%
18	6/25/2008	6	2052	7443	5.52	7.21	14.02	1044	357048	43	28772	4.1%	8.1%
19	7/8/2008	13	2065	7430	8.7	7.11	13.98	2262	359310	92	28864	4.1%	8.0%
20	7/16/2008	8	2073	7422	68.6	38.65	14.07	1392	360702	309	29173	22.2%	8.1%

Note:

[1]EBS: Exposure Budget Slope= ng/m^3-day

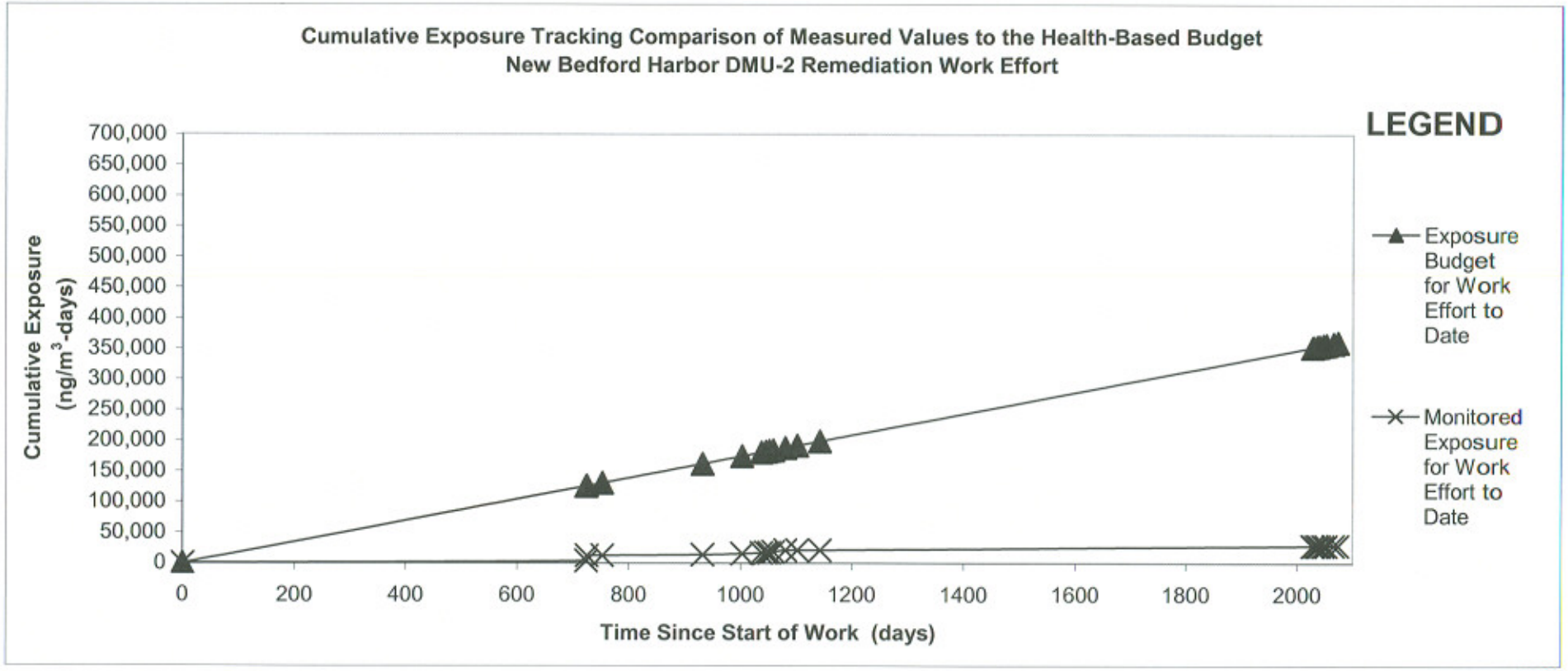
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	55 Aerovox West
Collection Date:	7/16/2008
Measured PCB Concentration (ng/m^3):	68.6
Exposure Budget Expended During This Period:	22.2%
Cumulative Exposure Budget Expended to Date:	8.1%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



SUBSECTION 4.6

Jacobs Solids and Water Balance and PCB Mass Removal Calculations

Table 4.6-1
Jacobs Solids and Water Balance
New Bedford Harbor Superfund Site - 2007 Season

Date	Area C						Area D													Miscellaneous Calculations				
	Slurry In		Sand and Oversize Out				Feed In		Filter Cake Out										Area D Effluent					
	Area C Totalized Slurry Flow		Sand and Oversize Material Transferred from Building C to DDA Storage				Totalized Wastewater Treatment Plant Influent		Filter Cake Production										Totalized Wastewater Treatment Plant Effluent					
	YTD Totalized Slurry Flow (gal)	YTD Totalized Slurry Flow (tons)	YTD Wet Solids (tons)	Average % Dry Solids	YTD Dry Solids (tons)	YTD Water (tons)	Totalized Plant Influent (gal)	Totalized Plant Influent (tons)	Daily Press Drops	YTD Number of Press Drops	YTD Cake Volume (cy)	Filter Cake Density (tons/ cy)	Daily Wet Solids (tons)	YTD Wet Solids (tons)	Daily Average % Dry Solids	Daily Dry Solids (tons)	YTD Dry Solids (tons)	YTD Water (tons)	Totalized Plant Effluent (gal)	Totalized Plant Effluent (tons)	Area C Influent Calculated Average % Dry Solids	Press Influent Calculated Average % Dry Solids	Press Influent Diluted Average % Dry Solids	Sand & Oversize as % of All Dry Solids YTD	Cake as % of All Dry Solids YTD
08/15/08	246,954	1,163	0.00	80%	0	0	284,200	1,216	1	1	8.10	1.22	9.88	9.88	58.14%	5.75	5.75	4.14	143,000	612	0.5	0.8	0.8	0	100
08/18/08	734,695	3,459	0.00	80%	0	0	1,055,100	4,516	20	21	170.10	1.19	192.78	202.66	61.52%	118.60	124.68	77.98	750,000	3,210	3.6	5.9	5.3	0	100
08/19/08	1,380,230	6,498	120.25	80%	96	24	1,712,100	7,328	24	45	364.50	1.22	237.17	439.83	60.01%	142.32	263.94	175.89	1,406,000	6,018	5.5	6.9	6.3	27	73
08/20/08	1,965,163	9,252	120.25	80%	96	24	2,290,400	9,803	36	81	656.10	1.21	352.84	792.67	59.22%	208.95	469.42	323.25	1,978,000	8,466	6.1	8.7	7.9	17	83
08/21/08	2,568,427	12,092	242.91	80%	194	49	2,871,900	12,292	46	127	1,028.70	1.18	439.67	1,232.33	60.38%	265.47	744.08	488.25	2,550,000	10,914	7.8	10.4	9.5	21	79
08/22/08	3,276,135	15,424	242.91	80%	194	49	3,529,000	15,104	41	168	1,360.80	1.19	395.20	1,627.53	59.49%	235.10	968.22	659.31	3,194,000	13,670	7.5	10.7	9.8	17	83
08/25/08	3,947,426	18,584	242.91	80%	194	49	4,142,800	17,731	30	198	1,603.80	1.20	291.60	1,919.13	60.30%	175.83	1,157.24	761.90	3,797,000	16,251	7.3	10.5	9.5	14	86
08/26/08	4,829,590	22,738	468.93	80%	375	94	5,026,270	21,512	25	223	1,806.30	1.19	240.98	2,160.11	58.76%	141.60	1,269.28	890.83	4,630,000	19,816	7.2	9.7	8.8	23	77
08/27/08	5,605,419	26,390	613.79	80%	491	123	5,703,200	24,410	31	254	2,057.40	1.21	303.83	2,463.94	58.58%	177.98	1,443.38	1,020.56	5,333,000	22,825	7.3	9.6	8.7	25	75
08/28/08	6,388,521	30,077	613.79	80%	491	123	6,497,500	27,809	33	287	2,324.70	1.22	326.11	2,790.05	58.91%	192.11	1,643.62	1,146.43	6,060,000	25,937	7.1	9.5	8.6	23	77
08/29/08	6,724,848	31,661	613.79	80%	491	123	6,845,900	29,300	16	303	2,454.30	1.21	156.82	2,946.86	60.09%	94.23	1,770.77	1,176.09	6,409,000	27,431	7.1	9.5	8.7	22	78
09/02/08	7,362,505	34,663	759.30	80%	607	152	7,507,300	32,131	34	337	2,729.70	1.18	324.97	3,271.83	59.28%	192.64	1,939.54	1,332.29	7,004,000	29,977	7.3	9.7	8.8	24	76
09/03/08	8,115,100	38,206	759.30	80%	607	152	8,252,200	35,319	36	373	3,021.30	1.21	352.84	3,624.67	58.96%	208.03	2,137.10	1,487.56	7,730,000	33,084	7.2	9.7	8.8	22	78
09/04/08	8,789,115	41,379	872.08	80%	698	174	8,882,300	38,016	35	408	3,304.80	1.18	334.53	3,959.20	59.18%	197.97	2,343.05	1,616.15	8,352,000	35,747	7.3	9.8	8.9	23	77
09/05/08	9,496,563	44,710	872.08	80%	698	174	9,442,400	40,413	41	449	3,636.90	1.19	395.20	4,354.40	60.16%	237.75	2,619.61	1,734.79	8,904,000	38,109	7.4	9.9	9.1	21	79
09/08/08	10,138,577	47,732	999.20	80%	799	200	10,068,200	43,092	40	489	3,960.90	1.10	356.40	4,710.80	58.88%	209.85	2,773.72	1,937.08	9,544,000	40,848	7.5	10.1	9.2	22	78
09/09/08	10,754,125	50,630	999.20	80%	799	200	10,610,800	45,414	36	525	4,252.50	1.10	320.76	5,031.56	59.38%	190.47	2,987.74	2,043.82	10,053,000	43,027	7.5	10.1	9.2	21	79
09/10/08	11,471,980	54,010	1,152.88	80%	922	231	11,331,400	48,498	44	569	4,608.90	1.10	392.04	5,423.60	58.60%	229.74	3,178.23	2,245.37	10,739,000	45,963	7.6	10.3	9.4	22	78
09/11/08	12,076,805	56,858	1,152.88	80%	922	231	11,924,300	51,036	55	624	5,054.40	1.10	490.05	5,913.65	58.72%	287.76	3,472.49	2,441.15	11,326,000	48,475	7.7	10.6	9.7	21	79
09/12/08	12,638,302	59,501	1,279.95	80%	1,024	256	12,497,100	53,488	42	666	5,394.60	1.10	374.22	6,287.87	59.77%	223.67	3,758.26	2,529.61	11,891,000	50,893	8.0	10.8	9.8	21	79
09/15/08	13,287,043	62,555	1,279.95	80%	1,024	256	13,159,100	56,321	39	705	5,710.50	1.10	347.49	6,635.36	60.63%	210.68	4,023.02	2,612.34	12,425,000	53,179	8.1	10.8	9.9	20	80
09/16/08	13,655,575	64,290	1,402.50	80%	1,122	281	13,254,800	56,731	6	711	5,759.10	1.10	53.46	6,688.82	61.08%	32.65	4,085.53	2,603.29	12,568,000	53,791	8.1	10.6	9.7	22	78
09/17/08	13,655,575	64,290	1,402.50	80%	1,122	281	13,254,800	56,731	0	711	5,759.10	na	na	6,688.82	na	na	4,085.53	2,603.29	12,568,000	53,791	8.1	10.6	9.7	22	78
09/18/08	13,655,575	64,290	1,402.50	80%	1,122	281	13,254,800	56,731	0	711	5,759.10	na	na	6,688.82	na	na	4,085.53	2,603.29	12,568,000	53,791	8.1	10.6	9.7	22	78
09/19/08	13,655,575	64,290	1,456.38	80%	1,165	291	13,254,800	56,731	0	711	5,759.10	na	na	6,688.82	na	na	4,085.53	2,603.29	12,568,000	53,791	8.2	10.6	9.7	22	78
09/22/08	14,331,151	67,471	1,456.38	80%	1,165	291	14,011,900	59,971	34	745	6,034.50	1.10	302.94	6,991.76	60.31%	182.70	4,216.73	2,775.03	13,256,000	56,736	8.0	10.6	9.7	22	78
09/23/08	15,088,397	71,036	1,456.38	80%	1,165	291	14,735,900	63,070	42	787	6,374.70	1.10	374.22	7,365.98	59.86%	224.01	4,409.27	2,956.70	13,977,000	59,822	7.8	10.6	9.7	21	79
09/24/08	15,850,747	74,625	1,651.43	80%	1,321	330	15,470,900	66,215	41	828	6,706.80	1.10	365.31	7,731.29	59.28%	216.56	4,583.11	3,148.18	14,700,000	62,916	7.9	10.6	9.7	22	78
09/25/08	16,589,244	78,102	1,651.43	80%	1,321	330	16,175,900	69,233	44	872	7,063.20	1.20	427.68	8,158.97	58.56%	250.45	4,777.89	3,381.08	15,391,000	65,873	7.8	10.7	9.7	22	78
09/26/08	17,217,298	81,059	1,714.84	80%	1,372	343	16,844,500	72,094	41	913	7,395.30	1.20	398.52	8,557.49	59.80%	238.31	5,117.38	3,440.11	16,048,000	68,685	8.0	10.8	9.8	21	79
09/29/08	17,896,007	84,254	1,714.84	80%	1,372	343	17,512,300	74,953	33	946	7,662.60	1.20	320.76	8,878.25	61.36%	196.82	5,447.69	3,430.56	16,685,000	71,412	8.1	10.8	9.8	20	80
09/30/08	18,573,868	87,446	1,714.84	80%	1,372	343	18,238,800	78,062	37	983	7,962.30	1.20	359.64	9,237.89	60.70%	218.30	5,607.40	3,630.49	17,400,000	74,472	8.0	10.8	9.8	20	80
10/01/08	19,338,502	91,046	1,931.68	80%	1,545	386	18,977,900	81,225	31	1014	8,213.40	1.20	301.32	9,539.21	60.65%	182.75	5,785.53	3,753.68	18,131,000	77,601	8.1	10.7	9.8	21	79
10/02/08	19,996,993	94,146	1,931.68	80%	1,545	386	19,652,100	84,111	37	1051	8,513.10	1.20	359.64	9,898.85	59.47%	213.88	5,886.84	4,012.00	18,796,000	80,447	7.9	10.7	9.8	21	79
10/03/08	20,570,989	96,848	1,931.68	80%	1,545	386	20,232,100	86,593	39	1090	8,829.00	1.20	379.08	10,277.93	60.63%	229.84	6,231.51	4,046.42	19,362,000	82,869	8.0	10.8	9.9	20	80
10/06/08	21,012,002	98,925	2,107.51	80%	1,686	422	20,618,120	88,246	26	1116	9,039.60	1.20	252.72	10,530.65	59.48%	150.32	6,263.63	4,267.02	19,768,000	84,607	8.0	10.9	9.9	21	79
10/07/08	21,583,629	101,616	2,107.51	80%	1,686	422	21,180,120	90,651	36	1152	9,331.20	1.20	349.92	10,880.57	57.85%	202.43	6,294.41	4,586.16	20,321,000	86,974	7.9	10.9	10.0	21	79
10/08/08	22,141,230	104,241	2,107.51	80%	1,686	422	21,726,120	92,988	39	1191	9,647.10	1.20	379.08	11,259.65	58.82%	222.97	6,622.92	4,636.72	20,862,000	89,289	8.0	11.0	10.1	20	80
10/09/08	22,691,284	106,831	2,107.51	80%	1,686	422	22,273,120	95,329	38	1229	9,954.90	1.10	338.58	11,598.23	58.20%	197.05	6,750.17	4,848.06	21,404,000	91,609	7.9	11.1	10.1	20	80
10/10/08	23,184,573	109,153	2,107.51	80%	1,686	422	22,787,720	97,531	37	1266	10,254.60	1.15	344.66	11,942.88	59.61%	205.45	7,119.15	4,823.73	21,906,000	93,758	8.1	11.2	10.2	19	81
10/13/08	23,778,221	111,948	2,346.17	80%	1,877	469	23,260,840	99,556	36	1302	10,546.20	1.15	335.34	12,278.22	60.00%	201.20	7,366.93	4,911.29	22,335,000	95,594	8.3	11.2	10.2	20	80
10/14/08	24,361,115	114,692	2,346.17	80%	1,877	469	23,839,840	102,035	33	1335	10,813.50	1.15	307.40	12,585.62	58.64%	180.26	7,380.21	5,205.41	22,902,000	98,021	8.1	11.2	10.2	20	80
10/15/08	24,912,753	117,289	2,346.17	80%	1,877	469	24,393,840	104,406	30	1365	11,056.50	1.15	279.45	12,865.07	57.55%	160.82	7,403.85	5,461.22	23,446,000	100,349	7.9	11.2	10.2	20	80
10/16/08	25,388,486	119,529	2,538.33	80%	2,031	508	24,865,740	106,425	30	1395	11,299.50	1.15	279.45	13,144.52	58.45%	163.34	7,682.97	5,461.55	23,923,000	102,390	8.1	11.2	10.2	21	79
10/17/08	25,916,857	122,017	2,538.33	80%	2,031	508	25,403,240	108,726	30	1425	11,542.50	1.15	279.45	13,423.97	56.40%	157.61	7,571.12	5,852.85	24,448,000	104,637	7.9	11.2	10.2	21	79
10/20/08	26,422,491	124,397	2,668.97	80%	2,135	534	25,847,940	110,629	30	1455	11,785.50	1.15	279.45	13,703.42	57.69%	161.21	7,905.50	5,797.92	24,907,000	106,602	8.1	11.3	10.3	21	79
10/21/08	26,814,067	126,241	2,795.02	80%	2,236	559	26,271,040	112,440	31	1486	12,036.60	1.15	288.77	13,992.18	57.88%	167.14	8,098.68	5,893.51	25,328,000	108,404	8.2	11.3	10.3	22	78
															Average of Daily Average Percent Solids						Seasonal Percent Dry Solids				
															59.35%						7.5	10.2	9.3		
																								Seasonal Percentage of Dry Solids	
																								21.6	78.4

Table 4.6-1
Jacobs Solids and Water Balance
New Bedford Harbor Superfund Site - 2007 Season

Notes

Notes [a] through [f] estimate the overall reduction in dry solids between the Area C influent and the Area D press feed tanks.

a.	Average slurry flow =	654,002	gal/day	=				3,270,008	gal/wk	
b.	Area C Dilution Water Flows [floor wash water]									
	Water meter [hi & lo flows] was 566941 gal from 7-23-08 to 10-24-08 =	69,139	gal/wk, less 2,200 gal/wk sanitary us	548,901	total	=	66,939	gal/wk	
c.	Area D Dilution Water Flows									
	Process water meter [hi and lo flows] was 1,900,329 gal from 7-17-08 to 11-20-08, estimated water use including unmetered water =	2650775	gal	323,265	gal/wk				
1.	Polymer make-up water rate is 1.5 gpm/feed pump, six pumps, = 9 gpm, 12 hrs/day, 5 days/wk					=	32,400	gal/wk	
2.	Sand filter backwash water use is 30,000 gal/vessel/wk, for four vessels					=	120,000	gal/wk	
3.	Pipeline flush water included in Area C slurry inflow =					=	0	gal/wk	
4.	Estimated filtrate monitoring water is 5 gpm/press, six presses, 12 hrs/day, five days/wk =					=	108,000	gal/wk	
5.	Wash water is the difference between process meter flow minus the polymer make-up water, backwash water and filtrate monitoring water					=	62,865	gal/wk	
6.	**Total polymer, wash, backwash, flush water, filtrate monitoring water (Area C & D) =**					=	**390,204**	**gal/wk**	

d. Solids Dilution due to process water

1.	The solids dilution ratio from Area C influent to Area D influent is (avg weekly slurry flow) / (avg weekly slurry flow+ avg weekly Area C wash water)	=	0.98	2	% reduction of solids concentration from Area C influent to Area D influent
2.	The solids dilution ratio from Area D influent to Area D effluent is (avg weekly slurry flow + Area C wash water) / (avg weekly slurry + Area C wash water + avg weekly Area D process water usage)	=	0.91	9	% reduction of solids concentration due to Area D dilution (all sources listed)
3.	The total solids dilution ratio is (avg weekly slurry flow) / (average weekly slurry flow + avg weekly Area C wash water + avg weekly Area D process water)	=	0.89	11	% reduction of solids concentration from Area C influent to Area D effluent.

Process Inputs	tons	Process Outputs	tons
Slurry into Area C	126241	Desander Material (wet)	2795
Area C Process Water	2289	Filter Cake (wet)	13992
Area D Process Water	11058	WWTP Effluent	108404
Ferric Sulfate	50		
Polymer	107		
Total	**139745**	**Total**	**125191**

Process Inputs to Process Outputs Percent Difference	**11.0%**

e. Press Influent Calculated, Average % Dry Solids column - These percentages are derived from mass balance calculations by Jacobs. These calculations used tonnages of screened material, filter cake, and dredge slurry as measured and estimated throughout the year.
f. Press Influent Diluted, Average % Dry Solid column - These percentages are derived from % solids calculated in the previous column with a dilution factor applied as presented in the calculations below the main body of the table.
g. Area C sand and oversize weights obtained from weigh tickets; Area D filter cake weights calculated.
h. Filter cake % solids and density values provided by SES as measured during production.
h. Gallons per week calculations assume a 5 day work week, 42 working dredge days.

Notes:

avg = average
cy = cubic yards
DDA = Debris Disposal Area
gal = gallon
gpm = gallons per minute
hrs = hours
wk = week
YTD = year to date

Table 4.6-2
Pre-Season and Post-Season Production Quantities
New Bedford Harbor Superfund Site - 2008 Season

Pre-Season Production Quantities (Theoretical) [1]								
Amount Insitu Material Dredged	15,568	cy	158,519	wet tons	7,609	dry tons	4.8%	solids
Sand and Oversize Removed at Area C			1,375	wet tons	1,141	dry tons	15%	of total solids
Feed % Solids	5%						234	tons of water in sand & debris
Filter Cake Produced			10,603	wet tons	6,468	dry tons	85%	of total solids
Filter Cake % Solids	61%						4,135	tons of water in filter cake
Filtrate Effluent	35,160,383	gal						

Post-Season Production Quantities (Actual)								
Amount Insitu Material Dredged	19,898	cy	124,420	wet tons[2]	10,335	dry tons	8.3%	solids (as dredged)
Sand and Oversize Removed at Area C			2,795	wet tons[3]	2,236	dry tons[5]	22%	of total solids
Feed % Solids	6.60	%					559	tons of water in sand & debris
Filter Cake Produced			13,992	wet tons[4]	8,099	dry tons[5]	78%	of total solids
Filter Cake % Solids[6]	59.37	%					5,893	tons of water in filter cake
Filtrate Effluent	25,328,000	gal						

Notes:
[1] Theoretical Quantities taken from 2008 Execution Plan, Mass Balance Calculations, Attachment B . Adjusted for 42 days of actual dredging.
[2] Tons of in-situ material dredged (Sec. 4.7) has 1821 tons of water booster pump contribution removed, New Bedford Harbor Dredge Season Water Usage, Table 4.6-3.
[3] Wet tonnage of sand and oversize mixture based on actual weigh tickets, Sand and Oversize Screenings Transport Log - Area C, Table 4.3-1.
[4] Wet tonnage of filter cake from JE Solids and Water Balance, Table 4.6-1.
[5] Dry tonnage of dredged solids calculated on JE Solids and Water Balance, Table 4.6-1.
[6] Average filter cake % solids value from JE Solids and Water Balance, Table 4.6-1.
cy = cubic yards
gal = gallons

Table 4.6-3
New Bedford Harbor Dredge Season Water Usage
New Bedford Harbor Superfund Site - 2008 Season

2008 Metered Water Usage				Gallons	Tons	Area Total (tons)	
Location	Pre-Season Meter (cf)	Post Season Meter (cf)	Total Usage (cf)				
Area C1	285100	316700	31600	236350	986	2365	
Area C2	302300	346500	44200	330591	1379		
Manomet St	NA	NA	58378	436633	1821	1821	
Area D1 process	686900	900300	213400	1596111	6658	7927	
Area D2 process	59400	100074	40674	304218	1269		
			388252	2903903		12113	Total metered water added

Note:
During the 2008 dredge season a significant amount of un-metered water was used in processing at the Area D Dewatering Facility.
To facilitate more reliable mass balance calculations an average rate of water use has been estimated using 2006 & 2007 data,
and used in the Solids and Water Balance calcualtions (Table 4.6-1).

Year	Area D Water Use (gallons)	Days of Processing	Gallons Per Day	Average Gallons per Day	Estimated 2008 Area D Process Water (gallons)	Estimated 2008 Area D Process Water (tons)
2006	2803366	43	65195	63114	2650775	11058
2007	2746477	45	61033			

Notes:
1 gallon = 0.1337 cubic feet
1 cf fresh water = 62.40 pounds at 50°F. Source: USCG CHRIS
2008 dredge season = 42 days
cf = cubic feet
NA = Booster pump station water not metered; 2007 daily usage rate used to estimate 2008 usage.

Table 4.6-4
PCB Mass Removed for 2008 Season Hydraulic Dredging
New Bedford Harbor Superfund Site - 2008 Season

2008 Filter Cake		
Location ID	**Total Aroclors (mg/Kg)**	**% Solids**
V2-082008	25.0	60
V2-082508	34.0	59
V2-082608	49.0	58
V2-082708	79.0	59
V2-082808	81.0	56
V2-090208	56.0	57
V2-090408	39.0	53
V2-090508	52.0	56
V2-090908	48.0	57
V2-091008	35.0	58
V2-091108	55.0	57
V2-091508	67.0	58
V2-092208	43.0	59
V2-092308	44.0	60
V2-092508	32.0	57
V2-092608	39.0	58
V2-093008	32.0	59
V2-100108	44.0	60
V2-100208	28.0	58
V2-100608	27.0	59
V2-100808	23.0	56
V2-100908	38.0	58
V2-101008	21.0	55
V2-101408	24.0	58
V2-101608	34.0	55
V2-102008	61.0	56
V2-102208	43.0	57
Average	42.7	58

Total Cake	13992	wet tons
Total Cake	8099	dry tons
Total Cake	7347289	dry kg
Calculated Aroclor Mass Removed	310	kg
Calculated Aroclor Mass Removed	0.34	tons

2008 Sand and Oversize Cake		
Location ID	**Total Aroclors (mg/Kg)**	**% Solids**
V1-081908	3.8	87
V1-082008	4.0	83
V1-082508	18.1	84
V1-082608	3.5	89
V1-082708	6.5	86
V1-082808	5.6	86
V1-090308	5.7	80
V1-090508	8.6	80
V1-090908	6.9	83
V1-091108	7.0	79
V1-091608	3.4	83
V1-092308	3.1	85
V1-092508	7.8	78
V1-092908	12.6	86
V1-100308	10.2	82
V1-100908	7.8	80
V1-101008	8.9	78
V1-101508	10.0	78
V1-101708	8.3	86
V1-102108	8.1	82
Average	7.5	83

Total Sand	2795	wet tons
Total Sand	2313	dry tons
Total Sand	2098209	dry kg
Calculated Aroclor Mass Removed	16	kg
Calculated Aroclor Mass Removed	0.017	tons

Notes:
Wet weight of material taken from 2008 JE Solids and Water Balance, Table 4-6.1
kg = kilograms
mg/kg = miligrams per kilogram

Table 4.6-5
Cumulative PCB Mass Removed for 2004-2008
New Bedford Harbor Superfund Site - 2008 Season

Year	Material	Estimated Total Aroclor Mass Removed (kg)
2004	Filter Cake	3000
	Sand/Oversize	166
2005	Filter Cake	7830
	Sand/Oversize	706
2006	Filter Cake	8076
	Sand/Oversize	959
2007	Filter Cake	1385
	Sand/Oversize	69
2008	Filter Cake	310
	Sand/Oversize	16
	Aerovox	10042

2004-2007 Estimated Total Aroclor Mass Removed in Solid Materials	22191	kg
	24.5	tons

2008 Estimated Total Aroclor Mass Removed in Solid Materials	10368	kg
	11.5	tons

2004-2008 Estimated Total Aroclor Mass Removed in Solid Materials	32559	kg
	36.0	tons

Notes:
2004-2007 data source: 2007 Dredge Season Data Submittal, ACE-J23-35BG0602-M17-001.

kg = kilograms

2008 Estimated Aroclor mass removed includes hydraulic and mechanical dredging activities.

SUBSECTION 4.7

Sevenson Operational Monitoring Data

Section 4.7
Sevenson Opeerational Monitoring Data
New Bedford Harbor Superfund Site - 2008 Season

							Influent		Effluent					Building C	Building D						
DMU Area	Day # Prod.	Date	Daily Dredged Gallons	Dredged Gallons to Date	Sludge Gallons/Day	Total Sludge Gallons to Date	Total Gal Water/Day	Total Gal Water to Date	Gallons of Water Discharged	Total Gallons of Water Discharged	Average WWT GPM/Day	DMU Estimated In-Situ CY Dredged	DMU In-Situ CY to Date	Average % Solids Dredged DMU	Average % Solids Press Feed	Average % Solids Filter Cake	# Press On Line	Hours of Operation	# Press Drops	Total Drops to Date	Avg. Cycle Time (min)
1	Shakedown-3	08/15/08	246,954	246,954	40,171	40,171	284,200	284,200	143,000	143,000	1,578.89	54	54	3.45%	3.74%	58.14%	6	3	1	1	1080
1	1	08/18/08	487,741	734,695	794,722	834,893	770,900	1,055,100	607,000	750,000	1,070.69	299	353	10.66%	8.21%	61.52%	6	12	20	21	216
1	2	08/19/08	645,535	1,380,230	655,375	1,490,268	657,000	1,712,100	656,000	1,406,000	912.50	346	699	9.25%	7.52%	60.01%	6	12	24	45	180
1	3	08/20/08	584,933	1,965,163	603,602	2,093,870	578,300	2,290,400	572,000	1,978,000	803.19	516	1,215	19.46%	11.54%	59.22%	6	12	36	81	120
1	4	08/21/08	603,264	2,568,427	656,753	2,750,623	581,500	2,871,900	572,000	2,550,000	807.64	711	1,926	13.52%	11.69%	60.38%	6	12	46	127	94
1	5	08/22/08	707,708	3,276,135	764,536	3,515,159	657,100	3,529,000	644,000	3,194,000	912.64	613	2,539	17.50%	9.05%	59.49%	6	12	41	168	105
1	6	08/25/08	671,291	3,947,426	849,315	4,364,474	613,800	4,142,800	603,000	3,797,000	852.50	457	2,996	12.25%	7.75%	60.30%	6	12	30	198	144
1	7	08/26/08	882,164	4,829,590	899,747	5,264,221	883,470	5,026,270	833,000	4,630,000	1,227.04	377	3,373	6.65%	6.66%	58.76%	6	12	25	223	173
1	8	08/27/08	775,829	5,605,419	760,224	6,024,445	676,930	5,703,200	703,000	5,333,000	940.18	470	3,843	8.83%	8.65%	58.58%	6	12	31	254	139
1	9	08/28/08	783,102	6,388,521	867,832	6,892,277	794,300	6,497,500	727,000	6,060,000	1,103.19	502	4,345	7.44%	9.02%	58.91%	6	12	33	287	131
1	9.5	08/29/08	336,327	6,724,848	353,039	7,245,316	348,400	6,845,900	349,000	6,409,000	483.89	242	4,587	9.02%	9.20%	60.09%	6	6	16	303	135
1	10.5	09/02/08	637,657	7,362,505	739,728	7,985,044	661,400	7,507,300	595,000	7,004,000	918.61	498	5,085	10.81%	10.28%	59.28%	6	12	34	337	127
1	11.5	09/03/08	752,595	8,115,100	785,612	8,770,656	744,900	8,252,200	726,000	7,730,000	1,035	530	5,615	11.69%	11.14%	58.96%	6	12	36	373	120
1	12.5	09/04/08	674,015	8,789,115	727,651	9,498,307	630,100	8,882,300	622,000	8,352,000	875	523	6,138	12.31%	9.34%	59.18%	6	12	35	408	123
1	13.5	09/05/08	707,448	9,496,563	630,122	10,128,429	560,100	9,442,400	552,000	8,904,000	778	608	6,746	11.46%	9.41%	60.16%	6	12	41	449	105
1	14.5	09/08/08	642,014	10,138,577	943,877	11,072,306	625,800	10,068,200	640,000	9,544,000	869	530	7,276	13.65%	11.38%	58.88%	6	12	40	489	108
1	15.5	09/09/08	615,548	10,754,125	616,935	11,689,241	542,600	10,610,800	509,000	10,053,000	754	481	7,757	11.04%	7.57%	59.38%	6	12	36	525	120
1	16.5	09/10/08	717,855	11,471,980	800,367	12,489,608	720,600	11,331,400	686,000	10,739,000	1,001	581	8,338	11.08%	10.10%	58.60%	6	12	44	569	98
1	17.5	09/11/08	604,825	12,076,805	683,543	13,173,151	592,900	11,924,300	587,000	11,326,000	823	712	9,050	14.22%	13.02%	58.72%	6	12	55	624	79
1	18.5	09/12/08	561,497	12,638,302	568,156	13,741,307	572,800	12,497,100	565,000	11,891,000	795.56	557	9,607	9.89%	10.44%	59.77%	6	12	42	666	103
1	19.5	09/15/08	648,741	13,287,043	803,454	14,544,761	662,000	13,159,100	534,000	12,425,000	919	524	10,131	15.58%	9.12%	60.63%	6	12	39	705	111
1	20.5	09/16/08	368,532	13,655,575	111,654	14,656,415	95,700	13,254,800	143,000	12,568,000	133	81	10,212	12.58%	9.94%	61.08%	6	2	6	711	120
1	21.5	09/17/08	0	13,655,575	0	14,656,415	0	13,254,800	0	12,568,000	0	0	10,212				0	0	0	711	
1	22.5	09/18/08	0	13,655,575	0	14,656,415	0	13,254,800	0	12,568,000	0	0	10,212				0	0	0	711	
1	23.5	09/19/08	0	13,655,575	0	14,656,415	0	13,254,800	0	12,568,000	0	0	10,212				0	0	0	711	
1	24.5	09/22/08	675,576	14,331,151	866,953	15,523,368	757,100	14,011,900	688,000	13,256,000	1,052	457	10,669	8.43%	11.88%	60.31%	6	12	34	745	127
1	25.5	09/23/08	757,246	15,088,397	800,910	16,324,278	724,000	14,735,900	721,000	13,977,000	1,006	536	11,205	10.21%	9.28%	59.86%	6	12	42	787	103
1	26.5	09/24/08	762,350	15,850,747	827,049	17,151,327	735,000	15,470,900	723,000	14,700,000	1,021	520	11,725	9.50%	8.68%	59.28%	6	12	41	828	105
1	27.5	09/25/08	738,497	16,589,244	782,282	17,933,609	705,000	16,175,900	691,000	15,391,000	979	551	12,276	12.66%	9.42%	58.56%	6	12	44	872	98
1	28.5	09/26/08	628,054	17,217,298	770,854	18,704,463	668,600	16,844,500	657,000	16,048,000	929	525	12,801	9.29%	8.72%	59.80%	6	12	41	913	105
1	29.5	09/29/08	678,709	17,896,007	930,540	19,635,003	667,800	17,512,300	637,000	16,685,000	928	408	13,209	12.20%	9.67%	61.36%	6	12	33	946	131
1	30.5	09/30/08	677,861	18,573,868	836,436	20,471,439	726,500	18,238,800	715,000	17,400,000	1,009	452	13,661	9.92%	8.28%	60.70%	6	12	37	983	117
1	31.5	10/01/08	764,634	19,338,502	836,064	21,307,503	739,100	18,977,900	731,000	18,131,000	1,027	323	13,984	9.62%	6.99%	60.65%	5	12	31	1014	137
1	32.5	10/02/08	658,491	19,996,993	758,287	22,065,790	674,200	19,652,100	665,000	18,796,000	936	443	14,427	8.50%	8.29%	59.47%	6	12	37	1051	117
1	33.5	10/03/08	573,996	20,570,989	675,939	22,741,729	580,000	20,232,100	566,000	19,362,000	806	476	14,903	20.15%	9.93%	60.63%	6	12	39	1090	111
1	34.5	10/06/08	441,013	21,012,002	666,708	23,408,437	386,020	20,618,120	406000	19,768,000	536	234	15,137	12.40%	7.92%	59.48%	5	12	26	1116	166
1	35.5	10/07/08	571,627	21,583,629	643,950	24,052,387	562,000	21,180,120	553,000	20,321,000	781	420	15,557	11.37%	9.15%	57.85%	6	12	36	1152	120
1	36.5	10/08/08	557,601	22,141,230	627,632	24,680,019	546,000	21,726,120	541,000	20,862,000	758	482	16,039	10.29%	10.95%	58.82%	6	12	39	1191	111
1	37.5	10/09/08	550,054	22,691,284	596,137	25,276,156	547,000	22,273,120	542,000	21,404,000	760	464	16,503	14.49%	10.63%	58.20%	6	12	38	1229	114
1	38.5	10/10/08	493,289	23,184,573	480,999	25,757,155	514,600	22,787,720	502,000	21,906,000	715	463	16,966	14.43%	11.12%	59.61%	6	12	37	1266	117
1	39.5	10/13/08	593,648	23,778,221	1,046,300	26,803,455	473,120	23,260,840	429,000	22,335,000	657	454	17,420	11.88%	9.40%	60.00%	6	12	36	1302	120
1	40.5	10/14/08	582,894	24,361,115	531,573	27,335,028	579,000	23,839,840	567,000	22,902,000	804	407	17,827	8.17%	8.92%	58.64%	6	12	33	1335	131
1	41.5	10/15/08	551,638	24,912,753	623,393	27,958,421	554,000	24,393,840	544,000	23,446,000	769	363	18,190	10.94%	7.82%	57.55%	6	12	30	1365	144
1	42.5	10/16/08	475,733	25,388,486	623,393	28,581,814	471,900	24,865,740	477,000	23,923,000	655	374	18,564	7.55%	7.56%	58.45%	6	12	30	1395	144
1	43.5	10/17/08	528,371	25,916,857	553,251	29,135,065	537,500	25,403,240	525,000	24,448,000	747	356	18,920	10.01%	7.85%	56.40%	6	12	30	1425	144
1	44.5	10/20/08	505,634	26,422,491	751,635	29,886,700	444,700	25,847,940	459,000	24,907,000	618	364	19,284	13.81%	8.55%	57.69%	6	12	30	1455	144
1	45	10/21/08	391,576	26,814,067	494,993	30,381,693	423,100	26,271,040	421,000	25,328,000	588	375	19,659	11.21%	9.02%	57.88%	6	10	31	1486	117
		TOTALS	26,814,067		30,381,693		26,271,040		25,328,000			19,659							1486		
		AVERAGES	647,978		740,037		633,825		614,268			478		11.53%	9.33%	59.37%			36		124.99
		Broken Pipeline Repair												**Contract Target :**		**60%**					

Section 4.7
Sevenson Opeerational Monitoring Data
New Bedford Harbor Superfund Site - 2008 Season

						Build C	Build C	CY x 1.9	Cummulative			Build C Tons	Build C	Area D	Area D	Area D	Area D	Area D	Area D	Pumps	Area D
Date	Daily CY Filter Cake	CY Filter Cake to Date	Tons/C.Y of Filter Cake	Daily Tons of Filter Cake	Tons of Filter Cake to Date	Estimated Daily Sand/Mix CY	Estimated Sand/Mix to Date CY	Daily Tons of Sand/Mix	Total Tons of Sand/Mix	Daily Tons of Filter Cake/Sand	Tons of Filter Cake/Sand to Date	Total Tons Sand/Mix Removed	Daily Truckloads Sand/Mix Removed	No. of Rail Cars	Daily Tonnage of Rail Cars	Total Tonnage of Rail Cars	Average Tons/Load of Filter Cake	Total Tons of Filter Cake to Date	Remaining Tons of Filter Cake to Date	Ferric Sulfate in Gallons	Polymer useage in gallons
08/15/08	8.10	8.10	1.22	9.88	9.88	29	29.0	55.1	55.1	65.0	65.0	0.00	0	0	0.00	0	0.0	0.00	9.9	924.00	35.00
08/18/08	162.00	170.10	1.19	192.78	202.66	44	73.0	83.6	138.7	276.4	341.4	0.00	0	0	0.00	0	0.0	0.00	202.7	294.00	300.00
08/19/08	194.40	364.50	1.22	237.17	439.83	35	108.0	66.5	205.2	303.7	645.0	120.25	6	2	195.95	196.0	98.0	195.95	243.9	98.00	435.00
08/20/08	291.60	656.10	1.21	352.84	792.67	29	137.0	55.1	260.3	407.9	1053.0	0.00	0	3	294.55	490.5	98.2	490.50	302.2	294.00	420.00
08/21/08	372.60	1,028.70	1.18	439.67	1,232.33	32	169.0	60.8	321.1	500.5	1553.4	122.66	6	4	392.78	883.3	98.2	883.28	349.1	147.00	630.00
08/22/08	332.10	1,360.80	1.19	395.20	1,627.53	23	192.0	43.7	364.8	438.9	1992.3	0.00	0	5	489.29	1372.6	97.9	1,372.57	255.0	147.00	663.75
08/25/08	243.00	1,603.80	1.20	291.60	1,919.13	63	255.0	119.7	484.5	411.3	2403.6	0.00	0	4	392.71	1765.3	98.2	1,765.28	153.9	196.00	259.00
08/26/08	202.50	1,806.30	1.19	240.98	2,160.11	61	316.0	115.9	600.4	356.9	2760.5	226.00	10	2	197.15	1962.4	98.6	1,962.43	197.7	245.00	315.00
08/27/08	251.10	2,057.40	1.21	303.83	2,463.94	40	356.0	76.0	676.4	379.8	3140.3	144.86	6	2	194.38	2156.8	97.2	2,156.81	307.1	245.00	363.75
08/28/08	267.30	2,324.70	1.22	326.11	2,790.05	34	390.0	64.6	741.0	390.7	3531.0	0.00	0	4	392.99	2549.8	98.2	2,549.80	240.2	98.00	731.00
08/29/08	129.60	2,454.30	1.21	156.82	2,946.86	9	399.0	17.1	758.1	173.9	3705.0	0.00	0	2	196.08	2745.9	98.0	2,745.88	201.0	49.00	210.00
09/02/08	275.40	2,729.70	1.18	324.97	3,271.83	27	426.0	51.3	809.4	376.3	4081.2	145.00	7	3	294.06	3039.9	98.0	3,039.94	231.9	147.00	581.25
09/03/08	291.60	3,021.30	1.21	352.84	3,624.67	21	447.0	39.9	849.3	392.7	4474.0	0.00	0	2	196.25	3236.2	98.1	3,236.19	388.5	147.00	483.75
09/04/08	283.50	3,304.80	1.18	334.53	3,959.20	34	481.0	64.6	913.9	399.1	4873.1	113.00	5	3	295.38	3531.6	98.5	3,531.57	427.6	98.00	555.00
09/05/08	332.10	3,636.90	1.19	395.20	4,354.40	35	516.0	66.5	980.4	461.7	5334.8	0.00	0	3	295.38	3827.0	98.5	3,826.95	527.4	98.00	551.25
09/08/08	324.00	3,960.90	1.10	356.40	4,710.80	50	566.0	95.0	1075.4	451.4	5786.2	127.00	6	2	196.55	4023.5	98.3	4,023.50	687.3	294.00	630.00
09/09/08	291.60	4,252.50	1.10	320.76	5,031.56	40	606.0	76.0	1151.4	396.8	6183.0	0.00	0	5	491.79	4515.3	98.4	4,515.29	516.3	147.00	540.00
09/10/08	356.40	4,608.90	1.10	392.04	5,423.60	40	646.0	76.0	1227.4	468.0	6651.0	153.66	7	5	491.41	5006.7	98.3	5,006.70	416.9	196.00	787.50
09/11/08	445.50	5,054.40	1.10	490.05	5,913.65	30	676.0	57.0	1284.4	547.1	7198.0	0.00	0	4	393.37	5400.1	98.3	5,400.07	513.6	245.00	806.25
09/12/08	340.20	5,394.60	1.10	374.22	6,287.87	30	706.0	57.0	1341.4	431.2	7629.3	126.57	5	3	293.91	5694.0	98.0	5,693.98	593.9	98.00	716.25
09/15/08	315.90	5,710.50	1.10	347.49	6,635.36	35	741.0	66.5	1407.9	414.0	8043.3	0.00	0	3	293.46	5987.4	97.8	5,987.44	647.9	196.00	588.75
09/16/08	48.60	5,759.10	1.10	53.46	6,688.82	4	745.0	7.6	1415.5	61.1	8104.3	0.00	0	1	98.33	6085.8	98.3	6,085.77	603.0	98.00	127.50
09/17/08	0.00	5,759.10		0.00	6,688.82	0	745.0	0.0	1415.5	0.0	8104.3	0.00	0	2	196.91	6282.7	98.5	6,282.68	406.1	0.00	0.00
09/18/08	0.00	5,759.10		0.00	6,688.82	0	745.0	0.0	1415.5	0.0	8104.3	0.00	0	1	98.68	6381.4	98.7	6,381.36	307.5	0.00	0.00
09/19/08	0.00	5,759.10		0.00	6,688.82	0	745.0	0.0	1415.5	0.0	8104.3	53.88	3	1	99.20	6480.6	99.2	6,480.56	208.3	0.00	0.00
09/22/08	275.40	6,034.50	1.10	302.94	6,991.76	20	765.0	38.0	1453.5	340.9	8445.3	0.00	0	3	295.9	6776.4	98.6	6,776.41	215.3	196.00	663.75
09/23/08	340.20	6,374.70	1.10	374.22	7,365.98	42	807.0	79.8	1533.3	454.0	8899.3	0.00	0	5	485.41	7261.8	97.1	7,261.82	104.2	245.00	783.75
09/24/08	332.10	6,706.80	1.10	365.31	7,731.29	20	827.0	38.0	1571.3	403.3	9302.6	195.00	9	3	295.83	7557.7	98.6	7,557.65	173.6	245.00	690.00
09/25/08	356.40	7,063.20	1.20	427.68	8,158.97	40	867.0	76.0	1647.3	503.7	9806.3	0.00	0	2	196.18	7753.8	98.1	7,753.83	405.1	196.00	667.50
09/26/08	332.10	7,395.30	1.20	398.52	8,557.49	35	902.0	66.5	1713.8	465.0	10271.3	63.00	3	3	294.51	8048.3	98.2	8,048.34	509.1	196.00	607.50
09/29/08	267.30	7,662.60	1.20	320.76	8,878.25	35	937.0	66.5	1780.3	387.3	10658.5	0.00	0	4	398.20	8446.5	99.6	8,446.54	431.7	196.00	528.75
09/30/08	299.70	7,962.30	1.20	359.64	9,237.89	30	967.0	57.0	1837.3	416.6	11075.2	0.00	0	2	196.33	8642.9	98.2	8,642.87	595.0	196.00	757.50
10/01/08	251.10	8,213.40	1.20	301.32	9,539.21	30	997.0	57.0	1894.3	358.3	11433.5	216.84	10	4	392.01	9034.9	98.0	9,034.88	504.3	245.00	633.75
10/02/08	299.70	8,513.10	1.20	359.64	9,898.85	30	1027.0	57.0	1951.3	416.6	11850.1	0.00	0	6	590.02	9624.9	98.3	9,624.90	273.9	196.00	660.00
10/03/08	315.90	8,829.00	1.20	379.08	10,277.93	25	1052.0	47.5	1998.8	426.6	12276.7	175.83	7	0	0.00	9624.9	0.0	9,624.90	653.0	147.00	652.50
10/06/08	210.60	9,039.60	1.20	252.72	10,530.65	16	1068.0	30.4	2029.2	283.1	12559.8	0.00	0	4	391.28	10016.2	97.8	10,016.18	514.5	147.00	378.75
10/07/08	291.60	9,331.20	1.20	349.92	10,880.57	25	1093.0	47.5	2076.7	397.4	12957.3	0.00	0	5	491.56	10507.7	98.3	10,507.74	372.8	147.00	671.25
10/08/08	315.90	9,647.10	1.20	379.08	11,259.65	30	1123.0	57.0	2133.7	436.1	13393.3	0.00	0	4	393.36	10901.1	98.3	10,901.10	358.5	147.00	686.25
10/09/08	307.80	9,954.90	1.10	338.58	11,598.23	25	1148.0	47.5	2181.2	386.1	13779.4	0.00	0	4	392.64	11293.7	98.2	11,293.74	304.5	147.00	708.75
10/10/08	299.70	10,254.60	1.15	344.66	11,942.88	16	1164.0	30.4	2211.6	375.1	14154.5	238.00	0	4	392.06	11685.8	98.0	11,685.80	257.1	147.00	678.75
10/13/08	291.60	10,546.20	1.15	335.34	12,278.22	28	1192.0	53.2	2264.8	388.5	14543.0	0.00	0	4	393.07	12078.9	98.3	12,078.87	199.4	196.00	528.75
10/14/08	267.30	10,813.50	1.15	307.40	12,585.62	30	1222.0	57.0	2321.8	364.4	14907.4	0.00	0	4	391.93	12470.8	98.0	12,470.80	114.8	196.00	615.00
10/15/08	243.00	11,056.50	1.15	279.45	12,865.07	35	1257.0	66.5	2388.3	346.0	15253.4	0.00	0	3	295.71	12766.5	98.6	12,766.51	98.6	147.00	708.75
10/16/08	243.00	11,299.50	1.15	279.45	13,144.52	30	1287.0	57.0	2445.3	336.5	15589.8	192.16	9	2	196.43	12962.9	98.2	12,962.94	181.6	98.00	551.25
10/17/08	243.00	11,542.50	1.15	279.45	13,423.97	32	1319.0	60.8	2506.1	340.3	15930.1	130.64	5	3	294.36	13257.3	98.1	13,257.30	166.7	147.00	660.00
10/20/08	243.00	11,785.50	1.15	279.45	13,703.42	23	1342.0	43.7	2549.8	323.2	16253.2	0.00	0	3	294.43	13551.7	98.1	13,551.73	151.7	147.00	600.00
10/21/08	251.10	12,036.60	1.15	288.77	13,992.18	16	1358.0	30.4	2580.2	319.2	16572.4	126.00	6	2	196.78	13748.5	98.4	13,748.51	243.7	49.00	483.75
TOTALS	12,036.60			**13,928.84**		1,358		**2580.2**		**16572.4**		2,670.35	110	140	13,748.51					8,274.00	24,646.25
AVERAGES	293.38		1.17	**340**		29		**61**		**401**		65	3	3	335					179	600
								Contract Target :		**396.0**											

CY = cubic yards
DMU = dredge management unit
gpm = gallons per minute

SUBSECTION 4.8

Jacobs Process Monitoring Data

Table 4.8-1
Air Filtration Sampling Data - Area C
New Bedford Harbor Superfund Site - 2008 Season

Date	Parameter				
	Hydrogen Sulfide (ppm)	Carbon Monoxide (ppm)	Total VOCs (ppm)	Trichloroethene (ppm)	Vinyl Chloride (ppm)
8/19/2008	1	0	0	ns	ns
8/28/2008	22	0	2.2	0	0
9/5/2008	3	0	0	ns	ns
9/12/2008	0	0	0	ns	ns
9/23/2008	0	0	0	ns	ns
9/29/2008	0	0	0	ns	ns
10/7/2008	0	0	0	ns	ns
10/14/2008	0	0	0	ns	ns
10/21/2008	0	0	0	ns	ns

Notes:
All samples collected at shaker vent.
Hydrogen sulfide, carbon monoxide, and total VOCs analyzed with Multi Rae detector.
Trichloroethene and vinyl chloride analyzed with Dräger tubes.
ns = not sampled

Table 4.8-2
Air Filtration Sampling Data - Area D
New Bedford Harbor Superfund Site - 2008 Season

Date	Parameter					
	Hydrogen Sulfide (ppm)		Carbon Monoxide (ppm)		Total VOCs (ppm)	
	Pre- Carbon	Post- Carbon	Pre-Carbon	Post-Carbon	Pre-Carbon	Post-Carbon
8/19/2008	0	0	0	0	0	0
8/28/2008	0	0	4	4	0	0
9/5/2008	0	0	3	4	0	0
9/12/2008	0	0	0	0	0	0
9/23/2008	0	0	6	6	0	0
9/29/2008	0	0	5	5	0	0
10/7/2008	0	0	1	3	0	0
10/14/2008	0	0	3	3	0	0
10/21/2008	0	0	2	3	0	0

Notes:
All samples collected at Area D mix tank air filtration system.
Hydrogen sulfide, carbon monoxide, and total VOCs analyzed with Multi Rae detector.
Trichloroethene and vinyl chloride analyzed with Dräger tubes.

Table 4.8-3
Filter Cake Percent Solids Analysis
New Bedford Harbor Superfund Site - 2008 Season

Date	Press Drop #	Solids %
8/25/2008	29	61.9
8/25/2008	10	64.9
8/25/2008	16	64.3
8/25/2008	31	58.6
8/25/2008	2	66.3
8/25/2008	19	63.3
8/25/2008	36	59.3
8/25/2008	46	58.6
8/25/2008	76	57.2
8/25/2008	90	63.1
8/25/2008	69	60.4
8/25/2008	81	52.9
8/25/2008	75	53.9
8/25/2008	57	62.8
8/28/2008	128	60.7
8/28/2008	119	61.6
8/28/2008	257	52.5
8/28/2008	196	58.9
8/28/2008	285	60.0
8/28/2008	188	59.3
8/28/2008	143	58.6
8/28/2008	161	55.3
8/28/2008	265	54.4
8/28/2008	224	53.5
8/28/2008	252	55.6
8/28/2008	208	60.4
8/28/2008	272	57.5
9/8/2008	324	59.7
9/8/2008	314	60.3
9/8/2008	305	52.8
9/8/2008	299	52.0
9/8/2008	345	58.9
9/8/2008	322	51.9
9/8/2008	356	50.4
9/8/2008	332	61.2
9/8/2008	362	51.8
9/15/2008	540	60.1
9/25/2008	654	53.7
9/25/2008	687	61.0
9/25/2008	742	62.6
9/25/2008	772	57.3
9/25/2008	697	54.5
9/25/2008	707	59.4
9/25/2008	761	57.8
9/25/2008	782	63.1
9/25/2008	794	54.1
9/25/2008	805	61.1

Date	Press Drop #	Solids %
9/15/2008	404	60.4
9/15/2008	395	59.2
9/15/2008	366	61.7
9/15/2008	616	61.3
9/15/2008	376	52.9
9/15/2008	555	61.0
9/15/2008	346	55.4
9/15/2008	607	57.5
9/15/2008	632	53.2
9/15/2008	570	60.3
9/15/2008	576	58.7
9/15/2008	567	59.4
9/15/2008	355	55.6
9/15/2008	331	53.5
9/15/2008	582	58.2
9/15/2008	445	54.2
9/15/2008	386	58.3
9/15/2008	601	60.7
9/15/2008	549	58.1
9/15/2008	455	59.8
9/15/2008	640	58.3
9/15/2008	334	52.2
9/15/2008	511	60.2
9/15/2008	466	59.4
9/15/2008	520	61.8
9/15/2008	434	61.7
9/15/2008	530	59.5
9/15/2008	494	60.1
9/15/2008	472	60.2
9/15/2008	440	60.9
9/15/2008	594	59.7
9/15/2008	489	44.8
9/15/2008	624	56.9
9/15/2008	500	60.1
9/25/2008	643	59.0
9/25/2008	713	60.9
9/25/2008	676	61.4
10/8/2008	1082	60.7
10/8/2008	1087	55.6
10/8/2008	1095	63.7
10/8/2008	1107	50.4
10/8/2008	1108	48.0
10/8/2008	1113	59.1
10/8/2008	1121	51.8
10/8/2008	1135	58.1
10/8/2008	1136	61.8
10/9/2008	1158	59.4

Table 4.8-3
Filter Cake Percent Solids Analysis
New Bedford Harbor Superfund Site - 2008 Season

Date	Press Drop #	Solids %
9/25/2008	750	54.3
9/25/2008	770	60.2
9/25/2008	767	59.9
9/25/2008	668	61.7
10/3/2008	826	59.0
10/3/2008	839	60.6
10/3/2008	844	58.7
10/3/2008	855	60.2
10/3/2008	866	60.0
10/3/2008	876	57.3
10/3/2008	881	55.9
10/3/2008	890	59.7
10/3/2008	904	58.3
10/3/2008	916	58.9
10/3/2008	922	55.1
10/3/2008	930	61.9
10/3/2008	948	55.2
10/7/2008	953	56.3
10/7/2008	965	62.1
10/7/2008	977	61.4
10/7/2008	985	63.2
10/7/2008	987	57.1
10/7/2008	993	56.1
10/7/2008	1002	61.3
10/7/2008	1016	58.5
10/7/2008	1026	58.2
10/7/2008	1035	52.0
10/7/2008	1045	58.0
10/7/2008	1053	56.9
10/7/2008	1064	62.9
10/8/2008	1071	58.8

Date	Press Drop #	Solids %
10/9/2008	1162	56.1
10/9/2008	1175	57.1
10/9/2008	1181	60.4
10/9/2008	1196	60.0
10/9/2008	1203	54.0
10/10/2008	1213	57.5
10/10/2008	1224	51.1
10/10/2008	1233	62.0
10/10/2008	1244	59.8
10/10/2008	1250	60.1
10/10/2008	1265	54.0
10/13/2008	1277	63.3
10/13/2008	1280	59.7
10/13/2008	1287	60.1
10/14/2008	1296	53.6
10/14/2008	1297	62.4
10/14/2008	1300	52.2
10/16/2008	1323	53.5
10/16/2008	1332	51.1
10/16/2008	1340	55.5
10/16/2008	1342	53.4
10/16/2008	1359	54.1
10/16/2008	1360	49.6
10/17/2008	1370	54.2
10/17/2008	1382	55.3
10/17/2008	1390	57.7
10/22/2008	1396	50.0
10/22/2008	1401	59.1
10/22/2008	1405	48.7
10/22/2008	1409	52.9
10/22/2008	1410	54.6
10/22/2008	1420	54.7
10/22/2008	1424	59.2
10/22/2008	1425	59.8
10/22/2008	1428	57.7
10/22/2008	1437	54.4
10/22/2008	1448	59.0
10/22/2008	1453	60.3
10/22/2008	1462	57.2
10/22/2008	1475	60.3
10/22/2008	1484	57.5
10/22/2008	1486	58.7

2008 Average Percent Solids **58.4**

Table 4.8-4
Filter Cake Density Analysis
New Bedford Harbor Superfund Site - 2008 Season

Press Drop Number	Press #	Sample Weight (g)	Sample Volume (cm^3)	Sample Density (g/cm^3)	Sample Density (t/yd^3)
9	3	26.1	18	1.45	1.22
14	5	24.7	20	1.24	1.04
19	1	19.8	12	1.65	1.39
29	4	25.6	16	1.60	1.35
31	1	25.4	15	1.69	1.43
36	1	19.7	13	1.52	1.28
46	4	28.1	17	1.65	1.39
113	3	22.2	14	1.59	1.34
119	5	34	21	1.62	1.36
128	1	37.8	21	1.80	1.52
143	4	40.5	29	1.40	1.18
159	6	34.5	19	1.82	1.53
161	4	37.3	26	1.43	1.21
168	4	34.7	25	1.39	1.17
175	3	22.2	12	1.85	1.56
188	5	40.7	24	1.70	1.43
196	4	32.5	21	1.55	1.30
208	4	26.1	18	1.45	1.22
219	1	27.9	19	1.47	1.24
231	3	29	19	1.53	1.29
248	3	40.2	28	1.44	1.21
252	2	9.5	7	1.36	1.14
257	2	34.7	22	1.58	1.33
265	2	28.4	20	1.42	1.20
272	5	27.1	20	1.36	1.14
278	2	23.2	14	1.66	1.40
285	6	24.8	17	1.46	1.23
290	6	23.1	18	1.28	1.08
295	2	31.4	20	1.57	1.32
299	4	41.5	28	1.48	1.25
305	2	30	20	1.50	1.26
314	5	32.4	20	1.62	1.37
324	3	41.6	29	1.43	1.21
331	6	27.2	18	1.51	1.27
334	1	27.9	18	1.55	1.31
346	2	30	20	1.50	1.26
355	5	29.5	19	1.55	1.31
366	2	24.2	16	1.51	1.27
376	2	26.7	18	1.48	1.25
386	6	35	23	1.52	1.28
395	4	45.8	30	1.53	1.29
404	3	40	27	1.48	1.25
415	6	20.9	12	1.74	1.47
420	1	32.7	20	1.64	1.38
434	5	36.2	21	1.72	1.45
440	5	19.5	12	1.63	1.37
445	6	28.4	20	1.42	1.20
455	4	18.6	13	1.43	1.21
465	3	21.7	14	1.55	1.31
472	5	20.4	12	1.70	1.43
489	2	25.7	19	1.35	1.14
494	1	21.9	13	1.68	1.42
500	1	19.5	12	1.63	1.37
511	3	30.7	22	1.40	1.18
520	2	22.4	12	1.87	1.57
530	5	28.6	17	1.68	1.42
540	6	25.1	16	1.57	1.32
549	4	26.9	15	1.79	1.51
555	3	40.3	28	1.44	1.21
567	1	28.2	18	1.57	1.32
570	6	27.7	17	1.63	1.37
576	2	37.6	26	1.45	1.22
582	5	29.4	20	1.47	1.24
594	2	19.1	12	1.59	1.34

Table 4.8-4
Filter Cake Density Analysis
New Bedford Harbor Superfund Site - 2008 Season

Press Drop Number	Press #	Sample Weight (g)	Sample Volume (cm^3)	Sample Density (g/cm^3)	Sample Density (t/yd^3)
601	4	27.3	14	1.95	1.64
607	2	25	15	1.67	1.40
616	3	36.8	24	1.53	1.29
624	4	28.5	19	1.50	1.26
632	5	34.9	24	1.45	1.23
637	6	19.1	12	1.59	1.34
640	1	21.2	12	1.77	1.49
643	6	15.6	10	1.56	1.31
654	6	19.9	11	1.81	1.52
660	4	20.9	11	1.90	1.60
668	5	21.5	12	1.79	1.51
675	3	14.7	8	1.84	1.55
676	2	16.1	10	1.61	1.36
682	4	29	19	1.53	1.29
687	3	27.3	16	1.71	1.44
697	1	16.6	11	1.51	1.27
707	2	30	19	1.58	1.33
713	3	24.5	15	1.63	1.38
723	4	16.5	10	1.65	1.39
734	5	8.5	4	2.13	1.79
742	6	23.2	16	1.45	1.22
750	1	22.1	13	1.70	1.43
761	2	22.6	18	1.26	1.06
764	3	18.1	10	1.81	1.53
766	5	18.4	12	1.53	1.29
767	6	14.5	9	1.61	1.36
770	4	23.8	18	1.32	1.11
772	5	21.8	10	2.18	1.84
782	3	16.7	10	1.67	1.41
794	1	24.2	18	1.34	1.13
805	6	18.8	13	1.45	1.22
810	2	21.8	18	1.21	1.02
826	1	39.3	27	1.46	1.23
839	2	12.1	10	1.21	1.02
844	3	16.8	11	1.53	1.29
855	4	13.3	9	1.48	1.25
866	5	22.7	14	1.62	1.37
876	6	29.4	20	1.47	1.24
881	1	25.5	20	1.28	1.07
890	2	35.7	21	1.70	1.43
904	3	26.3	16	1.64	1.39
916	4	38.3	24	1.60	1.34
922	5	10.3	9	1.14	0.96
930	6	19.4	12	1.62	1.36
948	1	33.6	25	1.34	1.13
953	2	32.6	20	1.63	1.37
965	3	23.1	14	1.65	1.39
977	4	21.4	12	1.78	1.50
985	5	11.6	9	1.29	1.09
987	6	28.8	20	1.44	1.21
993	1	37.1	21	1.77	1.49
1002	2	29	18	1.61	1.36
1016	3	37.6	22	1.71	1.44
1026	4	13.9	10	1.39	1.17
1035	5	11.2	6	1.87	1.57
1045	6	21.2	12	1.77	1.49
1053	1	13.0	9	1.44	1.22
1057	2	34.0	20	1.70	1.43
1071	3	30.1	19	1.58	1.34
1082	4	37.5	24	1.56	1.32
1087	5	60.2	39	1.54	1.30
1095	6	26.0	15	1.73	1.46
1107	1	15.5	10	1.55	1.31

Table 4.8-4
Filter Cake Density Analysis
New Bedford Harbor Superfund Site - 2008 Season

Press Drop Number	Press #	Sample Weight (g)	Sample Volume (cm^3)	Sample Density (g/cm^3)	Sample Density (t/yd^3)
1108	2	41.5	25	1.66	1.40
1113	3	20.7	13	1.59	1.34
1121	4	28.1	19	1.48	1.25
1135	5	56.9	39	1.46	1.23
1136	6	59.6	40	1.49	1.26
1158	1	35.5	22	1.61	1.36
1162	2	57.8	37	1.56	1.32
1175	3	50.7	31	1.64	1.38
1181	4	29.3	19	1.54	1.30
1196	5	68.4	42	1.63	1.37
1203	6	47.6	31	1.54	1.29
1213	1	43	26	1.65	1.39
1224	2	34.6	24	1.44	1.22
1233	3	36.3	21	1.73	1.46
1244	4	55.9	34	1.64	1.39
1250	5	62.4	40	1.56	1.31
1265	6	39.1	24	1.63	1.37
1277	1	28.8	19	1.52	1.28
1280	2	33.2	23	1.44	1.22
1287	3	66.0	41	1.61	1.36
1296	6	64.7	49	1.32	1.11
1297	5	72.8	46	1.58	1.33
1300	4	54.3	34	1.60	1.35
1303	1	54.3	37	1.47	1.24
1305	3	63.2	42	1.50	1.27
1307	5	52.8	35	1.51	1.27
1310	2	43.0	27	1.59	1.34
1317	6	30.7	21	1.46	1.23
1319	4	74.5	43	1.73	1.46
1323	6	62.5	41	1.52	1.28
1332	4	46.4	36	1.29	1.09
1340	5	86.8	56	1.55	1.31
1342	3	88.1	60	1.47	1.24
1359	1	75.3	51	1.48	1.24
1360	2	52.4	38	1.38	1.16
1370	1	42.1	30	1.40	1.18
1382	2	28.3	20	1.42	1.19
1390	3	44.2	29	1.52	1.28
1396	4	51.0	33	1.55	1.30
1401	5	67.2	41	1.64	1.38
1405	6	50.5	39	1.29	1.09
1409	1	74.2	49	1.51	1.28
1410	2	41.2	30	1.37	1.16
1420	3	28.5	19	1.50	1.26
1424	4	45.8	30	1.53	1.29
1425	5	45.3	30	1.51	1.27
1428	6	44.8	30	1.49	1.26
1437	1	48.8	31	1.57	1.33
1448	2	45.0	29	1.55	1.31
1453	3	33.6	20	1.68	1.42
1462	4	48.2	32	1.51	1.27
1475	5	33.5	22	1.52	1.28
1484	6	35.1	21	1.67	1.41
1486	4	51.3	31	1.65	1.39
				Average	1.31

Notes:
cm^3 = cubic centimeters
g = grams

SUBSECTION 4.9

Pipeline Break

JACOBS™

Document Control Number:
ACE-J23-35BG0701-P1-0002

Client, Project and Location	Project Note	Delivery Order/Task Order
USACE New Bedford Resident Office **New Bedford Harbor Superfund Site** **New Bedford, Massachusetts** **USACE Contract Number** **DACW33-03-D-0006**	**Note No.:** 002	**TO 0007** Project No. **35-BG07-01**

Confirmation of	
☒ Project note-P1 ☐ Client Meeting-P4 ☐ Other	Date Issued: 30 September 2008 Recorded By: Anita Rigassio Smith
Subject **Release Estimates for 16 September 2008 Pipeline Break**	Issued By: Steve Fox Steve Fox Jacobs Project Manager

Item	Remarks	Action Required By
1	**Introduction:** At approximately 1100 on 16 September 2008 a break was discovered in the submerged pipeline near the Area D treatment facility. Operators in the dewatering plant noticed that the influent equalization tanks were losing volume even though dredging had started at approximately 0800 and sludge material was being processed through the Area C desanding building. The pipeline break resulted in contaminated sediment slurry exiting the pipeline into an area of the New Bedford Harbor indicated as Dredge Management Unit 35 (MU-35). It is estimated that 26 pounds of PCBs and 936 pounds of ferric sulfate were deposited outside the pipeline. The reportable quantities for PCBs and ferric sulfate are 1 pound and 1,000 pounds, respectively. The site plan followed for this release is Jacobs' *Regulatory Compliance Plan, New Bedford Harbor Superfund Site, New Bedford, Massachusetts*, May 2007.	
2	**Assumptions and Calculations:** Based on information obtained from the Route 6 Bridge Operator, it is assumed that the pipeline was broken early in the morning of 16 September 2008, probably during low tide, and prior to initiation of site activities for the day. Dredging began at approximately 0800 on 16 September and ceased at approximately 1100 when a problem was noticed. Therefore, three hours of dredging occurred with the broken pipeline. The volume of material would be the volume of sediment slurry contained in the pipeline from the previous day plus the volume of material dredged in three hours on the 16th.	

Distribution: USACE: KC Mitkevicius, Paul L'Heureux, Maurice Beaudoin; EPA: Dave Dickerson, Elaine Stanley; Jacobs: Mike Anderson, Mark Gouveia, Carl Wilson, Josh Cummings, Kirk Morris, Site File, Document Control; SES: Shea Brossett, Joe Burke, Bob Sandarelli, Mike Crystal.

Item	Remarks	Action Required By
	The internal diameter of the double-walled pipe is 12". Volume in Pipe = $\pi \cdot (0.5')^2$ x 6000' x 7.48 gal/cf = 35,247 gal. Volume Dredged = 1,800 gpm x 3 hr x 60 min/hr = 324,000 gal. Total Volume = 35,247 gal + 324,000 gal = 359,247 gal. PCB Release The dredge was located in the middle-ground of Dredge Area I (see *Final Dredge Work Plan Addendum No. 4, New Bedford Harbor Superfund Site, New Bedford Harbor Superfund Site, New Bedford, MA*, August 2008) where concentrations of PCBs have historically been 67 mg/kg (Station S-3648, Table A-1 Chemical Data by SMU, from Foster Wheeler's January 2003 document, *Volumes, Areas and Properties of Sediments by MUs*). Because this area was used as a test dredge location in 1991, the PCB concentrations are likely lower than 67 mg/kg. Avg. % solids feed into Area D (from SES daily reports) = 9.58% Sediment Density (from SES mass balance) = 1.12 ton/cy PCBs = 359,247 gal x 0.0958 x 0.005 cy/gal x 1.12 ton/cy x 908 kg/ton x 67 mg/kg x 1 kg/1000 g x 1 lb/454 g = 25.83 lbs. Ferric Sulfate Release Ferric sulfate servo pump was set at a stroke setting of 35, which delivers 23.5 gph. For a 50% ferric sulfate solution, 23.5 gph = 5.2 lbs/min. Ferric Sulfate = 5.2 lbs/min x 3 hr x 60 min/hr = 936 lbs.	
3	**Action Taken:** Agency Notification As outlined in the site Regulatory Compliance Plan, the Jacobs Project Manager notified the NAE Project Engineer of the break and the estimated quantities of PCB and ferric sulfate materials that were deposited in the Acushnet River at the site of the break. The NAE Project Engineer notified the EPA Project Manager. At the request of the NAE Project Engineer, the Jacobs Project Manager notified the MassDEP Project Manager. Sample Collection In the afternoon of 17 September 2008, divers collected four sediment samples from the river bottom. These samples were collected from the approximate centerline of the fan of discharged sediment at 25 feet intervals and analyzed for total PCB Arochlors. The unvalidated sample results are: • 25ft = 19.7 mg/kg • 50ft = 30 mg/kg • 75ft = 25 mg/kg • 100ft = 6.9 mg/kg These results were compared to 2002 sample results from the same general area obtained from Foster Wheeler's March 2002 document, *Draft Technical Memorandum for Area D Dredged Material Beneficial Use*, and data queried from the Battelle database. Previously analyzed samples from the area ranged in concentration from 26 mg/kg to 120 mg/kg. There were no significant differences noted.	

Item	Remarks	Action Required By
	At the time of the pipeline break, Apex was dredging a CAD cell approximately 1,000 feet to the east. At the request of the MassDEP, Apex collected samples from their dredge scow on 18 September 2008 and had them analyzed for PCBs to see if the pipeline break contaminated the material being dredged from their CAD cell. The samples represented material dredged on 16 September 2008. The analytical data for the five samples collected by Apex (attached) showed that the CAD cell material was not contaminated with PCBs. The total PCB concentrations in the samples ranged from nondetect to 0.18 mg/kg. Marine Notification Prior to the pipeline break and repair, four lighted obstruction buoys marked the submerged pipeline. However, recent dredging by the City of New Bedford near the Area D facility has resulted in increased boat traffic along the pipeline. Following the pipeline repair, additional obstruction buoys were installed along the pipeline in areas of commercial boat traffic to provide additional visual indication of the submerged pipeline to boat captains and operators. A total of six lighted obstruction buoys now mark the submerged pipeline. A Notice to Mariners, describing the location of the submerged pipeline with latitude and longitude coordinates, was submitted to the US Coast Guard on 18 September 2008 for publication through 30 December 2012. A copy of the notice published on 24 September 2008 is attached.	
4	**Conclusion:** The pipeline was repaired on 18 September 2008 and re-anchored on 19 September 2008. Hydraulic dredging resumed at approximately 0900 on 20 September 2008. The following further corrective actions are planned to enable early detection of broken lines. An in-line flow meter at the Area D pipeline inlet will be installed during next season's mobilization timeframe. The meter will be located just before the mix tanks' pipe manifold on the influent side and will provide Area D operators with indication of low flow into the facility. Manomet Street and Area C booster pump operators will be requested to alert a foreman when not meeting the optimum operating range for pump discharge pressure. Currently, operators look for signs of over-pressurization to avoid pipeline bursts. The optimum operating range for the discharge will be considered $\pm$ 15 psi of the normal discharge pressure.	
5	**Attachments:** 1. Alpha Analytical 25 September 2008 Analytical Report prepared for Apex Environmental, Inc. 2. US Coast Guard 24 September 2008 Local Notice to Mariners.	

ANALYTICAL REPORT

Prepared for:
Apex Environmental, Inc.
115 Broad Street
Suite 200
Boston , MA 02110

Project:	CAD II Area
ETR:	0809089
Report Date:	September 25, 2008

Certifications and Accreditations
Massachusetts M-MA030
Connecticut PH-0141
New Hampshire 2206
Rhode Island LAO00289
New Jersey MA015
Maine MA0030
New York 11627
Louisiana 03090
Florida E87814
Pennsylvania 68-02089
Army Corps of Engineers
Department of the Navy

Sample ID Cross Reference

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**

Lab Code: **MA00030**
ETR: **0809089**

Lab Sample ID	Client Sample ID
0809089-01	#1
0809089-02	#2
0809089-03	#3
0809089-04	#4
0809089-05	#5

CASE NARRATIVE
Alpha Analytical

ETR: 0809089
Project: CAD II Area

All analyses were performed according to Alpha Analytical quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report were performed within holding time, and with appropriate quality control measures, except where noted. All soil/sediment results are reported on a dry weight basis unless otherwise noted. A summary of all state and federal accreditations is provided within this report. Blank correction of results is not performed in the laboratory for any parameter. Alpha Analytical certifies that the test results within meet all of the requirements of NELAC, for all NELAC accredited parameters.

PCB Aroclors by 8082

1. No problems were encountered with this analysis.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Analytical makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Analytical. To the best of my knowledge, the information contained in this report is accurate and complete. For any questions regarding this report, please contact the signatory below at 508-822-9300.

Approved by: Peter Henriksen Title: Project Manager Date: 9/25/08

PCB
By
8082

Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **#1**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **0809089-01**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/18/08	09/18/08	09/19/08	09/23/08	79.2	5.51	10	1	NLJr

Parameter	Result
Aroclor 1016	45.8 U
Aroclor 1221	45.8 U
Aroclor 1232	45.8 U
Aroclor 1242	45.8 U
Aroclor 1248	**64.0**
Aroclor 1254	**99.4**
Aroclor 1260	45.8 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	95	30-150
Decachlorobiphenyl	104	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Polychlorinated Biphenyls by 8082

ALPHA ANALYTICAL

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **#2**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **0809089-02**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/18/08	09/18/08	09/19/08	09/23/08	89.0	5.29	10	1	NLJr

Parameter	Result
Aroclor 1016	42.5 U
Aroclor 1221	42.5 U
Aroclor 1232	42.5 U
Aroclor 1242	42.5 U
Aroclor 1248	42.5 U
Aroclor 1254	42.5 U
Aroclor 1260	42.5 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	87	30-150
Decachlorobiphenyl	98	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **#3**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **0809089-03**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/18/08	09/18/08	09/19/08	09/23/08	80.4	5.55	10	1	NLJr

Parameter	Result
Aroclor 1016	44.8 U
Aroclor 1221	44.8 U
Aroclor 1232	44.8 U
Aroclor 1242	44.8 U
Aroclor 1248	**68.3**
Aroclor 1254	**96.3**
Aroclor 1260	44.8 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	95	30-150
Decachlorobiphenyl	96	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **#4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **0809089-04**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/18/08	09/18/08	09/19/08	09/23/08	78.8	5.59	10	1	NLJr

Parameter	Result
Aroclor 1016	45.4 U
Aroclor 1221	45.4 U
Aroclor 1232	45.4 U
Aroclor 1242	45.4 U
Aroclor 1248	**68.6**
Aroclor 1254	**108**
Aroclor 1260	45.4 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	102	30-150
Decachlorobiphenyl	107	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **#5**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **0809089-05**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
09/18/08	09/18/08	09/19/08	09/23/08	98.1	5.24	10	1	NLJr

Parameter	Result
Aroclor 1016	38.9 U
Aroclor 1221	38.9 U
Aroclor 1232	38.9 U
Aroclor 1242	38.9 U
Aroclor 1248	38.9 U
Aroclor 1254	38.9 U
Aroclor 1260	38.9 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	96	30-150
Decachlorobiphenyl	106	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Blank
Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **PS091908B08**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	09/19/08	09/23/08	100	5.00	10	1	NLJr

Parameter	Result
Aroclor 1016	40.0 U
Aroclor 1221	40.0 U
Aroclor 1232	40.0 U
Aroclor 1242	40.0 U
Aroclor 1248	40.0 U
Aroclor 1254	40.0 U
Aroclor 1260	40.0 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	83	30-150
Decachlorobiphenyl	99	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Laboratory Control Summary
Polychlorinated Biphenyls by 8082

Client: **Apex Environmental, Inc.**
Project: **CAD II Area**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment** Column/ID: **RTX 5/0.25 CLP II/0.25**

Lab Code: **MA00030**
ETR: **0809089**
Lab ID: **See Below**
Associated Blank: **PS091908B08**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	09/19/08	100	NLJr

Lab ID:		PS091908B08	PS091908LCS03		PS091908LCSD03				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Aroclor 1016	40.0	U	1920	96	1740	87	10	50	40-140
Aroclor 1260	40.0	U	1830	91	1640	82	11	50	40-140

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	99	90	30-150
Decachlorobiphenyl	107	95	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

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Chain of Custody Records

CHAIN OF CUSTODY PAGE ____ OF ____

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: 0809089

Client Information

Client: Apex Companies LLC
Address: 115 Broad Street Suite 200 Boston MA
Phone: (617) 728-0070
Fax: (617) 728-0080
Email: mbruno@apexcos.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: NBH-CADCell 2
Project Location: NewBedford
Project #: 6615.006.001
Project Manager: Ted Pickering
ALPHA Quote #:

Turn-Around Time

☑ Standard ☑ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
Rush #1 ASAP, Others Std. TAT

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: 8082 Total PCBs	SAMPLE HANDLING	TOTAL # BOTTLES	Sample Specific Comments
	#1 *	9/18/08	16:00	Sed.	MLB	X			
	#2	"	16:05			X			
	#3	"	16:10			X			
	#4	"	16:15			X			
	#5	"	16:20	↓	↓	X			
	* Rush								

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type
Preservative

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
CW Pulleang	9/18/08 18:30	Nancy a Ito Sr.	9/18/08 1880

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO:01-01 (rev. 30-JUL-07)

Sample Receipt Checklist

Client: ~~APEX~~ APEENV	Receipt Date: 9/18/08
Project: NBH-CAD Cell 2	Log-in Date: 9/19/08
ETR #: 0809089	Inspection by: NAM / Login by: VR

ALL SECTIONS BELOW MUST BE COMPLETED

Were samples shipped? Yes, FedEx / UPS / Other:_____
No, Alpha Analytical Courier pick-up / (Hand delivered)

Is bill of lading retained? Yes, Tracking #:_____
No, Unavailable / NA

Number of coolers received for this project delivery: 2

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 23 IR Gun, (Circle one) SN 460647143 or 94031
NA Temp. Blank, / (NA)
Were samples received on ice? Yes / (No)

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)
Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO_4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / NA

Project Manager Acknowledgement: Date:

Comments / Notes

Sample storage refrigerator #: A1

Sample storage freezer #:_____

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

Certificate/Approval Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate/Lab ID : PH-0141 - *Wastewater* (General Chemistry: EPA 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2; Metals: 200.8, 245.1; Organics: 608-PCB, ETPH) *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9060; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate/Lab ID : E87814 - Primary NELAP Accreditation Authority for Air & Emissions. Secondary NELAP Accreditation for Wastwater and Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 335.2, SM2320B, SM2340B, SM2540G, SM4500NH3; Metals: 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9065, Reactivity 7.3; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Louisiana Department of Environmental Quality Certificate/Lab ID : 03090 - Primary NELAP Accrediting Authority for Wastewater, Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1, 6020; Organics: 608-PCB, 8015-DRO, 8081, 8082, 8260, 8270). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060, Reactivity 7.3; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate/Lab ID : MA0030 - *Wastewater* (General Chemistry: EPA 120.1/ SM2510B, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: 608-PCB).

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: EPA 608-PCB).

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, SM2540G; Metals: 200.8, 245.4; Organics: 608-PCB).

New Jersey Department of Environmental Protection Certificate/Lab ID : MA015 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1 6020; Organics: 608-PCB, 8081, 8082, 8260, 8270). *Solid & Hazardous Waste* (General Chemistry: EPA 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

New York Department of Health Certificate/Lab ID : 11627 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 376.2; Metals: 200.8, 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: EPA 1010, 1311; : 200.8; 6020;7041; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Rhode Island Department of Health Certificate/Lab ID : LAO00289 - Chemistry: *Organic and Inorganic in Non-Poratable Water, Wastewater/Sewage and Soil* (Refer to LADEQ and MADEP certificates for method numbers.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-02089 - Registered laboratory

U.S. Army Corps of Engineers

Department of the Navy

MA - BOSTON HARBOR

Chart 13270

LNM: 32/08

MA - NEW BEDFORD HARBOR

Dredging will be done in the Upper Harbor until November 30, 2008 from 0600 to 1900 Monday to Saturday. A dredge control system consisting of steel piles and multiple wire rope cables is being deployed and will be maintained in the upper harbor of New Bedford Harbor. Two floating dredges will be operating within the perimeter of the pilings. The system is located at Pierce Mill Cove adjacent to the Riverside Park on the westerly side of the Acushnet River approximately 1500 feet (0.25 Nm) north of the Rte. 195 bridge and Coggeshall Street. At high tide, the traverse cable system will be nominally 1ft above the water-s surface. A floating white oil boom is attached to piling as well as blinking lights located at the top of several pilings. The dredges are connected to a booster pump station on the west side of the Acushnet River via a floating 10 inch pipeline. The dredge line will extend easterly in a sweeping loop into and possibly blocking the river channel. The dredge lines are nominally submerged at the water surface and marked approximately every 500ft with lighted buoys. Mariners are urged to use extreme caution in this area and if transit is desired, hail on VHF Channel 77 or contact the dredges on VHF Channel 13/16 to coordinate the passage and proceed with caution after passage arrangements have been made with the dredges.

LNM: 32/08

MA - WOODS HOLE

WATER STREET BRIDGE DEMOLITION

Demolition operations on the Water Street Bridge in Woods Hole, MA will require the closure of Eel Pond Channel for six days in September 2008. This is the first phase of replacing the bridge. Eel Pond Channel will be closed to all vessel traffic from 7 a.m. on Monday, September 15, 2008 until 5 p.m. on Saturday, September 20, 2008. Vessels will not be able to enter or depart Eel Pond during this period. The waterway will then be open to vessel traffic until the new bridge is put in place sometime in the spring of 2009. The Massachusetts Highway Department (MHD) has contracted with J.F. White Contracting Company to demolish the superstructure of the Water Street Bridge over the Eel Pond Channel during the dates and times noted above.

* J.F. White-s project engineer is Mr. Chris Vrachos, who can be reached by cell phone at 617-799-4998.
* The MHD resident engineer is Mr. Michael McGovern, who can be reached at 508-548-2795.

Mariners are advised to monitor Marine Safety Information Broadcasts on VHF-FM channel 22 for the latest safety related navigation information.

Chart 13235

LNM: 32/08

MA-BOSTON INNER HARBOR-CHELSEA RIVER

An underwater obstruction has been reported approximately 200 feet west of the Chelsea Street Bridge at a depth of approximately 31 feet. Mariners are advised to use extreme caution while transiting the area.

LNM: 34/08

MA-NEW BEDFORD HARBOR

Dredging is being done northeast of the Route 6 Bridge on or about 25 August until approximately 8 October 2008. On scene will be the dredge A. J. FOURNIER, tugs EDNA, LUCINDA & HAROLD REINAUR and the scows EDDIE CARROLL, MIGHTY QUINN & the JOE VERROCHI. All vessels are monitoring VHF-FM channels 16, 13 & 67. The hours of operation are 7 days a week, 24 hours a day.

LNM: 35/08

MA-NEW BEDFORD UPPER HARBOR

A submerged dredge pipeline is installed on the river bottom along the northwestern portion of the upper New Bedford Harbor until 30 November 2012. The pipeline originates at position 70o55-17.03- 41o38-45.01- and extends through positions 70o55-13.9- 41o38-45.66-, 70o55-11.03- 41o38-55.0-, 70o55-10.06- 41o39-00.03-, and 70o55-08.03- 41o39-06.29- to the western abutment of the I-195 Bridge. Mariners are urged to use extreme caution in this area.

The location of the submerged pipeline is indicated with lighted obstruction buoys marked -Danger Submerged Pipeline-. The submerged pipeline is an 18- diameter HDPE pipe anchored to the river bottom at regular intervals.

LNM: 39/08

MA-OFFSHORE-BOSTON HARBOR TRAFFIC LANE-GREAT SOUTH CHANNEL-NAVAL EXERCISE.

U.S. Navy Ships will conduct surface and subsurface exercises including launching and recovery of inert exercise torpedoes from 19 Sept to 3 Oct 2008 in an area bounded by 42-00n/069-45w; 42-00n/068-45w; 40-55n/068-45w; and 40-55n/069-02w. Mariners transiting this area are advised to proceed with caution and are requested to cooperate with patrolling navy vessels and aircraft. M/V PREVAIL will be stationed in the area while operations are in progress and will monitor VHF-FM channels 13 and 16.

LNM: 38/08

ME - CAPE NEDDICK HARBOR TO ISLES OF SHOALS-CAPE NEDDICK HARBOR

The Coast Guard has established a safety zone 100 yards on either side of the Cape Neddick Harbor Bridge, also known as the Shore Road Bridge in Cape Neddick, Me. No vessel traffic is allowed to move within 100 yards of the bridge without permission from the Captain of The Port, Sector Northern New England. Affected mariners are requested to contact Coast Guard Sector Northern New England on Channel 16 VHF-FM for further information.

Chart 13283

LNM: 20/06

Northeast Remsco Construction and Caldwell Marine International will be installing a 30 inch pipeline from the Bergen County Utilities Authority to

SUBSECTION 4.10

2008 Lessons Learned/Conclusions

Section 4.10
Lessons Learned/Conclusions
New Bedford Harbor Superfund Project - 2008 Season

Operation	Activity	Conclusions and Recommendations
Mobilization		
Configuring Booster Pump Station	Laying out pipe configuration	**Conclusion** - Excessive bends, ells and tees disrupts flow and may increase clogging . **Recommendation** - streamlining pipeline layout at booster pump station to decrease chance of clogging.
Dredging and Associated Activities		
In-Line Grinder Operation	Dredging in rocky areas	**Conclusion -** In line grinder tends to clog when dredging in rocky areas. **Recommendation** - When a dredge operator is dredging in a known rocky area or can hear they are in a rocky area this information is communicated to booster pump station. The booster pump operator will open the in-line grinder bypass to prevent clogging.
Debris Removal	Debris removal in areas with a lot of brick fragments or cobble	**Conclusion** - The debris rake is effective at removing larger debris but some smaller items such as brick tend to fall through the tines and will eventually clog the dredge pump. **Recommendation -** Welding a rebar "screen" on tines increased retention of smaller debris but still allowed sediment to wash off.
Area D Operations		
Dredging Operations	Pumping slurry from Area C to Area D	**Conclusion -** The September 2008 pipeline break was not detected for several hours, a flow meter would have cut this time down to minutes. **Recommendation** - Install a flow meter at the Area C Dewatering influent port.
All Operations	Housekeeping	**Conclusion** - Better housekeeping practices as well as loading out oldest (driest) cake first resulted in measurably lower ambient dust levels in the Area D facility. **Recommendation** - Continue good housekeeping practices.
Rail Car Load Out	Tarping Full Rail Cars	**Conclusion** - Some of the recycled rail car tarps were folded so that deployment was difficult, workers found that opening and refolding on the floor prior to deployment simplified the tarping process. **Recommendation** - Open and refold recycled tarps prior to deployment.

SECTION 5.0

Construction Activities

SUBSECTION 5.1

WWTP Conversion

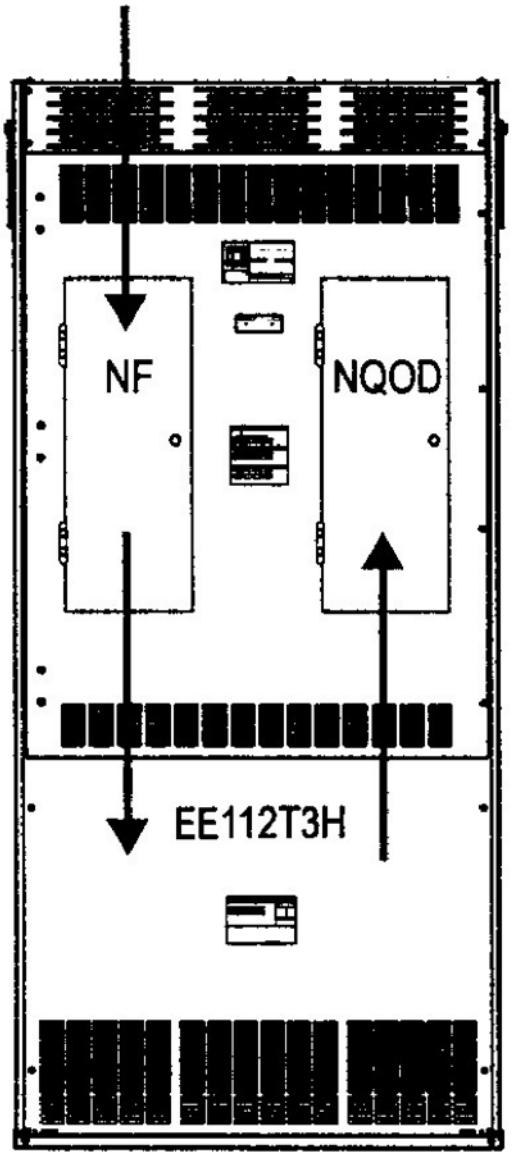
5.0 CONSTRUCTION ACTIVITIES

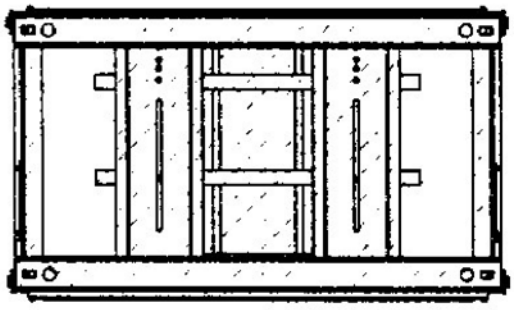
5.1 WASTE WATER TREATMENT PLANT CONVERSION

In anticipation of future office space reconfiguration at the Area C portion of the Site, the former WWTP building is in the process of being converted to usable office space. The following description only details modifications made to date.

- All unused or obsolete equipment was removed from the building; this included the plant hardware as well as consumables. Removed equipment was either properly disposed of or has been stored as excess Government Property, which has been photographed and inventoried.
- Water service to the building was relocated to the east side wall.
- A sanitary sewer line and vent have been installed in the building to accommodate a restroom in the southeast corner. The new sewer line has not yet been connected to the POTW system.
- Debris has been cleaned from exterior roof gutters.
- A new concrete floor was installed in the building. Welded wire mesh was installed above the existing concrete floor prior to the placement of a new floor. The new floor was placed level to the top of the existing foundation wall.
- Interior sheet metal panels were removed to accommodate future drywall installation. All louvered wall vents were removed; and the interior sheet metal panels removed earlier were re-used to replace the panels cut to accommodate the louvers.
- The existing electrical switch gear and transformers were removed and a more suitable system installed. The new transformer/branch breaker combination is a Square D™ IPC2TC-5EE, see Figure 5.1-1 for specifics on the transformer/branch breaker.

Catalog No. IPC2TC-5EE





NF Panel

480/277V 3Ph 4W
400A MLO 18kAIC
1 – 175/3 (Transformer)
20 – 20/1 Branch Breakers
10 – 1PSO
Copper Bus
Ground Bus
SUSE

NQOD Panel

208Y/120V 3Ph 4W
400/3 MB 10kAIC
20 – 20/1 Branch Breakers
22 – 1PSO
Copper Bus
Ground Bus

Transformer

Type EE (Energy Efficient)
480V – 208Y/120V 3Ph
112.5kVA
150°C Temp Rise
Aluminum Windings
6 – 2.5% Taps; 2+ 4-

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JACOBS

Square D IPC2™
Transformer Combo
Catalog No. IPC2TC-5EE
New Bedford Harbor Superfund Site

CROBERTS DATE: 12/16/2008 | Figure 5.1-1

SUBSECTION 5.2

Northern Landing Bulkhead

5.2 NORTHERN LANDING BULKHEAD

Preparations have begun to relocate the dock facility from the present location to a landing on the northern shoreline of the site. This relocation is in anticipation of a change in the current land use and project footprint at Area C.

The Northern Landing site was selected on the basis that it already has an access road with gate and the proximity to current and future dredging activities. In previous years, a landing constructed of bin blocks and crushed stone was established at the Northern Landing site. The previously constructed Northern Landing was noted to be settling unevenly with many portions underwater at high tide.

Initial site preparation in 2008 consisted of removing or repositioning of bin blocks and mechanical compaction of the existing stone. The new landing was designed with three seaward steel sheet pile sides (north, west, and east) jutting out into Pierce Mill Cove. Corner points for the new landing were surveyed in and staked. Sixty three 50-foot long Dura-Bond Steel AZ 26-700 sheets and two 50-foot long AZ 26-700 SGL corner sheets were driven to refusal by a 90-ton hydraulic hammer to form the seaward sides of the landing. All sheets are keyed together and were checked for plumbness as they were driven. Utilizing a surveyed point and a laser level, all sheets were marked and cut evenly at approximately 5 feet above mean higher high water (MHHW). A single course of 8-inch H beams are bolted horizontally along the inner perimeter of the sheet pile landing to provide additional strength, these beams are positioned approximately 2 ½ feet below the top of the cut sheets. A 2-foot wide steel sheet cap was constructed over the top of the sheets, and was stick welded in place to the tops of the sheets. The steel cap has rolled edges on all sides.

Following the completion of the steel work the landing was backfilled with a layer of 4-inch stone. This layer extended down to the mudline along the steel sheets then up and over the previously existing landing. The 4-inch stone layer provided the rough leveling of the landing surface once it was mechanically compacted with an excavator. A layer of 1 ½ inch stone was placed over the 4-inch stone and mechanically compacted; this layer was brought up and over the top of the reinforcing H beam. Geotextile fabric was laid

out over the stone layers and 1 ½ inches of dense grade was spread over the surface of the fabric. The dense grade material was roughly graded mechanically with an excavator, grade stakes and markers were then deployed to establish a finish surface grade. The finish grade was compacted with a vibratory roller, and pitched slightly towards the water to provide drainage. Four-inch rip rap was installed on the outer perimeter of the western sheet pile wall to help prevent erosion.

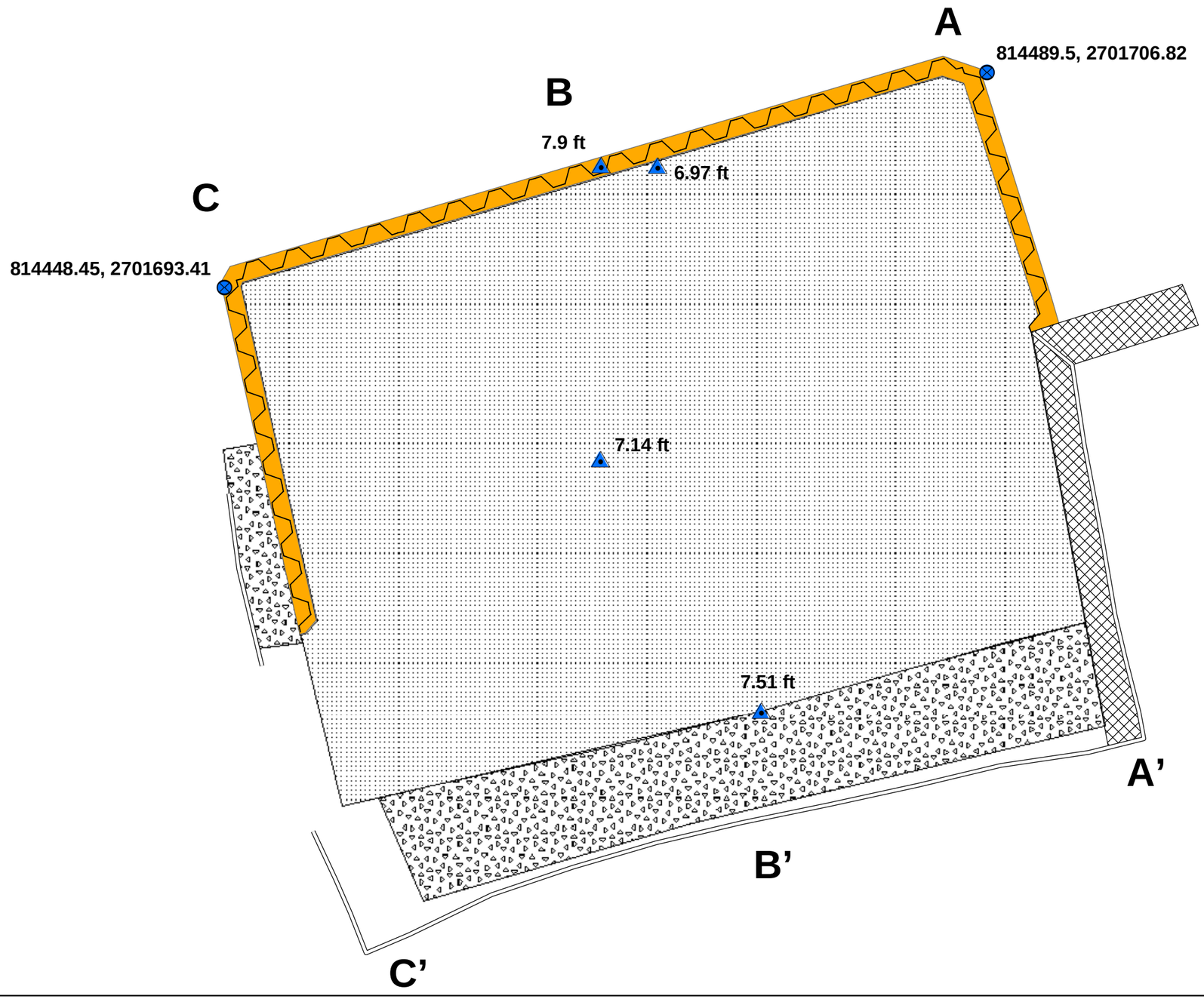
Figures 5.2-1 through 5.2-4 show the Northern Landing in various stages of construction. Figures 5.2-5 through 5.2-9 are the As-Built drawings of the Northern Landing; these As-Builts detail work completed through 2008.

Figure 5.2-1 Driving sheets

Figure 5.2-2 Installing H Beams

Figure 5.2-3 Completed West side of landing, after grading.

Figure 5.2-4 Completed East side of landing, after grading.



Legend

- Sheetpile Wall
- Fence
- Existing Concrete Wall
- Bulkhead Cap
- Rip Rap
- Dense Grade
- Corner Coordinates
- Elevation (feet NGVD-29)

0 25 Feet

1:150

N

JACOBS™

Northern Landing Bulkhead As-Built Plan View

New Bedford Harbor Superfund Site

NAME: croberts DATE: 02/23/09

Figure 5.2-5

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B

B’

Fence

13.00 feet

7.90 feet

6.97 feet

7.14 feet

7.50 feet

Rip Rap

Geo-textile

MHHW

2.72 feet

Mudline

-1.66 feet

Legend

- Elevation (feet, NGVD-29) All elevations are GPS derived.
- Dense Grade
- Rip Rap
- Stone (4")
- Stone (1.5")
- Fence
- MHHW
- Mudline
- Geo-textile

0 5 Feet

1:60

JACOBS

Northern Landing Bulkhead As-Built Cross Section

New Bedford Harbor Superfund Site

NAME: croberts DATE: 02/23/2009

Figure 5.2-6

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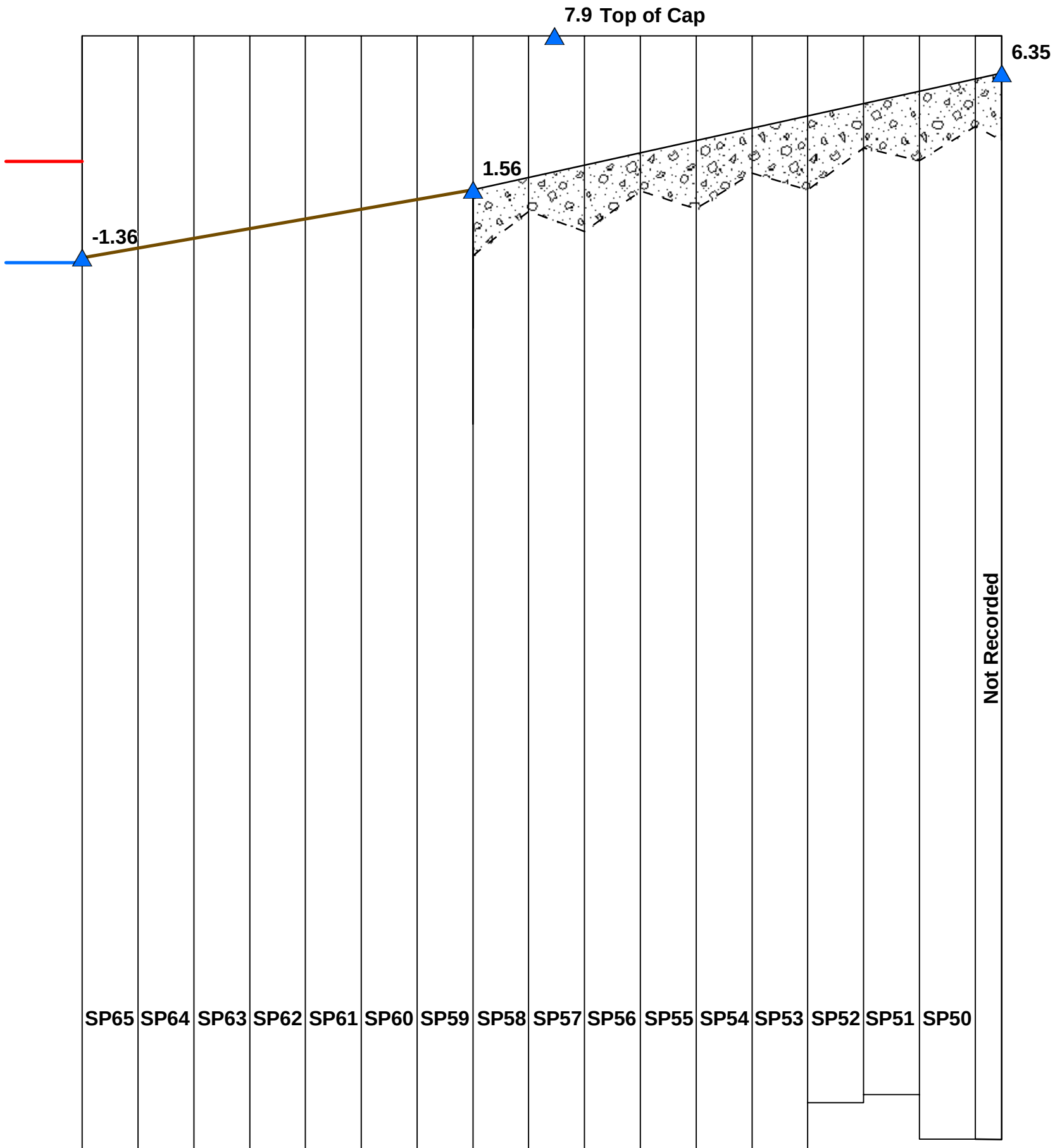
C
North

C’
South



Sheet#	Length of Sheet (feet)	Toe Elevation of Sheet (NGVD 29)
49	45.67	-37.77
50	45.42	-37.52
51	43.58	-35.68
52	43.92	-36.02
53	47.92	-40.02
54	48.25	-40.35
55	47.71	-39.81
56	47.88	-39.98
57	47.67	-39.77
58	48.13	-40.23
59	47.83	-39.93
60	47.88	-39.98
61	47.96	-40.06
62	47.79	-39.89
63	47.50	-39.60
64	48.58	-40.68
65	49.25	-41.35

Legend

- Elevations, NGVD Feet
- Rip Rap approximately 1’- 2’ thick
- Mudline
- MHHW
- MLLW

0 2.5 5
Feet 1:60

JACOBS™

Northing Landing Bulkhead As-Built West Facing Wall

New Bedford Harbor Superfund Site

NAME: croberts DATE: 02/25/09

Figure 5.2-7

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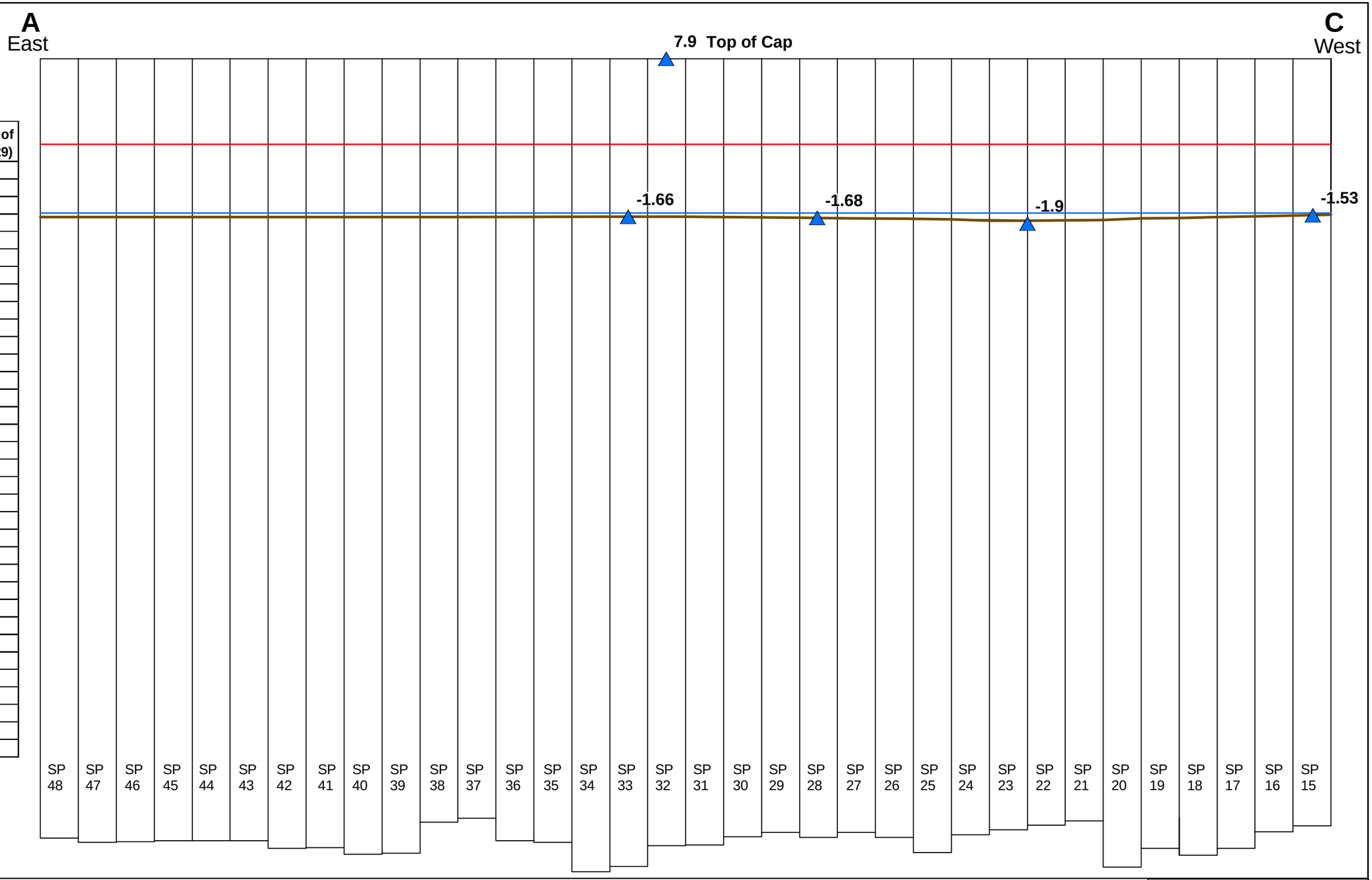
Sheet#	Length of Sheet (feet)	Toe elevation of sheet (NGVD 29)
15	46.42	-38.52
16	46.79	-38.89
17	47.79	-39.89
18	48.21	-40.31
19	47.79	-39.89
20	48.92	-41.02
21	46.13	-38.23
22	46.38	-38.48
23	46.67	-38.77
24	46.96	-39.06
25	48.04	-40.14
26	47.13	-39.23
27	46.83	-38.93
28	47.13	-39.23
29	46.83	-38.93
30	47.08	-39.18
31	47.58	-39.68
32	47.63	-39.73
33	48.88	-40.98
34	49.21	-41.31
35	47.42	-39.52
36	47.33	-39.43
37	45.96	-38.06
38	46.21	-38.31
39	48.08	-40.18
40	48.14	-40.24
41	47.75	-39.85
42	47.79	-39.89
43	47.33	-39.43
44	47.33	-39.43
45	47.33	-39.43
46	47.38	-39.48
47	47.42	-39.52
48	47.17	-39.27



Legend

- Elevations, NGVD Feet
- Mudline
- MHHW
- MLLW

0 6 Feet

1:72

JACOBS

Northern Landing Bulkhead As-Built North Facing Wall

New Bedford Harbor Superfund Site

NAME: croberts DATE: 02/25/2009

Figure 5.2-8

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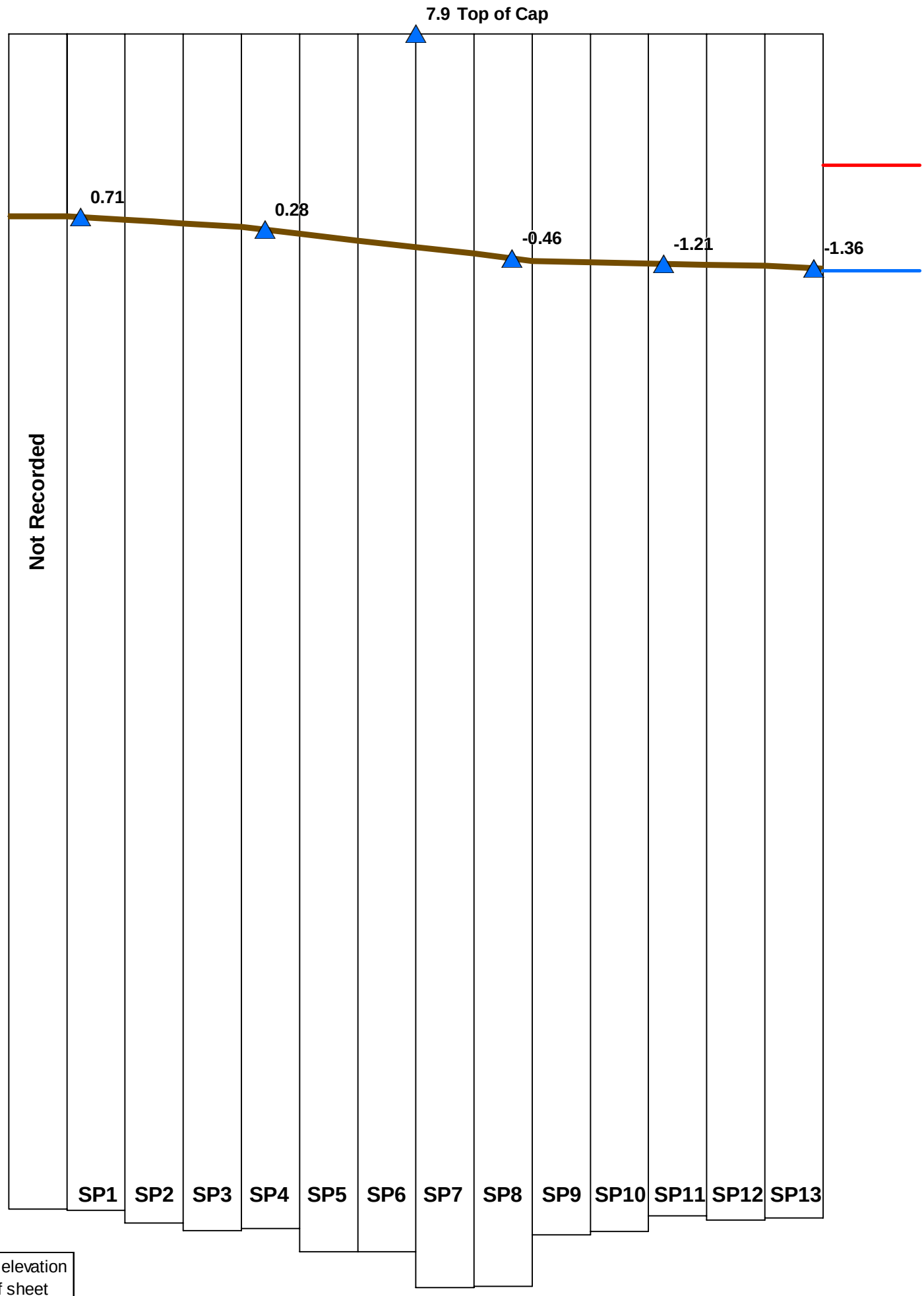
A’ South

A North



Sheet#	Length of Sheet (feet)	Toe elevation of sheet (NGVD 29)
SP1	46.46	-38.56
SP1	46.96	-39.06
SP3	47.25	-39.35
SP4	47.17	-39.27
SP5	48.08	-40.18
SP6	48.08	-40.18
SP7	49.50	-41.60
SP8	49.46	-41.56
SP9	47.42	-39.52
SP10	47.29	-39.39
SP11	46.67	-38.77
SP12	46.83	-38.93
SP13	46.75	-38.85

Legend

Elevations, NGVD Feet

Mudline

MHHW

MLLW

0 2.5 5

Feet 1:60

JACOBS™

Northern Landing Bulkhead As-Built East Facing Wall

New Bedford Harbor Superfund Site

NAME: croberts DATE: 02/25/09

Figure 5.2-9

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