

IMMEDIATE RESPONSE ACTION  
STATUS REPORT #3

FORMER AEROVOX FACILITY  
740 BELLEVILLE AVENUE  
NEW BEDFORD, MA  
RTN 4-0601

*Prepared for:*

AVX Corporation  
801 17<sup>th</sup> Avenue South  
Myrtle Beach, SC 29578

February 2015



AECOM  
1155 Elm Street, Suite 401  
Manchester, New Hampshire 03101

PN: 39744051

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
<b>2.0</b>	<b>RELEVANT CONTACTS (310 CMR 40.0424(a)) .....</b>	<b>3</b>
<b>3.0</b>	<b>STATUS OF IMMEDIATE RESPONSE ACTIONS (310 CMR 40.0425(3)(a)) .....</b>	<b>4</b>
3.1	DNAPL Gauging and Removal .....	4
3.2	DNAPL Analyses .....	5
3.3	Activities Since Last Status Report – Groundwater Sampling.....	6
3.4	Other New Site Information or Data (310 CMR 40.0425(3)(b)).....	6
<b>4.0</b>	<b>MANAGEMENT OF REMEDIATION WASTE (310 CMR 40.0425(3)(c)).....</b>	<b>7</b>
<b>5.0</b>	<b>OTHER RELATED INFORMATION (310 CMR 40.0425(3)(d)) .....</b>	<b>8</b>
<b>6.0</b>	<b>LSP OPINION (310 CMR 40.0425(3)(e)) .....</b>	<b>9</b>

## TABLES

- Table 1 – MW-15D DNAPL Gauging and Recovery Volume
- Table 2 – MW-15B DNAPL Gauging and Recovery Volume
- Table 3 – DNAPL Analytical Summary
- Table 4 – Groundwater Analytical Results - December 2014

## FIGURES

- Figure 1 – Site Location Plan
- Figure 2 – Site Plan
- Figure 3 – Detail of DNAPL IRA Area

## APPENDICES

- Appendix A – DNAPL Recovery Graphs
- Appendix B – DNAPL Analytical Reports
- Appendix C – IDW Waste Manifest

## LIST OF ACRONYMS & ABBREVIATIONS

ug/l	microgram per liter
ACO	Administrative Consent Order (MassDEP-AVX Agreement)
AVX	AVX Corporation
City	City of New Bedford
CSA	Comprehensive Site Assessment
CVOC	Chlorinated Volatile Organic Compound
DNAPL	Dense Non-Aqueous Phase Liquid
EPA	United States Environmental Protection Agency
IRA	Immediate Response Action
LSP	Licensed Site Professional
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MHW	Mean High Water
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene or Perchloroethene
PPE	Personal Protective Equipment
RTN	Release Tracking Number
TCE	Trichloroethene
TOC	Total Organic Carbon
TSS	Total suspended solids
UCL	Upper Concentration Limit
URS	URS Corporation
UTM	Universal Transverse Mercator

## 1.0 INTRODUCTION

On behalf of AVX Corporation (AVX), AECOM has prepared this *Immediate Response Action (IRA) Status Report* (Status Report) for the Disposal Site known as the former Aerovox Facility (Site). Note that as of January 5, 2015, AECOM and URS Corporation (URS) have completed their merger and going forward will be operating under the AECOM brand. The merger has not affected project staffing; this Site continues to be managed by the URS legacy staff.

On April 10, 2014, AECOM notified the Massachusetts Department of Environmental Protection (MassDEP) of the presence of dense non-aqueous phase liquid (DNAPL) at a thickness of greater than 0.5-inches per 310 CMR 40.0313(1). AECOM submitted an IRA Plan on June 10, 2014, an IRA Status Report on August 6, 2014, and an interim IRA Status Report on October 8, 2014.

MassDEP orally approved an IRA consisting of assessment actions pursuant to the Massachusetts Contingency Plan (MCP), 310 CMR 40.0414(1), including assessment of the extent and recoverability of DNAPL in the vicinity of MW-15D and removal actions pursuant to the MCP at 310 CMR 40.0414(2) including utilizing low-energy methods (bailing and pumping) to remove DNAPL from MW-15D and from any newly installed monitoring wells that exhibit DNAPL thickness greater than ½ inch. The IRA condition is being addressed under the existing Release Tracking Number (RTN) for the Site, 4-0601.

The site assessment and remediation under Massachusetts General Law Chapter 21E and the MCP is subject to the Administrative Consent Order and Notice of Responsibility (ACO) between AVX and the MassDEP and the Massachusetts Office of the Attorney General, effective as of June 3, 2010 (ACO-SE-09-3P-016).

The Disposal Site is located at 740 Belleville Avenue, New Bedford, Bristol County, Massachusetts. **Figure 1**, Site Location Plan, shows the Site location with respect to the surrounding topography and features, and **Figure 2**, Site Plan, shows historic investigation locations across the Site. The coordinates of the Site (referenced to the corner of Belleville Avenue and Hadley Street) are latitude 41° 40' 25.12" N and longitude 70° 55' 13.84" W (UTM coordinates 340135.53m E and 4615326.34m N).

The Site as defined by the ACO includes any place or area where a release of oil and/or hazardous material at or from the property which occurred before the ACO Effective Date (June 3, 2010) has come to be located, excepting those places or areas that are part of the New Bedford Harbor Superfund Site including land area, bank or water body located seaward of the sheet pile wall previously installed at the property or seaward of the mean high water (MHW) level at the property and running along the MHW level in a northward and southward direction from the property. Per this definition, the Disposal Site as currently delineated extends to the following locations:

- The existing Aerovox western property line along Belleville Avenue,
- The existing sheet pile wall (inclusive of the wall itself) running generally in a north-south orientation along the Acushnet River;

- North of the northern boundary of the Site, onto the Precix property at 744 Belleville Avenue; and,
- South of the southern boundary of the Site, onto the Titleist property at 700 Belleville Avenue.

Phase II Comprehensive Site Assessment (CSA) activities are ongoing at the Site, and it is likely that, based on the results of those activities, the boundaries of the Site to the north and south will be modified from what is described above. Additional information and details regarding the Disposal Site history, a description of the release and potential receptors were provided in the Phase I and Tier Classification submittal and the IRA Plan, and are not repeated in this IRA Status Report.

## **2.0 RELEVANT CONTACTS (310 CMR 40.0424(a))**

The property is owned by the City of New Bedford, Massachusetts (the City). Contact information for the City's representative is as follows:

Ms. Michele Paul  
Director of Environmental Stewardship  
City of New Bedford  
133 Williams Street, Room 304  
New Bedford, MA 02740  
Phone Number: 508-991-6188

The person assuming responsibility for conducting IRA activities is:

Mr. Evan Slavitt  
AVX Corporation  
801 17<sup>th</sup> Avenue South, P.O. Box 867  
Myrtle Beach, SC 29578  
Phone Number: 843-946-0714

The Licensed Site Professional (LSP) for the Site is:

Ms. Marilyn Wade, LSP No. 4513  
AECOM  
1155 Elm Street, Suite 401  
Manchester, NH 03101  
Phone Number: 603-606-4824

### 3.0 STATUS OF IMMEDIATE RESPONSE ACTIONS (310 CMR 40.0425(3)(a))

#### 3.1 DNAPL GAUGING AND REMOVAL

Beginning on May 19, 2014, AECOM has conducted bi-weekly DNAPL recovery from monitoring well MW-15D. Gauging events have occurred on six occasions since the last event discussed (10/6/2014) in IRA Status Report #2.

During each DNAPL recovery event, the thickness of DNAPL in the well is first measured using a weighted string. Once the measurement is recorded, dedicated polyethylene tubing is then deployed to the bottom of the well and the discharge end connected to a peristaltic pump. DNAPL that is located at the bottom of the well is then extracted using the peristaltic pump and discharged into a 5-gallon bucket. Pumping is continued until there is no longer any visible evidence of DNAPL being discharged from the tubing. The discharge consists of a mixture of groundwater and DNAPL extracted from the well. By carefully decanting the water collected into a separate container, the volume of the recovered DNAPL is then measured by decanting into a graduated beaker.

On September 29, 2014, DNAPL was identified in monitoring well MW-15B for the first time. Prior to this measurement, only a trace of DNAPL had been observed in this well (weighted string was intermittently stained, but not continuously at bottom of string). Subsequently, DNAPL recovery has also been undertaken for MW-15B in addition to MW-15D.

During these six recovery events, the average thickness of DNAPL measured in MW-15D was 3.8 inches, with a minimum measured thickness of 3.5 inches and a maximum measured thickness of 4.0 inches. The total volume recovered from MW-15D during these six events was approximately 606 milliliters (ml) (0.16 gallon). The total DNAPL recovered from MW-15D since initiation of recovery efforts in May 2014 is 2,056 ml (0.54 gallon).

The average thickness of DNAPL measured in MW-15B during this period was 3.0 inches, with a minimum measured thickness of 2.5 inches and a maximum measured thickness of 3.5 inches. The total volume recovered from MW-15B during these six events is approximately 500 milliliters (ml) (0.13 gallon). The total DNAPL recovered from MW-15B since initiation of recovery efforts in September 2014 is 530 ml (0.22 gallon).

Refer to Table 1 and Table 2 for a tabulated summary of DNAPL recovery by event and cumulative volumes for MW-15D and MW-15B, respectively. Graphs of DNAPL thickness and recovery volume per event, and cumulative recovery to date are included in **Appendix A**.

The recovered water/DNAPL mixture is stored in a 5-gallon bucket with lid which is then placed in a 55-gallon drum. The drum is stored in a secure drum shed with secondary containment located on the Site.

To date, measurable DNAPL has not been observed in the other wells installed at the Site.

### 3.2 DNAPL ANALYSES

The DNAPL sample collected on September 30, 2014 from monitoring wells MW-15D and MW-15B was submitted for laboratory analysis for chlorinated volatile organic compounds (CVOCs), polychlorinated biphenyls (PCBs), and physical parameters including specific gravity, viscosity, surface tension and interfacial tension. The DNAPL CVOC and PCB analyses indicate that five CVOCs (1,2,4-trichlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, tetrachloroethene and trichloroethene [TCE]) and two Aroclors (1242 and 1254) are present in the DNAPL. The concentration of these constituents was similar to the concentrations detected in a DNAPL sample collected from MW-15D in March 2014.

Refer to **Table 3** for a summary of the DNAPL chemical laboratory analyses and **Appendix B** for the laboratory analytical reports.

#### Physical Properties

In order to assess the potential mobility of the DNAPL mixture present at the Site, physical characteristics (dynamic viscosity, fluid density, surface tension and interfacial tension) of the DNAPL are required; however, identification of a laboratory capable of performing this analysis has been problematic. Inquiries to regional and national commercial laboratories, academic facilities, and to MassDEP and EPA did not identify a laboratory that could provide the assessment of physical attributes due to the high PCB concentration in the DNAPL sample. Ultimately, AECOM identified a laboratory, Doble Engineering Company of Watertown, MA, that could complete most, but not all of the physical parameter testing. Doble was not able to perform the test method for measuring interfacial tension (ASTM Method D971). The physical parameter results were received January 7, 2015, and a copy of the report is provided in **Appendix B**. The following physical measurements were provided:

Test	Viscosity at 40°C	Specific Gravity	Surface Tension
Phase 1, Water	0.742 mm <sup>2</sup> /s	0.9986	41.4 mN/m
Phase 2	22.6 mm <sup>2</sup> /s	1.2297	22.9 mN/m

These physical parameters will be used to complete a mobility assessment for the DNAPL. The results of this assessment will provide evidence of whether the DNAPL is stable, and whether recovery of the DNAPL is potentially feasible. If recovery is feasible, the assessment will aid in the design of a potential recovery system. AECOM anticipates that this mobility assessment will be completed and the results reported in the next IRA Status Report.

#### UVOST DNAPL Assessment

Identification of the potential area and volume of soil impacted by DNAPL has, to date been estimated based on the use of Membrane Interface Probe (MIP) screening, followed by Geoprobe® direct push soil borings with soil sampling and analysis. The MIP screening tool is calibrated for non-site specific detections of volatile organics, including the chlorinated ethenes present at the Site. Given the relative proportion of chlorinated ethenes, chlorinated benzenes and PCBs found in the DNAPL, AECOM collected a sample of the DNAPL to evaluate a similar subsurface detailed assessment tool, also based on a Geoprobe platform, which uses laser induced fluorescence to identify the presence of polynuclear aromatic hydrocarbons found in



petroleum based NAPL. A sample of DNAPL from the Site was submitted to ZEBRA Technical Services to evaluate whether UVOST equipment was capable of detecting the PCB carrier oil. A waveform specific to the DNAPL was obtained, and this will be used to identify the DNAPL present in MW-15D and MW-15B. Therefore, additional assessment of the extent of DNAPL along the Aerovox shoreline and extending north onto the shoreline area on the Precix property will be conducted utilizing this tool calibrated to the site-specific DNAPL.

### 3.3 ACTIVITIES SINCE LAST STATUS REPORT – GROUNDWATER SAMPLING

In addition to the DNAPL IRA related activities described above (DNAPL gauging and recovery and DNAPL assessment), a groundwater sampling round in support of the Phase II CSA was performed in December 2014. Selected monitoring wells within the identified DNAPL IRA area were sampled during this event, including MW-15D and MW-15B. The groundwater samples were analyzed for CVOCs, PCBs, total suspended solids (TSS), RSK-175 gases (methane, ethane, and ethane), bicarbonate alkalinity, ammonia (as nitrogen), ferrous iron, total iron, nitrate (as nitrogen), phosphorus, sulfate, and total organic carbon (TOC) analysis. Two compounds were reported above laboratory reporting limits in the sample collected from MW-15B: cis-1,2-dichloroethene; and trichlorethene (TCE). The sample collected from monitoring well MW-15B contained these compounds at concentrations of 43,000 ug/L and 88,000 ug/L, slightly lower than the concentrations of 44,000 ug/L and 110,000 ug/L detected in September 2014. The sample collected from monitoring well MW-15D also contained tetrachloroethene. The MW-15D cis-1,2-Dichlorethene concentration was reported as 1,400 ug/L; the TCE concentration was reported as 5,600 ug/L, and the tetrachloroethene concentration was reported as 100 ug/L. The TCE concentration exceeds the Method 1 GW-3 standard and upper concentration limit (UCL) in MW-15B, and exceeds only the Method 1 GW-3 standard in MW-15D.

Refer to **Table 4** for the tabulated data for MW-15D and MW-15B. In addition, **Table 4** also provides the tabulated data for all site monitoring wells that were sampled in December 2014.

### 3.4 OTHER NEW SITE INFORMATION OR DATA (310 CMR 40.0425(3)(b))

Evaluation of tidal study data indicates that wells across the Site respond to tidal fluctuations within the Acushnet River. The tidal efficiency was calculated for each monitoring well to obtain the average fluctuation and percent response at each well relative to the change in water level of the river. As anticipated, the greatest fluctuations are observed in monitoring wells along the shoreline, with response decreasing in wells farther west. The average tidal fluctuation in overburden monitoring wells ranged from a minimum of 0.06 feet at MW-8S to a maximum of 1.80 feet at GZ-103S. The percent response of these monitoring wells ranged from a minimum of 1.0% at MW-20D to a maximum of 61% at MW-15D. For wells completed in bedrock, the average tidal fluctuation ranged from a minimum of 0.14 feet at MW-04B to a maximum of 2.94 feet at MW-07B. The percent response of bedrock monitoring wells ranged from a minimum of 0.10% at MW-13B to a maximum of 52.9% at MW-07B. The percent response for both overburden and bedrock monitoring wells was greatest within 300 feet of the river, dropping to 10%-20% 300 feet west of the shoreline.

#### **4.0 MANAGEMENT OF REMEDIATION WASTE (310 CMR 40.0425(3)(c))**

DNAPL, contaminated soil, contaminated groundwater, and contaminated personal protective equipment (PPE) are being generated during IRA activities. The DNAPL generated from recovery activities is temporarily stored in a covered 5-gallon pail that is stored within a 55-gallon drum in the secure temporary drum storage unit (with integral secondary containment) at the Site. Soils, decontamination water, and PPE are stored in separate 55-gallon drums, along with similar materials generated during other investigation (not part of this IRA) on the Site. Wastes generated during IRA activities after September 30, 2014 and monitoring well purge water/decontamination fluids from the December 2014 groundwater sampling event were transported off-site on December 12, 2014. Refer to **Appendix C** for a copy of the waste manifests.

## **5.0 OTHER RELATED INFORMATION (310 CMR 40.0425(3)(d))**

The September 14, 2014 letter from MassDEP also requested submittal of a modified IRA Plan. AECOM and MassDEP agreed that this submittal will be discussed at meetings scheduled between AVX and MassDEP. Such meetings were held on October 16, 2014 and December 10, 2014. Planning and coordination meetings are proposed to continue on a monthly basis, and the final scope of the IRA Modification and its subsequent submittal date remain pending.

The September 14, 2014 letter from MassDEP also requested that an environmental Imminent Hazard evaluation be prepared based on the analytical data for the samples collected by AECOM at the Site and analytical data for surface water and sediment samples collected from the Acushnet River by EPA and its contractors. The MCP and MassDEP risk characterization guidance documents do not include a requirement or methodology for preparing a quantitative data based environmental Imminent Hazard evaluation, and the qualitative criteria at 310 CMR 40.0955(3) for an environmental Imminent Hazard are not present at the Site. AECOM and MassDEP agreed that this Imminent Hazard evaluation is not required.

## **6.0 LSP OPINION (310 CMR 40.0425(3)(e))**

The IRA activities to date have been successful in removing a limited quantity of DNAPL and providing additional assessment of the extent of DNAPL in and around MW-15D and MW-15B and along the Aerovox shoreline. The IRA has been and will continue to be conducted in conformance with the IRA Plan submitted to MassDEP on June 9, 2014.

## TABLES

**Table 1**  
**MW-15D DNAPL Recovery Summary**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

Date	Depth to Groundwater	Approximate DNAPL Thickness (inches)	Recovery Event Volume (ounces)	Recovery Event Volume (ml)	Cumulative Volume Removed (ml)	Recovery Event Volume (gal)	Cumulative Volume Removed (gal)	Tide Cycle At Measurement
5/19/2014	NM	7	8 to 16	350	350	0.09	0.09	NR
6/2/2014	5.03	4.5	8 to 16	350	700	0.09	0.18	NR
6/16/2014	NM	4.5	5.5	160	860	0.04	0.23	NR
6/30/2014	NM	6	5	150	1010	0.04	0.27	NR
7/27/2014	4.49	3.5	3.4	100	1110	0.03	0.29	low tide
8/18/2014	3.85	3	3.4	100	1210	0.03	0.32	3/4 of high
9/22/2014	5.46	5	6.8	200	1410	0.05	0.37	3/4 of high; ebbing
10/6/2014	5.48	3	1.4	40	1450	0.01	0.38	low tide
10/22/2014	4.93	4	6.8	200	1650	0.05	0.44	low tide
11/3/2014	5.74	4	0.0	1.25	1651	0.00	0.44	low tide
11/17/2014	4.43	4	3.4	100	1751	0.03	0.46	Mid-tide; ebbing
12/8/2014	2.76	4	5.1	150	1901	0.04	0.50	high tide
12/23/2014	2.94	3.5	2.7	80	1981	0.02	0.52	high tide
1/6/2015	6.35	3.5	2.5	75	2056	0.02	0.54	low tide

**Notes:**

Volume is estimated; includes DNAPL only - recovered water is not included in estimate

For the total volume recovered calculation, a value of 12 ounces was used for the first two recovery events.

**Table 2**  
**MW-15B DNAPL Recovery Summary**  
**Aerovox, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-04601**

Date	Depth to Groundwater	Approximate DNAPL Thickness (inches)	Recovery Event Volume (ounces)	Recovery Event Volume (ml)	Cumulative Recovery Volume (ml)	Recovery Event Volume (gal)	Cumulative Recovery Volume (Gal)	Tide Cycle
5/19/2014								
6/2/2014								
6/16/2014								
6/30/2014								
7/27/2014								
8/18/2014								
9/22/2014								
10/6/2014	4.63	3	10.1	30	30	0.09	0.09	low tide
10/22/2014	4.82	3.5	33.8	100	130	0.03	0.12	low tide
11/3/2014	5.46	3	33.8	100	230	0.03	0.14	low tide
11/17/2014	4.98	2.5	25.4	75	305	0.02	0.16	mid-tide; ebbing
12/8/2014	4.98	3.5	25.4	75	380	0.02	0.18	high tide
12/23/2014	3.43	2.5	25.4	75	455	0.02	0.20	high tide
1/6/2015	4.62	3	25.4	75	530	0.02	0.22	low tide

**Table 3**  
**DNAPL Analytical Summary**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

<b>Sample ID:</b>	<b>DNAPL-MW-15D</b>	<b>MW15D/B DNAPL</b>
<b>Sample Date:</b>	<b>3/24/2014</b>	<b>9/30/2014</b>
<b>Chlorinated Volatile Organic Compounds (mg/kg)</b>		
1,2,4-Trichlorobenzene	12,000	13,000
1,4-Dichlorobenzene	400	2,000
cis-1,2-Dichloroethene	1,500	1,300
Tetrachloroethene	13,000	8,100
Trichloroethene	24,000	20,000
<b>Polychlorinated Biphenyls (mg/kg)</b>		
Aroclor 1242	479,000	381,000
Aroclor 1254	187,000	124,000
PCBs, Total	666,000	505,000



**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	GZ-002	GZ-004A	GZ-101D	GZ-101S	GZ-103D	GZ-103S	MW-2	MW-2B
					AX-GW-GZ2-120814 12/08/14	AX-GW-GZ4A-120814 12/08/14	AX-GW-GZ101D-120814 12/08/14	AX-GW-GZ101S-120814 12/08/14	AX-GW-GZ103D-120814 12/08/14	AX-GW-GZ103S-120814 12/08/14	AX-GW-MW2-121114 12/11/14	AX-GW-MW2B-121114 12/11/14
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	5.6	25. U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	1.0 U	150.	70.	4.9	610.	38.	2.0 U	2600.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	23.	25. U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	1.0 U	12. U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.4	45.	25. U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
Bromoform	(ug/l)	700.	50000.	100000.	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
Chlorobenzene	(ug/l)	200.	1000.	10000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	5.5	220.	25. U
Chloroethane	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
Chloroform	(ug/l)	50.	20000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
Chloromethane	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	1.0 U	150.	70.	4.9	610.	38.	2.0 U	2600.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	1.0 U	12. U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	0.60 U	2.4 U	2.4 U	0.60 U	2.4 U	0.60 U	1.2 U	15. U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
o-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
p-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	8.0 U	8.0 U	2.0 U	8.0 U	2.0 U	4.0 U	50. U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	1.0 U	4.0 U	4.0 U	1.4	4.0 U	1.0 U	2.0 U	27.
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.0 U	2.0 U	25. U
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	1.0 U	12. U
Trichloroethene	(ug/l)	5.	5000.	50000.	1.0 U	400.	420.	14.	560.	11.	2.0 U	3200.
Vinyl chloride	(ug/l)	2.	50000.	100000.	1.0 U	4.0 U	4.0 U	1.0 U	240.	8.5	2.0 U	160.
Total CVOCs	(ug/l)	NE	NE	NE	N D	550.	490.	20.3	1410.	64.4	293.6	5987.
<b>Dissolved Gases</b>												
Ethane	(ug/l)	NE	NE	NE	0.500 U	0.500 U	0.500 U	0.500 U	7.77	2.97	144.	4.32
Ethene	(ug/l)	NE	NE	NE	0.500 U	0.500 U	0.500 U	0.500 U	37.4	0.620	15.1	3.52
Methane	(ug/l)	NE	NE	NE	1550.	5.43	0.500 U	0.500 U	268.	5120.	1930.	180.
<b>Polychlorinated BiPhenyls</b>												
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1242	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.896	0.250 U	0.253	0.250 U	17.3	24.6
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	0.250 U	1.15	0.250 U	0.250 U	0.250 U	1.90	5.00 U
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U
Total PCBs	(ug/l)	5.	10.	100.	0.250 U	0.250 U	2.05	0.250 U	0.253	0.250 U	[19.2]	[24.6]

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	GZ-002	GZ-004A	GZ-101D	GZ-101S	GZ-103D	GZ-103S	MW-2	MW-2B
					AX-GW-GZ2-120814 12/08/14	AX-GW-GZ4A-120814 12/08/14	AX-GW-GZ101D-120814 12/08/14	AX-GW-GZ101S-120814 12/08/14	AX-GW-GZ103D-120814 12/08/14	AX-GW-GZ103S-120814 12/08/14	AX-GW-MW2-121114 12/11/14	AX-GW-MW2B-121114 12/11/14
<b>MNA Parameters</b>												
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	277.	75.7	40.0	54.5	82.1	206.	113.	37.1
Ammonia (as N)	(mg/l)	NE	NE	NE	1.69	0.075 U	0.075 U	0.075 U	0.321	4.78	1.85	0.405
Ferrous Iron	(mg/l)	NE	NE	NE	19.	0.50 U	0.50 U	0.50 U	16.	24.	0.82	1.1
Total Iron	(mg/l)	NE	NE	NE	30.	0.31	0.05 U	0.05 U	14.	26.	1.0	0.98
Nitrate (as N)	(mg/l)	NE	NE	NE	0.500 U	1.70	2.98	2.61	0.500 U	0.500 U	0.100 U	0.100 U
Phosphorus	(mg/l)	NE	NE	NE	0.344	0.010 U	0.010 U	0.010 U	0.034	0.092	0.057	0.010 U
Sulfate	(mg/l)	NE	NE	NE	13.	40.	14.	11.	140.	27.	32.	170.
Total Organic Carbon	(mg/l)	NE	NE	NE	5.5	1.4	0.71	1.0 U	2.2	9.2	4.4	6.0
Total Suspended Solids	(mg/l)	NE	NE	NE	70.	5.0 U	5.0 U	5.0 U	5.1	5.0 U	5.0 U	5.0 U
<b>Field Parameters</b>												
Dissolved Oxygen	(mg/l)	NE	NE	NE	0.21	0.53	1.00	1.98	6.90	0.50	0.34	1.56
ORP	(mv)	NE	NE	NE	-44.7	165.2	133.8	146.2	-18.9	-79.8	-25.8	-21.4
Specific Conductivity	(ms/cm)	NE	NE	NE	2.239	1.704	1.083	1.928	2.773	1.956	1.337	1.800
Temperature	(c)	NE	NE	NE	10.67	16.13	15.40	13.49	12.02	15.68	14.70	14.02
Turbidity	(ntu)	NE	NE	NE	131.0	1.79	1.94	4.02	3.61	0.79	0.00	0.07
pH	(su)	NE	NE	NE	6.40	7.28	5.91	5.99	6.17	6.25	6.39	5.42

**Notes:**  
(ug/l) = Micrograms per liter  
(mg/l) = Milligrams per liter  
(mv) = Millivolts  
(ms/cm) = Microsiemens per centimeter  
(C) = Celsius degrees  
(ntu) = Nephelometric units  
(su) = Standard units  
U = Constituent not detected at listed detection limit  
J = Estimated concentration  
ND = Not detected  
NE = Not established  
-- = Not analyzed for this constituent  
**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard  
**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*  
**Bold and orange shaded** value indicates concentration is above UCL  
\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S  
Total CVOCs and Total PCBs calculated by: summing detected concentrations  
MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards  
MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-4B AX-GW-MW4B-120914 12/09/14	MW-4S AX-GW-MW4S-120814 12/08/14	MW-5 AX-GW-MW5-121114 12/11/14	MW-6 AX-GW-MW6-121114 12/11/14	MW-6 AX-GW-DUP4-121114 12/11/14	MW-6A AX-GW-MW6A-121114 12/11/14	MW-6B AX-GW-MW6B-121114 12/11/14	MW-7 AX-GW-MW7-120914 12/09/14	MW-7 AX-GW-DUP2-120914 12/09/14
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	40. U	1.3	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	230.	31.	1.0 U	300.	320.	13.	1400.	2600.	2700.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	20. U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	10. U	120. U	120. U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Bromoform	(ug/l)	700.	50000.	100000.	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Chlorobenzene	(ug/l)	200.	1000.	10000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Chloroethane	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
Chloroform	(ug/l)	50.	20000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Chloromethane	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	230.	[30.]	1.0 U	300.	320.	13.	1400.	2600.	2700.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	20. U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	10. U	120. U	120. U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	24. U	0.60 U	0.60 U	3.0 U	3.0 U	0.60 U	12. U	150. U	150. U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
o-Chlorotoluene	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
p-Chlorotoluene	(ug/l)	NE	NE	NE	80. U	2.0 U	2.0 U	10. U	10. U	2.0 U	40. U	500. U	500. U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	40. U	1.0 U	1.0 U	5.0 U	5.0 U	2.4	20. U	250. U	250. U
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	40. U	1.4	1.0 U	5.0 U	5.0 U	1.0 U	20. U	250. U	250. U
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	20. U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	10. U	120. U	120. U
Trichloroethene	(ug/l)	5.	5000.	50000.	[5400.]	[47.]	1.0 U	610.	650.	42.	1500.	[22000.]	[23000.]
Vinyl chloride	(ug/l)	2.	50000.	100000.	40. U	[2.5]	1.0 U	7.6	8.3	1.0 U	26.	250. U	250. U
Total CVOCs	(ug/l)	NE	NE	NE	5630.	82.2	N D	917.6	978.3	57.4	2926.	24600.	25700.
<b>Dissolved Gases</b>													
Ethane	(ug/l)	NE	NE	NE	0.943	0.500 U	0.500 U	0.657	--	0.500 U	6.70	47.8	--
Ethene	(ug/l)	NE	NE	NE	1.04	0.500 U	0.500 U	0.500 U	--	0.500 U	4.14	10.9	--
Methane	(ug/l)	NE	NE	NE	172.	11.9	0.500 U	2.35	--	0.500 U	7.72	4400.	--
<b>Polychlorinated BiPhenyls</b>													
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1242	(ug/l)	NE	NE	NE	1.92	0.250 U	0.250 U	6.24	5.01	0.250 U	11.6	24.4	23.8
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	1.25 U	5.00 U	5.00 U
Total PCBs	(ug/l)	5.	10.	100.	1.92	0.250 U	0.250 U	6.24	5.01	0.250 U	[11.6]	[24.4]	[23.8]

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-4B AX-GW-MW4B-120914 12/09/14	MW-4S AX-GW-MW4S-120814 12/08/14	MW-5 AX-GW-MW5-121114 12/11/14	MW-6 AX-GW-MW6-121114 12/11/14	MW-6 AX-GW-DUP4-121114 12/11/14	MW-6A AX-GW-MW6A-121114 12/11/14	MW-6B AX-GW-MW6B-121114 12/11/14	MW-7 AX-GW-MW7-120914 12/09/14	MW-7 AX-GW-DUP2-120914 12/09/14
<b>MNA Parameters</b>													
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	8.70	151.	42.9	58.4	--	37.5	61.3	112.	--
Ammonia (as N)	(mg/l)	NE	NE	NE	0.332	0.102	0.075 U	0.075 U	--	0.075 U	0.141	4.99	--
Ferrous Iron	(mg/l)	NE	NE	NE	20.	0.50 U	0.50 U	0.50 U	--	0.50 U	0.97	0.99	--
Total Iron	(mg/l)	NE	NE	NE	9.9	0.12	0.05 U	0.20	--	0.31	0.96	1.1	--
Nitrate (as N)	(mg/l)	NE	NE	NE	0.100 U	1.16	5.22	2.26	--	1.41	1.41	0.100 U	--
Phosphorus	(mg/l)	NE	NE	NE	0.010 U	0.037	0.010 U	0.018	--	0.010 U	0.010 U	0.043	--
Sulfate	(mg/l)	NE	NE	NE	51.	120.	140.	370.	--	10. U	240.	140.	--
Total Organic Carbon	(mg/l)	NE	NE	NE	2.0	4.0	1.2	2.7	--	2.0	5.0 U	11.	--
Total Suspended Solids	(mg/l)	NE	NE	NE	5.0 U	5.0 U	5.0 U	15.	--	5.0 U	5.0 U	5.0 U	--
<b>Field Parameters</b>													
Dissolved Oxygen	(mg/l)	NE	NE	NE	0.16	1.20	5.04	0.19	--	4.01	0.06	0.06	--
ORP	(mv)	NE	NE	NE	202.3	149.2	91.9	189.5	--	131.0	111.9	113.4	--
Specific Conductivity	(ms/cm)	NE	NE	NE	1.706	4.339	0.636	7.535	--	0.161	6.347	1.808	--
Temperature	(c)	NE	NE	NE	13.61	14.29	13.69	13.99	--	13.48	12.81	14.81	--
Turbidity	(ntu)	NE	NE	NE	1.34	2.95	3.81	11.3	--	4.61	0.93	2.01	--
pH	(su)	NE	NE	NE	4.78	7.36	5.70	5.78	--	5.88	5.86	5.94	--

**Notes:**  
(ug/l) = Micrograms per liter  
(mg/l) = Milligrams per liter  
(mv) = Millivolts  
(ms/cm) = Microsiemens per centimeter  
(C) = Celsius degrees  
(ntu) = Nephelometric units  
(su) = Standard units  
U = Constituent not detected at listed detection limit  
J = Estimated concentration  
ND = Not detected  
NE = Not established  
-- = Not analyzed for this constituent  
**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard  
**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*  
**Bold and orange shaded** value indicates concentration is above UCL  
\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S  
Total CVOCs and Total PCBs calculated by: summing detected concentrations  
MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards  
MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-7B AX-GW-MW7B-120914 12/09/14	MW-8S AX-GW-MW8S-120914 12/09/14	MW-10D AX-GW-MW10D-121114 12/11/14	MW-11B AX-GW-MW11B-121014 12/10/14	MW-13B AX-GW-MW13B-121014 12/10/14	MW-13D AX-GW-MW13D-121014 12/10/14	MW-15B AX-GW-MW15B-121114 12/11/14	MW-15D AX-GW-MW15D-121114 12/11/14
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	10. U	100. U	50. U	1.0 U	220.	2.0 U	1000. U	100. U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	10. U	100. U	50. U	1.0 U	100. U	5.8	1000. U	100. U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	15.	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	610.	8300.	2200.	3.0	3700.	250.	43000.	1400.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	5.0 U	50. U	25. U	0.50 U	50. U	1.0 U	500. U	50. U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	10. U	100. U	50. U	1.0	100. U	2.0 U	1000. U	100. U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
Bromoform	(ug/l)	700.	50000.	100000.	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
Chlorobenzene	(ug/l)	200.	1000.	10000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
Chloroethane	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
Chloroform	(ug/l)	50.	20000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
Chloromethane	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	610.	8300.	2200.	3.0	3700.	250.	43000.	1400.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	5.0 U	50. U	25. U	0.50 U	50. U	1.0 U	500. U	50. U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0 U	1000. U	100. U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	6.0 U	60. U	30. U	0.60 U	60. U	1.2 U	600. U	60. U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
o-Chlorotoluene	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
p-Chlorotoluene	(ug/l)	NE	NE	NE	20. U	200. U	100. U	2.0 U	200. U	4.0 U	2000. U	200. U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	10. U	100. U	56.	110.	100. U	2.0 U	1000. U	100.
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	10. U	100. U	50. U	1.0 U	100. U	2.0	1000. U	100. U
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	5.0 U	50. U	25. U	0.50 U	50. U	1.0 U	500. U	50. U
Trichloroethene	(ug/l)	5.	5000.	50000.	[14000.]	140.	[6800.]	8.7	[23000.]	47.	[88000.]	[5600.]
Vinyl chloride	(ug/l)	2.	50000.	100000.	35.	4200.	290.	1.0 U	620.	530.	1000. U	100. U
Total CVOCs	(ug/l)	NE	NE	NE	14660.	12640.	9346.	122.7	27540.	834.8	131000.	7100.
<b>Dissolved Gases</b>												
Ethane	(ug/l)	NE	NE	NE	3.71	4.50	8.89	0.500 U	2.89	1.78	20.8	2.53
Ethene	(ug/l)	NE	NE	NE	14.9	325.	3.42	0.500 U	57.2	66.3	43.8	3.79
Methane	(ug/l)	NE	NE	NE	44.3	333.	237.	8.45	155.	312.	97.9	55.9
<b>Polychlorinated BiPhenyls</b>												
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1242	(ug/l)	NE	NE	NE	0.436	0.713	22.3	0.530	35.2	0.250 U	183.	56.6
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	0.250 U	5.00 U	0.250 U	5.00 U	0.250 U	25.0 U	12.5 U
Total PCBs	(ug/l)	5.	10.	100.	0.436	0.713	[22.3]	0.530	[35.2]	0.250 U	[183.]	[56.6]

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-7B AX-GW-MW7B-120914 12/09/14	MW-8S AX-GW-MW8S-120914 12/09/14	MW-10D AX-GW-MW10D-121114 12/11/14	MW-11B AX-GW-MW11B-121014 12/10/14	MW-13B AX-GW-MW13B-121014 12/10/14	MW-13D AX-GW-MW13D-121014 12/10/14	MW-15B AX-GW-MW15B-121114 12/11/14	MW-15D AX-GW-MW15D-121114 12/11/14
<b>MNA Parameters</b>												
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	72.9	229.	106.	89.6	185.	272.	40.5	25.1
Ammonia (as N)	(mg/l)	NE	NE	NE	0.075 U	0.910	1.39	0.075 U	0.390	0.486	0.075 U	0.287
Ferrous Iron	(mg/l)	NE	NE	NE	0.50 U	11.	0.50 U	0.50 U	0.50 U	0.50 U	19.	0.50 U
Total Iron	(mg/l)	NE	NE	NE	0.05 U	6.1	0.25	0.05 U	0.07	0.39	14.	0.08
Nitrate (as N)	(mg/l)	NE	NE	NE	0.100 U	0.100 U	0.100 U	1.88	0.100 U	0.100 U	0.100 U	0.201
Phosphorus	(mg/l)	NE	NE	NE	0.029	0.094	0.010 U	0.010 U	0.576	0.062	0.010 U	0.010 U
Sulfate	(mg/l)	NE	NE	NE	320.	360.	160.	18.	260.	31.	510.	420.
Total Organic Carbon	(mg/l)	NE	NE	NE	1.7	9.0	3.8	1.2	13.	4.2	2.4	3.6
Total Suspended Solids	(mg/l)	NE	NE	NE	6.1	8.5	5.0 U	5.0 U	5.0 U	5.0 U	11.	5.0 U
<b>Field Parameters</b>												
Dissolved Oxygen	(mg/l)	NE	NE	NE	0.17	0.24	0.06	0.33	0.11	0.08	0.39	0.40
ORP	(mv)	NE	NE	NE	-108.1	-82.5	98.5	38.1	118.2	96.2	-72.4	101.0
Specific Conductivity	(ms/cm)	NE	NE	NE	9.227	4.763	1.631	0.681	4.173	1.484	8.141	3.785
Temperature	(c)	NE	NE	NE	11.08	13.67	12.71	15.78	15.58	15.66	13.95	12.96
Turbidity	(ntu)	NE	NE	NE	0.51	6.81	0.63	1.58	17.3	2.48	7.65	1.53
pH	(su)	NE	NE	NE	8.22	6.83	6.01	6.20	8.88	6.80	6.09	5.19

**Notes:**

(ug/l) = Micrograms per liter

(mg/l) = Milligrams per liter

(mv) = Millivolts

(ms/cm) = Microsiemens per centimeter

(C) = Celsius degrees

(ntu) = Nephelometric units

(su) = Standard units

U = Constituent not detected at listed detection limit

J = Estimated concentration

ND = Not detected

NE = Not established

-- = Not analyzed for this constituent

**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard

**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*

**Bold and orange shaded** value indicates concentration is above UCL

\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S

Total CVOCs and Total PCBs calculated by: summing detected concentrations

MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards

MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-16S AX-GW-MW16S-120814 12/08/14	MW-17B AX-GW-MW17B-120914 12/09/14	MW-17B AX-GW-DUP1-120914 12/09/14	MW-17D AX-GW-MW17D-120914 12/09/14	MW-18D AX-GW-MW18D-121014 12/10/14	MW-18S AX-GW-MW18S-120814 12/08/14	MW-19D AX-GW-MW19D-120914 12/09/14	MW-19S AX-GW-MW19S-120914 12/09/14
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	130.	3600.	3100.	2700.	1100.	53.	3100.	220.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	0.50 U	20. U	20. U	20. U	20. U	0.50 U	20. U	1.0 U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Bromoform	(ug/l)	700.	50000.	100000.	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Chlorobenzene	(ug/l)	200.	1000.	10000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Chloroethane	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
Chloroform	(ug/l)	50.	20000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Chloromethane	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	[130.]	3500.	3000.	2600.	1100.	[53.]	3100.	210.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	20. U	20. U	20. U	20. U	0.50 U	20. U	1.0 U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	1.0 U	40. U	40. U	40. U	40. U	1.0 U	40. U	2.0 U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	0.60 U	24. U	24. U	24. U	24. U	0.60 U	24. U	1.2 U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
o-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
p-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	80. U	80. U	80. U	80. U	2.0 U	80. U	4.0 U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	1.2	40. U	40. U	40. U	40. U	1.6	40. U	2.0 U
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	1.8	67.	70.	59.	40. U	1.0 U	40. U	5.2
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	20. U	20. U	20. U	20. U	0.50 U	20. U	1.0 U
Trichloroethene	(ug/l)	5.	5000.	50000.	[170.]	2900.	3000.	3200.	2100.	[200.]	2700.	26.
Vinyl chloride	(ug/l)	2.	50000.	100000.	1.6	340.	370.	350.	73.	1.0 U	100.	3.7
Total CVOCs	(ug/l)	NE	NE	NE	304.6	6807.	6440.	6209.	3273.	254.6	5900.	244.9
<b>Dissolved Gases</b>												
Ethane	(ug/l)	NE	NE	NE	0.965	32.3	--	22.9	1.11	0.500 U	4.67	0.500 U
Ethene	(ug/l)	NE	NE	NE	0.500 U	5.06	--	3.35	0.701	0.500 U	4.53	0.500 U
Methane	(ug/l)	NE	NE	NE	47.7	937.	--	693.	9.34	0.500 U	446.	2.30
<b>Polychlorinated BiPhenyls</b>												
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1242	(ug/l)	NE	NE	NE	0.250 U	22.9	23.6	34.1	12.8	0.250 U	7.55	0.250 U
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.257
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	5.00 U	5.00 U	5.00 U	1.25 U	0.250 U	1.25 U	0.250 U
Total PCBs	(ug/l)	5.	10.	100.	0.250 U	[22.9]	[23.6]	[34.1]	[12.8]	0.250 U	7.55	0.257

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-16S AX-GW-MW16S-120814 12/08/14	MW-17B AX-GW-MW17B-120914 12/09/14	MW-17B AX-GW-DUP1-120914 12/09/14	MW-17D AX-GW-MW17D-120914 12/09/14	MW-18D AX-GW-MW18D-121014 12/10/14	MW-18S AX-GW-MW18S-120814 12/08/14	MW-19D AX-GW-MW19D-120914 12/09/14	MW-19S AX-GW-MW19S-120914 12/09/14
<b>MNA Parameters</b>												
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	76.2	126.	--	58.5	62.8	103.	50.2	33.4
Ammonia (as N)	(mg/l)	NE	NE	NE	0.075 U	1.58	--	1.44	0.087	0.075 U	0.936	0.075 U
Ferrous Iron	(mg/l)	NE	NE	NE	0.50 U	0.61	--	0.50 U	0.50 U	0.50 U	1.4	0.50 U
Total Iron	(mg/l)	NE	NE	NE	0.05 U	0.58	--	0.45	0.05 U	0.05 U	1.3	0.14
Nitrate (as N)	(mg/l)	NE	NE	NE	0.372	0.100 U	--	0.100 U	0.912	4.40	0.100 U	6.56
Phosphorus	(mg/l)	NE	NE	NE	0.010 U	0.011	--	0.010 U	0.010 U	0.010 U	0.010 U	0.017
Sulfate	(mg/l)	NE	NE	NE	300.	210.	--	220.	120.	15.	600.	22.
Total Organic Carbon	(mg/l)	NE	NE	NE	0.57	7.9	--	7.6	3.2	1.3	6.5	4.0
Total Suspended Solids	(mg/l)	NE	NE	NE	5.0 U	5.0 U	--	12.	5.0 U	5.0 U	11.	11.
<b>Field Parameters</b>												
Dissolved Oxygen	(mg/l)	NE	NE	NE	1.19	0.07	--	0.18	0.29	1.49	0.08	7.09
ORP	(mv)	NE	NE	NE	135.4	-11.7	--	88.6	91.4	192.6	123.1	250.0
Specific Conductivity	(ms/cm)	NE	NE	NE	8.192	4.090	--	3.695	2.551	0.526	13.91	0.343
Temperature	(c)	NE	NE	NE	13.93	11.71	--	13.96	16.85	15.30	13.96	14.56
Turbidity	(ntu)	NE	NE	NE	2.06	1.88	--	7.12	0.83	4.11	3.19	2.01
pH	(su)	NE	NE	NE	6.09	6.24	--	5.50	5.92	7.38	5.46	5.66

**Notes:**

(ug/l) = Micrograms per liter

(mg/l) = Milligrams per liter

(mv) = Millivolts

(ms/cm) = Microsiemens per centimeter

(C) = Celsius degrees

(ntu) = Nephelometric units

(su) = Standard units

U = Constituent not detected at listed detection limit

J = Estimated concentration

ND = Not detected

NE = Not established

-- = Not analyzed for this constituent

**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard

**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*

**Bold and orange shaded** value indicates concentration is above UCL

\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S

Total CVOCs and Total PCBs calculated by: summing detected concentrations

MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards

MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards



**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-20B AX-GW-MW20B-121014 12/10/14	MW-20D AX-GW-MW20D-121014 12/10/14	MW-21B AX-GW-MW21B-121014 12/10/14	MW-21D AX-GW-MW21D-121014 12/10/14	MW-22S AX-GW-MW22S-121014 12/10/14	MW-23B AX-GW-MW23B-121014 12/10/14	MW-23D AX-GW-MW23D-121014 12/10/14	MW-24B AX-GW-MW24B-120814 12/08/14
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	1.0 U	1.0 U	8.9	1.0 U	1.0 U	5100.	950.	68.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	25. U	5.0 U	2.0 U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
Bromoform	(ug/l)	700.	50000.	100000.	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	[40000.]
Chlorobenzene	(ug/l)	200.	1000.	10000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
Chloroethane	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
Chloroform	(ug/l)	50.	20000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	[31000.]
Chloromethane	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	9.7
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	1.0 U	1.0 U	8.9	1.0 U	1.0 U	5100.	950.	61.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	25. U	5.0 U	2.0 U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	4.0 U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	30. U	6.0 U	2.4 U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	4200.
o-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
p-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100. U	20. U	8.0 U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	28.
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50. U	10. U	7.3
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	25. U	5.0 U	2.0 U
Trichloroethene	(ug/l)	5.	5000.	50000.	1.0 U	1.0 U	40.	3.6	1.0 U	2000.	990.	440.
Vinyl chloride	(ug/l)	2.	50000.	100000.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	91.	11.	4.0 U
Total CVOCs	(ug/l)	NE	NE	NE	N D	N D	48.9	3.6	N D	7191.	1951.	75790.
<b>Dissolved Gases</b>												
Ethane	(ug/l)	NE	NE	NE	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	24.9	1.07	3.18
Ethene	(ug/l)	NE	NE	NE	0.500 U	0.500 U	0.788	0.500 U	0.500 U	29.3	1.42	8.41
Methane	(ug/l)	NE	NE	NE	0.500 U	0.500 U	16.5	8.92	3770.	361.	48.4	19.4
<b>Polychlorinated BiPhenyls</b>												
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1242	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.450	0.895	0.250 U
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.986	0.250 U	0.250 U	0.250 U
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Total PCBs	(ug/l)	5.	10.	100.	0.250 U	0.250 U	0.250 U	0.250 U	0.986	0.450	0.895	0.250 U

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-20B AX-GW-MW20B-121014 12/10/14	MW-20D AX-GW-MW20D-121014 12/10/14	MW-21B AX-GW-MW21B-121014 12/10/14	MW-21D AX-GW-MW21D-121014 12/10/14	MW-22S AX-GW-MW22S-121014 12/10/14	MW-23B AX-GW-MW23B-121014 12/10/14	MW-23D AX-GW-MW23D-121014 12/10/14	MW-24B AX-GW-MW24B-120814 12/08/14
<b>MNA Parameters</b>												
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	44.9	38.1	161.	57.9	101.	214.	38.4	129.
Ammonia (as N)	(mg/l)	NE	NE	NE	0.075 U	0.075 U	0.075 U	0.075 U	1.34	0.114	0.132	0.178
Ferrous Iron	(mg/l)	NE	NE	NE	0.50 U	0.50 U	0.50 U	0.50 U	24.	2.8	1.0	0.50 U
Total Iron	(mg/l)	NE	NE	NE	0.05 U	0.05 U	0.48	0.34	12.	2.9	0.98	0.38
Nitrate (as N)	(mg/l)	NE	NE	NE	3.19	5.95	0.374	2.32	0.100 U	0.100 U	0.276	0.100 U
Phosphorus	(mg/l)	NE	NE	NE	0.010 U	0.010 U	0.100	0.010 U	0.060	0.010 U	0.010 U	0.010 U
Sulfate	(mg/l)	NE	NE	NE	14.	34.	31.	25.	24.	400.	250.	61.
Total Organic Carbon	(mg/l)	NE	NE	NE	2.5 U	3.4	2.5 U	0.86	7.4	2.9	1.7	1.4
Total Suspended Solids	(mg/l)	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.9	15.	6.3	5.0 U
<b>Field Parameters</b>												
Dissolved Oxygen	(mg/l)	NE	NE	NE	1.41	1.76	0.09	2.52	0.20	6.69	0.11	4.21
ORP	(mv)	NE	NE	NE	59.2	118.4	-89.8	130.8	-74.2	-149.6	154.8	-50.6
Specific Conductivity	(ms/cm)	NE	NE	NE	0.434	0.320	1.460	0.502	0.252	11.26	6.764	3.600
Temperature	(c)	NE	NE	NE	13.86	12.23	12.22	12.08	10.95	11.25	12.71	14.38
Turbidity	(ntu)	NE	NE	NE	1.29	1.74	0.70	1.53	0.31	0.25	0.51	1.99
pH	(su)	NE	NE	NE	5.95	5.02	9.49	5.56	6.06	6.98	5.50	6.84

**Notes:**

(ug/l) = Micrograms per liter

(mg/l) = Milligrams per liter

(mv) = Millivolts

(ms/cm) = Microsiemens per centimeter

(C) = Celsius degrees

(ntu) = Nephelometric units

(su) = Standard units

U = Constituent not detected at listed detection limit

J = Estimated concentration

ND = Not detected

NE = Not established

-- = Not analyzed for this constituent

**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard

**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*

**Bold and orange shaded** value indicates concentration is above UCL

\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S

Total CVOCs and Total PCBs calculated by: summing detected concentrations

MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards

MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-24D AX-GW-MW24D-120814 12/08/14	MW-26B AX-GW-MW26B-121014 12/10/14	MW-26B AX-GW-DUP3-121014 12/10/14	MW-27B AX-GW-MW27B-121014 12/10/14	MW-28B AX-GW-MW28B-121014 12/10/14	MW-103B AX-GW-MW103B-120814 12/08/14
<b>Volatile Organic Compounds</b>										
1,1,1,2-Tetrachloroethane	(ug/l)	10.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,1,1-trichloroethane	(ug/l)	4000.	20000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,1,2,2-Tetrachloroethane	(ug/l)	9.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,1,2-Trichloroethane	(ug/l)	900.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,1-Dichloroethane	(ug/l)	2000.	20000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,1-Dichloroethene	(ug/l)	80.	30000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,2,4-Trichlorobenzene	(ug/l)	200.	50000.	100000.	2.0 U	2000. U	2000. U	200. U	200. U	40. U
1,2-Dibromoethane	(ug/l)	2.	50000.	100000.	2.0 U	2000. U	2000. U	200. U	200. U	40. U
1,2-Dichlorobenzene	(ug/l)	8000.	2000.	80000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,2-Dichloroethane	(ug/l)	5.	20000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,2-Dichloroethene	(ug/l)	NE	NE	NE	1.0 U	7700.	7500.	1400.	620.	600.
1,2-Dichloropropane	(ug/l)	3.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,3-Dichlorobenzene	(ug/l)	6000.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
1,3-Dichloropropane	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
1,3-Dichloropropene	(ug/l)	10.	200.	2000.	0.50 U	500. U	500. U	50. U	50. U	10. U
1,4-Dichlorobenzene	(ug/l)	60.	8000.	80000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
Bromodichloromethane	(ug/l)	6.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
Bromoform	(ug/l)	700.	50000.	100000.	2.0 U	2000. U	2000. U	200. U	200. U	40. U
Carbon Tetrachloride	(ug/l)	2.	5000.	50000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
Chlorobenzene	(ug/l)	200.	1000.	10000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
Chloroethane	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
Chloroform	(ug/l)	50.	20000.	100000.	2.7	1000. U	1000. U	100. U	100. U	20. U
Chloromethane	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
cis-1,2-Dichloroethene	(ug/l)	20.	50000.	100000.	1.0 U	7700.	7500.	1400.	620.	600.
cis-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	500. U	500. U	50. U	50. U	10. U
Dibromochloromethane	(ug/l)	20.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
Dichlorodifluoromethane	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
Hexachlorobutadiene	(ug/l)	1.	3000.	30000.	0.60 U	600. U	600. U	60. U	60. U	12. U
Methylene Chloride	(ug/l)	2000.	50000.	100000.	2.0 U	2000. U	2000. U	200. U	200. U	40. U
o-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
p-Chlorotoluene	(ug/l)	NE	NE	NE	2.0 U	2000. U	2000. U	200. U	200. U	40. U
Tetrachloroethene	(ug/l)	50.	30000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
trans-1,2-Dichloroethene	(ug/l)	80.	50000.	100000.	1.0 U	1000. U	1000. U	100. U	100. U	20. U
trans-1,3-Dichloropropene	(ug/l)	NE	NE	NE	0.50 U	500. U	500. U	50. U	50. U	10. U
Trichloroethene	(ug/l)	5.	5000.	50000.	2.8	[140000.]	[130000.]	[14000.]	[8600.]	1500.
Vinyl chloride	(ug/l)	2.	50000.	100000.	1.0 U	1000. U	1000. U	160.	100. U	51.
Total CVOCs	(ug/l)	NE	NE	NE	5.5	147700.	137500.	15560.	9220.	2151.
<b>Dissolved Gases</b>										
Ethane	(ug/l)	NE	NE	NE	0.500 U	10.1	--	17.6	2.45	1.00
Ethene	(ug/l)	NE	NE	NE	0.500 U	37.9	--	21.1	9.01	1.25
Methane	(ug/l)	NE	NE	NE	0.606	178.	--	662.	4.27	15.0
<b>Polychlorinated BiPhenyls</b>										
Aroclor 1016	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1221	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1232	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1242	(ug/l)	NE	NE	NE	0.250 U	2.44	2.76	2.52	0.250 U	4.60
Aroclor 1248	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1254	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1260	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1262	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Aroclor 1268	(ug/l)	NE	NE	NE	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Total PCBs	(ug/l)	5.	10.	100.	0.250 U	2.44	2.76	2.52	0.250 U	4.60

**Table 4**  
**Groundwater Analytical Results - December 2014**  
**Aerovox Site, 740 Belleville Avenue, New Bedford, MA**  
**RTN 4-0601**

DRAFT - Unvalidated Results

Location Sample ID Sample Date	Units	MCP GW-2	MCP GW-3	MCP Groundwater UCLs	MW-24D AX-GW-MW24D-120814 12/08/14	MW-26B AX-GW-MW26B-121014 12/10/14	MW-26B AX-GW-DUP3-121014 12/10/14	MW-27B AX-GW-MW27B-121014 12/10/14	MW-28B AX-GW-MW28B-121014 12/10/14	MW-103B AX-GW-MW103B-120814 12/08/14
<b>MNA Parameters</b>										
Alkalinity, Bicarbonate (as CaCO3)	(mg/l)	NE	NE	NE	40.1	326.	--	238.	94.2	24.6
Ammonia (as N)	(mg/l)	NE	NE	NE	0.075 U	0.120	--	0.115	0.163	0.086
Ferrous Iron	(mg/l)	NE	NE	NE	0.50 U	37.	--	1.8	0.50 U	0.50 U
Total Iron	(mg/l)	NE	NE	NE	0.05 U	17.	--	2.0	1.0	0.06
Nitrate (as N)	(mg/l)	NE	NE	NE	4.10	0.100 U	--	0.100 U	0.100 U	0.693
Phosphorus	(mg/l)	NE	NE	NE	0.010 U	0.010 U	--	0.010 U	0.010 U	0.010 U
Sulfate	(mg/l)	NE	NE	NE	14.	140.	--	640.	110.	120.
Total Organic Carbon	(mg/l)	NE	NE	NE	0.55	20.	--	2.5 U	2.1	1.4
Total Suspended Solids	(mg/l)	NE	NE	NE	5.0 U	9.5	--	10.	7.3	5.0 U
<b>Field Parameters</b>										
Dissolved Oxygen	(mg/l)	NE	NE	NE	3.02	0.10	--	0.08	0.18	0.09
ORP	(mv)	NE	NE	NE	116.9	62.9	--	-27.8	-151.7	222.5
Specific Conductivity	(ms/cm)	NE	NE	NE	0.553	11.34	--	16.91	5.646	2.109
Temperature	(c)	NE	NE	NE	15.02	14.98	--	12.68	14.92	15.68
Turbidity	(ntu)	NE	NE	NE	1.02	2.09	--	0.29	0.42	0.44
pH	(su)	NE	NE	NE	6.03	5.89	--	6.87	11.31	5.34

**Notes:**

(ug/l) = Micrograms per liter

(mg/l) = Milligrams per liter

(mv) = Millivolts

(ms/cm) = Microsiemens per centimeter

(C) = Celsius degrees

(ntu) = Nephelometric units

(su) = Standard units

U = Constituent not detected at listed detection limit

J = Estimated concentration

ND = Not detected

NE = Not established

-- = Not analyzed for this constituent

**Bold and yellow shaded** value indicates concentration is above Method 1 GW-3 standard

**Bold and pink shaded** value indicates concentration is above Method 1 GW-2 standard\*

**Bold and orange shaded** value indicates concentration is above UCL

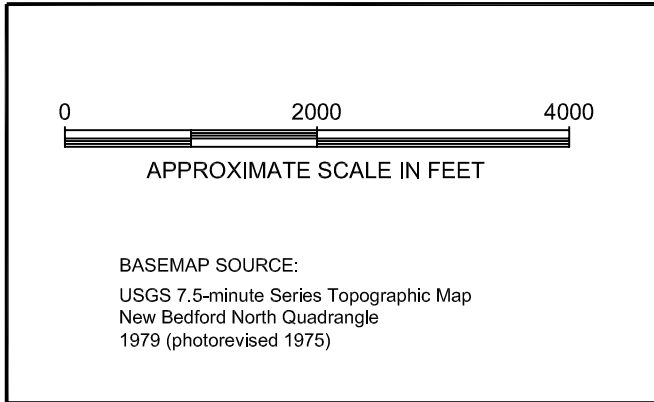
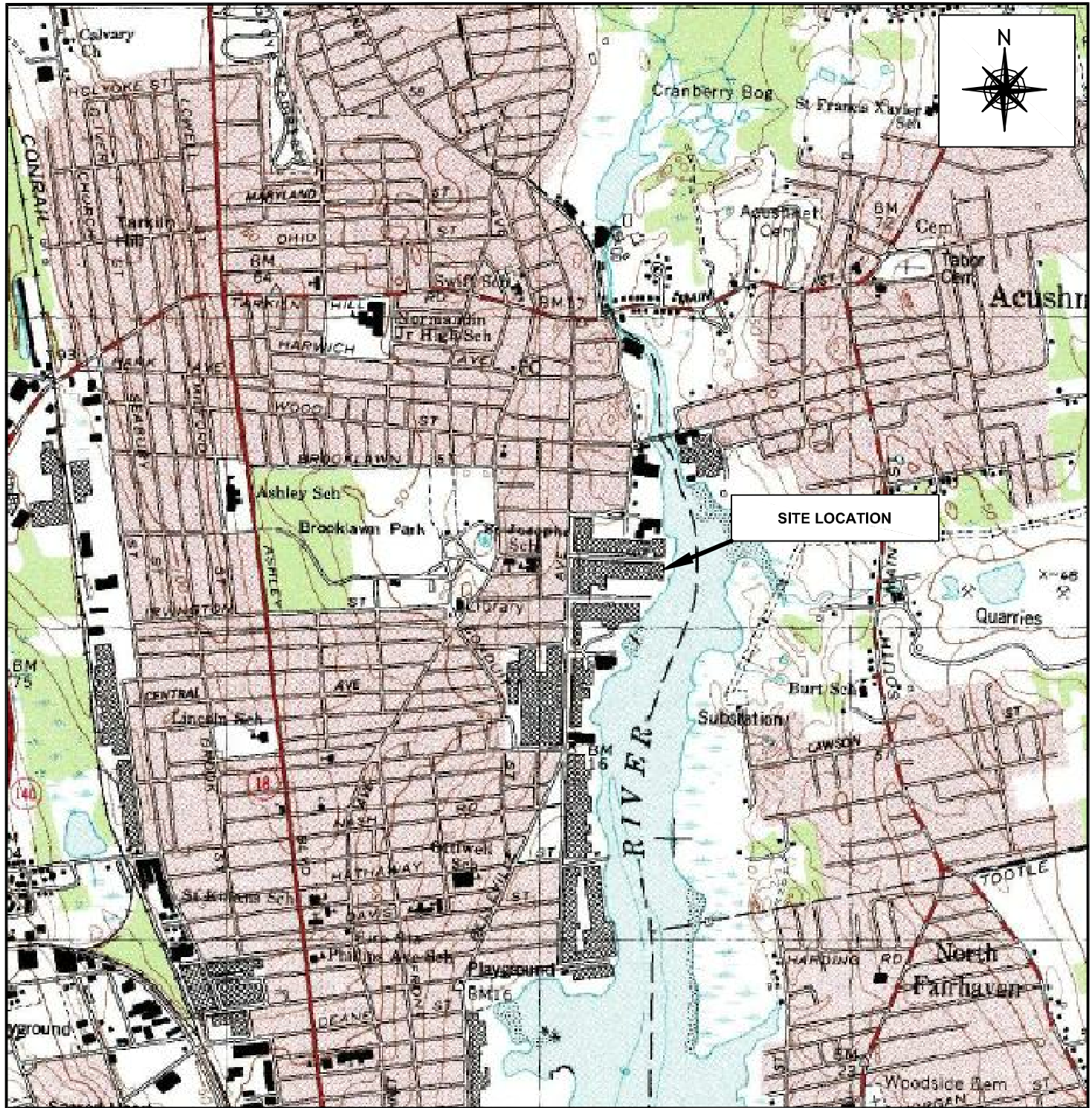
\*MCP GW-2 standards only apply only to wells MW-4S, MW-16S, MW-18S, MW-20D, MW-21D, and MW-22S

Total CVOCs and Total PCBs calculated by: summing detected concentrations

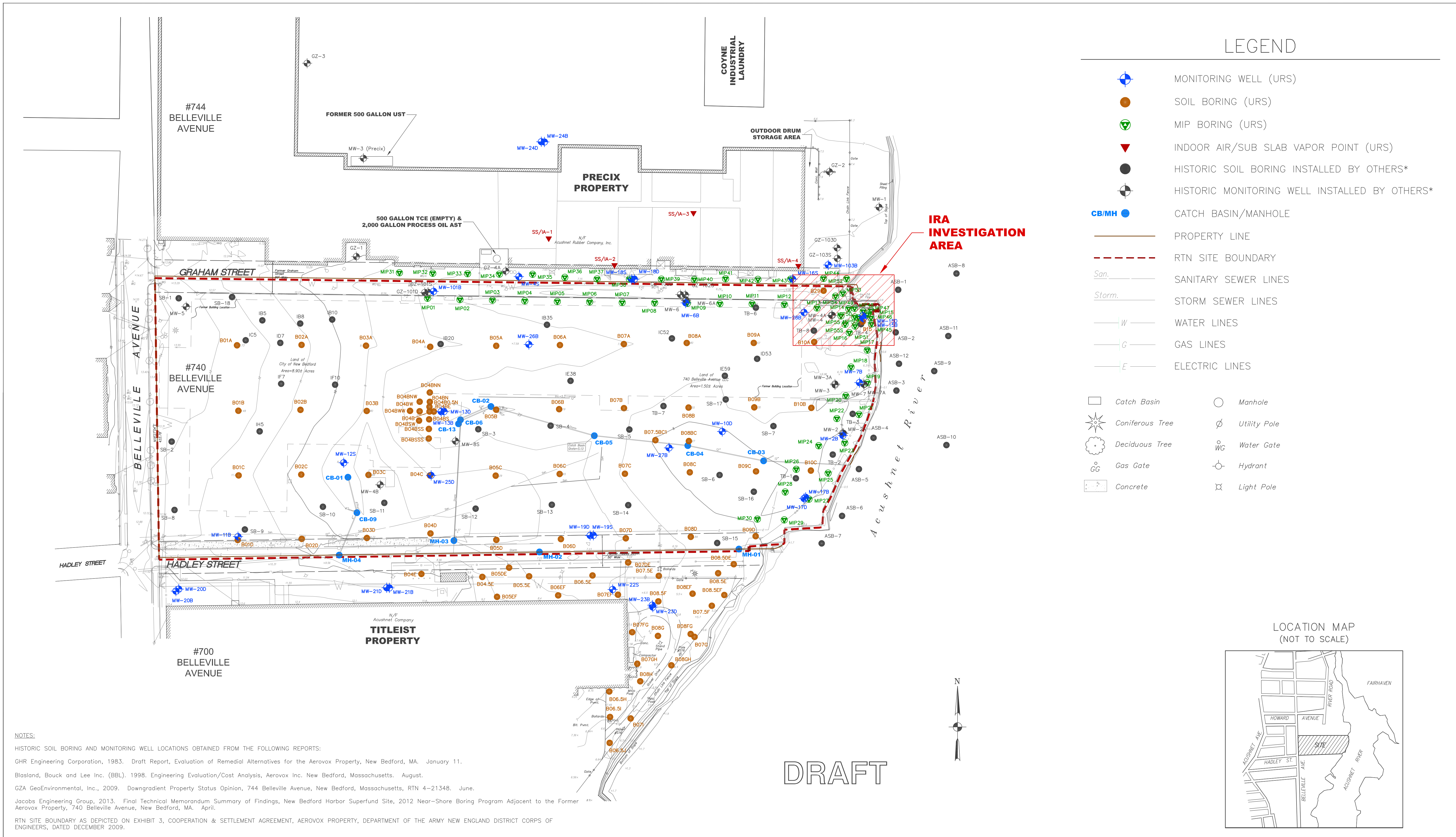
MCP GW-2 = MCP Method 1: GW-2 Water Quality Standards

MCP GW-3 = MCP Method 1: GW-3 Water Quality Standards

## FIGURES



<b>SITE LOCATION PLAN</b>			
<b>AEROVOX FACILITY</b> 740 BELLEVILLE AVENUE NEW BEDFORD, MASSACHUSETTS			
<b>URS</b>		5 Industrial Way Salem, New Hampshire 03079 TEL: (603) 893-0616 FAX: (603) 893-6240 <a href="http://www.urscorp.com">http://www.urscorp.com</a>	
SCALE:	NTS	DRAWN BY:	KP
DATE:	06/14	APPR. BY:	JU
JOB NO.:		39744051	
FIGURE 1			



LEGEND

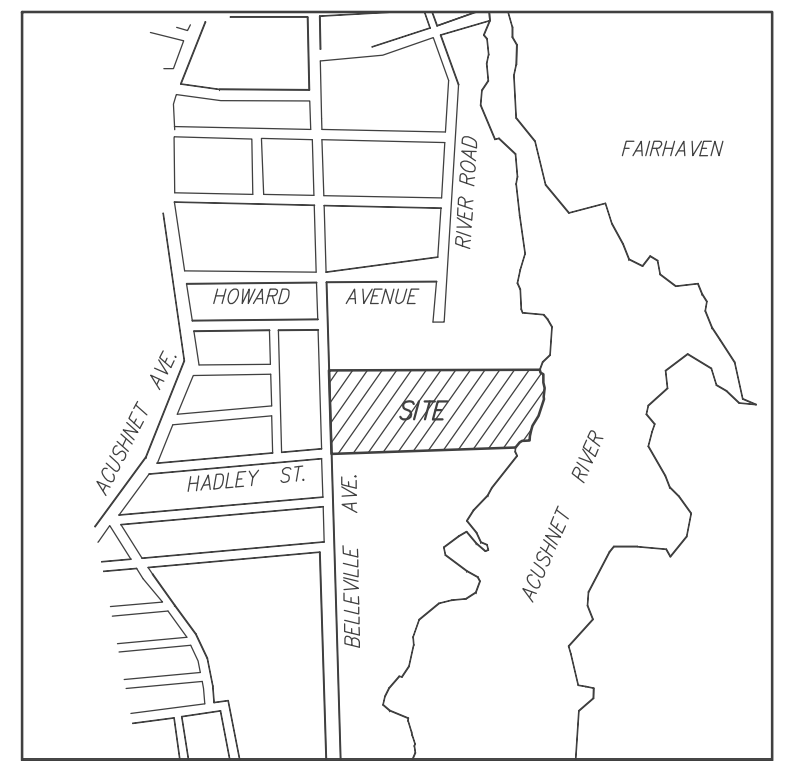
- MONITORING WELL (URS)
- SOIL BORING (URS)
- MIP BORING (URS)
- INDOOR AIR/SUB SLAB VAPOR POINT (URS)
- HISTORIC SOIL BORING INSTALLED BY OTHERS\*
- HISTORIC MONITORING WELL INSTALLED BY OTHERS\*
- CATCH BASIN/MANHOLE
- PROPERTY LINE
- RTN SITE BOUNDARY
- SANITARY SEWER LINES
- STORM SEWER LINES
- WATER LINES
- GAS LINES
- ELECTRIC LINES
- Catch Basin
- Manhole
- Coniferous Tree
- Deciduous Tree
- Concrete
- Utility Pole
- Water Gate
- Hydrant
- Light Pole

**IRA INVESTIGATION AREA**

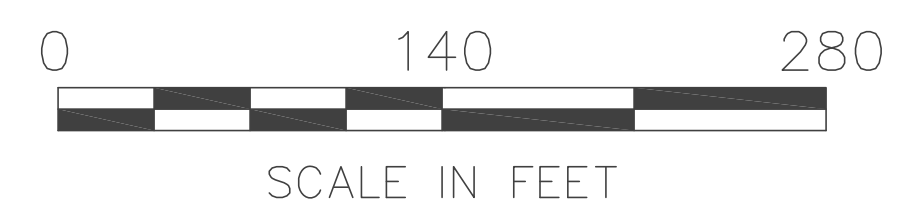
DRAFT

**NOTES:**  
 HISTORIC SOIL BORING AND MONITORING WELL LOCATIONS OBTAINED FROM THE FOLLOWING REPORTS:  
 GHR Engineering Corporation, 1983. Draft Report, Evaluation of Remedial Alternatives for the Aerovox Property, New Bedford, MA. January 11.  
 Blasland, Bouck and Lee Inc. (BBL). 1998. Engineering Evaluation/Cost Analysis, Aerovox Inc. New Bedford, Massachusetts. August.  
 GZA GeoEnvironmental, Inc., 2009. Downgradient Property Status Opinion, 744 Belleville Avenue, New Bedford, Massachusetts, RTN 4-21348. June.  
 Jacobs Engineering Group, 2013. Final Technical Memorandum Summary of Findings, New Bedford Harbor Superfund Site, 2012 Near-Shore Boring Program Adjacent to the Former Aerovox Property, 740 Belleville Avenue, New Bedford, MA. April.  
 RTN SITE BOUNDARY AS DEPICTED ON EXHIBIT 3, COOPERATION & SETTLEMENT AGREEMENT, AEROVOX PROPERTY, DEPARTMENT OF THE ARMY NEW ENGLAND DISTRICT CORPS OF ENGINEERS, DATED DECEMBER 2009.

LOCATION MAP (NOT TO SCALE)



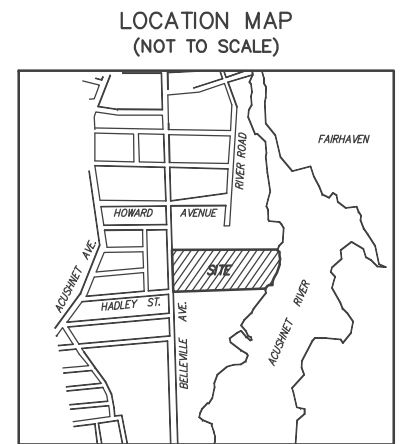
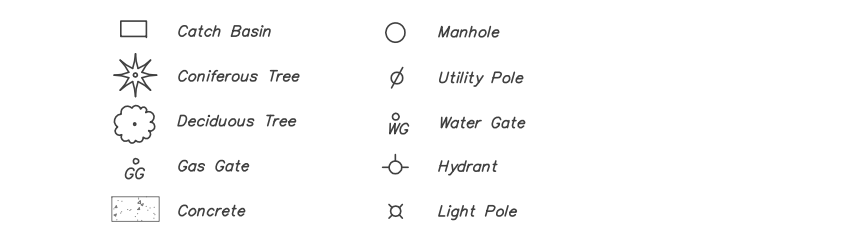
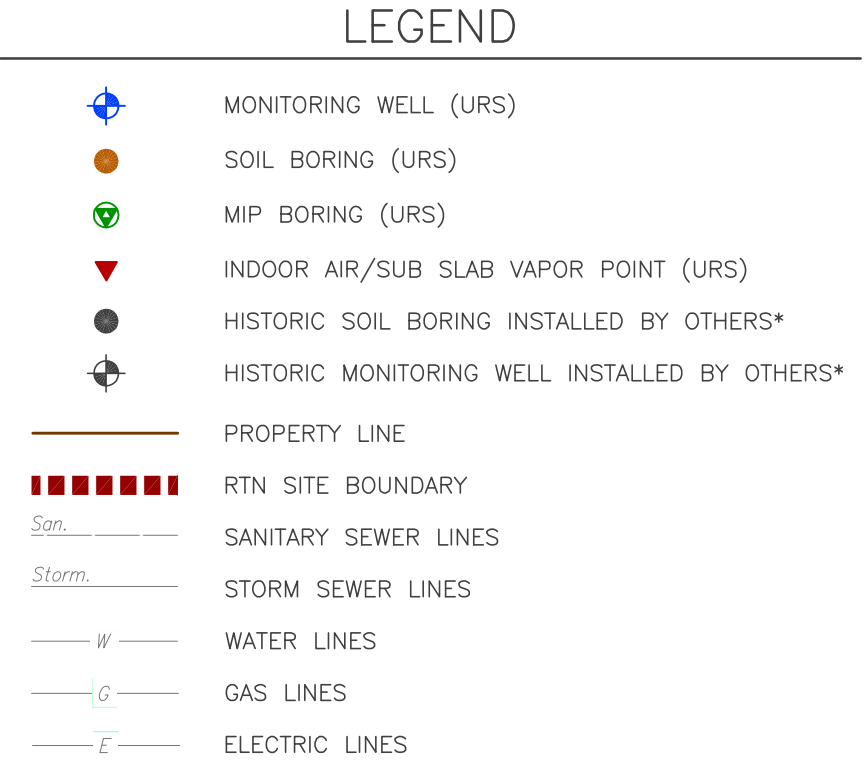
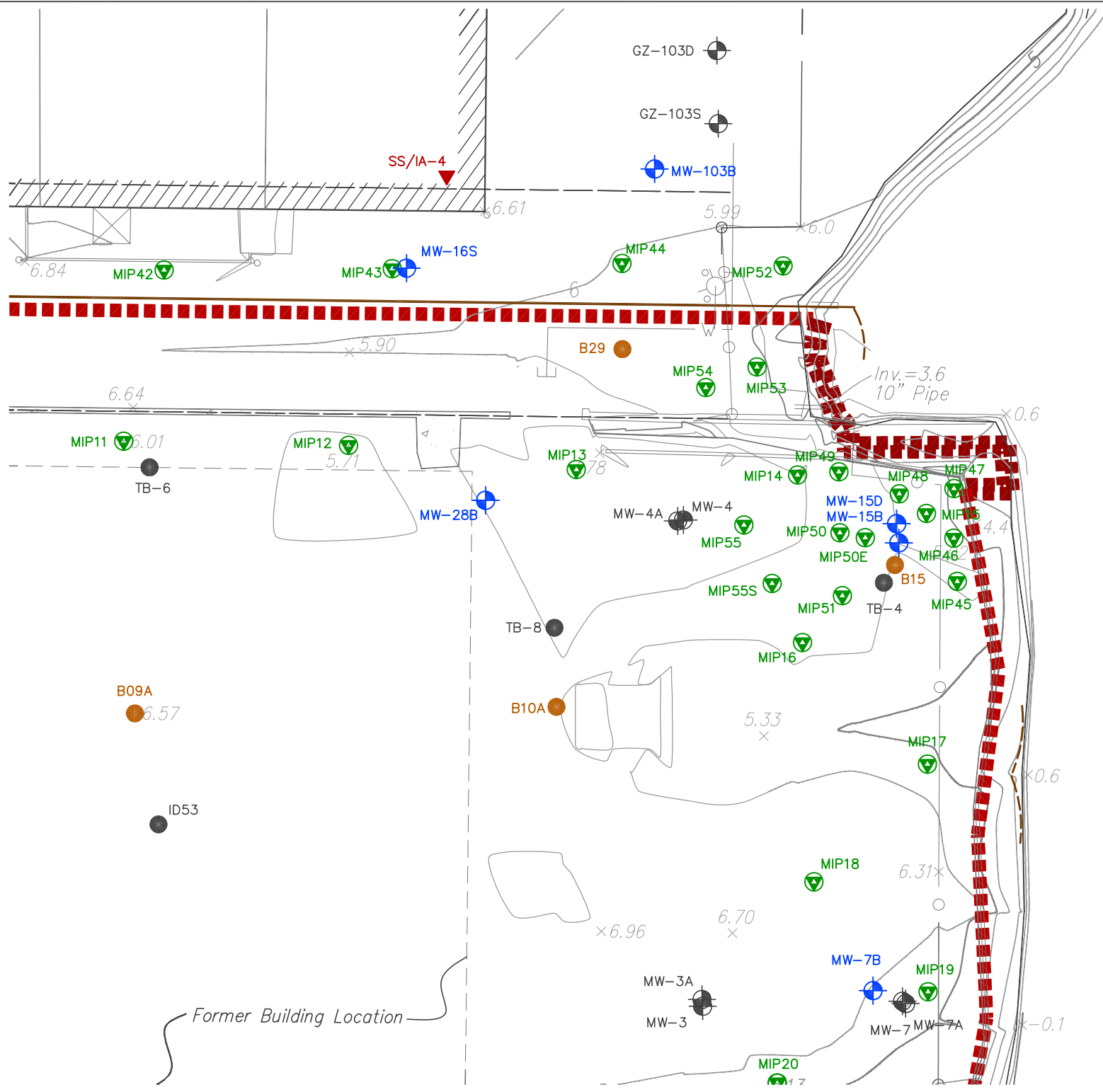
**URS**  
 URS Corporation  
 477 Congress Street, Suite 900  
 Portland, ME 04101-3453  
 Tel: 207.879.7686  
 Fax: 207.879.7685  
 www.urscorp.com



PROJECT NO:	39744051
DESIGN:	DB
APPROVED:	MW
DRAWN:	FS
SCALE:	AS SHOWN
DATE:	OCT 2014
FILE NO:	AVX - IRA Status Report - 2014-03

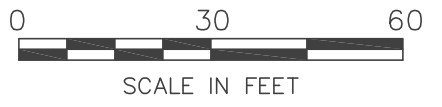
CLIENT:	AVX CORPORATION
PROJECT:	IRA STATUS REPORT 740 BELLEVILLE AVENUE NEW BEDFORD, MA

TITLE:	SITE PLAN
FIGURE NO.:	2



**NOTES:**  
 HISTORIC SOIL BORING AND MONITORING WELL LOCATIONS OBTAINED FROM THE FOLLOWING REPORTS:  
 GHR Engineering Corporation, 1983. Draft Report, Evaluation of Remedial Alternatives for the Aerovox Property, New Bedford, MA. January 11.  
 Blasland, Bouck and Lee Inc. (BBL), 1998. Engineering Evaluation/Cost Analysis, Aerovox Inc. New Bedford, Massachusetts. August.  
 GZA GeoEnvironmental, Inc., 2009. Downgradient Property Status Opinion, 744 Belleville Avenue, New Bedford, Massachusetts, RTN 4-21348. June.  
 Jacobs Engineering Group, 2013. Final Technical Memorandum Summary of Findings, New Bedford Harbor Superfund Site, 2012 Near-Shore Boring Program Adjacent to the Former Aerovox Property, 740 Belleville Avenue, New Bedford, MA. April.  
 RTN SITE BOUNDARY AS DEPICTED ON EXHIBIT 3, COOPERATION & SETTLEMENT AGREEMENT, AEROVOX PROPERTY, DEPARTMENT OF THE ARMY NEW ENGLAND DISTRICT CORPS OF ENGINEERS, DATED DECEMBER 2009.

DRAFT



PROJECT NO:	39744051
DESIGN:	DB
APPROVED:	MW
DRAWN:	FS
SCALE:	AS SHOWN
DATE:	OCT 2014
FILE NO:	AVX - IRA Status Report - 2014-03

CLIENT:	AVX CORPORATION
PROJECT:	IRA STATUS REPORT 740 BELLEVILLE AVENUE NEW BEDFORD, MA

TITLE:	DETAIL OF IRA AREA
--------	--------------------

FIGURE NO.:	3
-------------	---

P:\acad-2008\AVX\dwg\AVX - IRA Status Report - 2014-03.dwg, Figure 3, 10/3/2014 12:07:28 PM

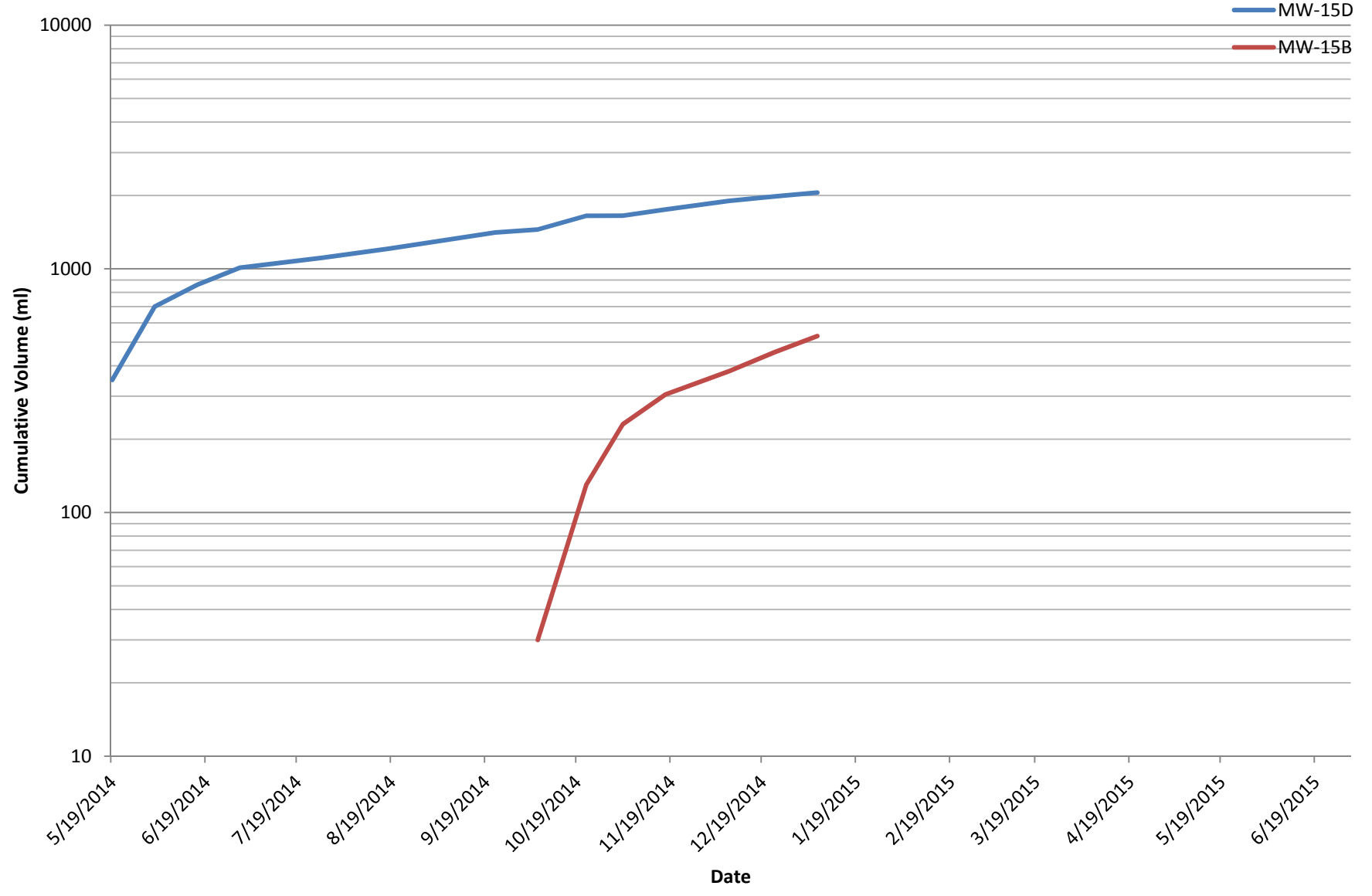


# **APPENDIX A**

## **DNAPL Recovery Graphs**

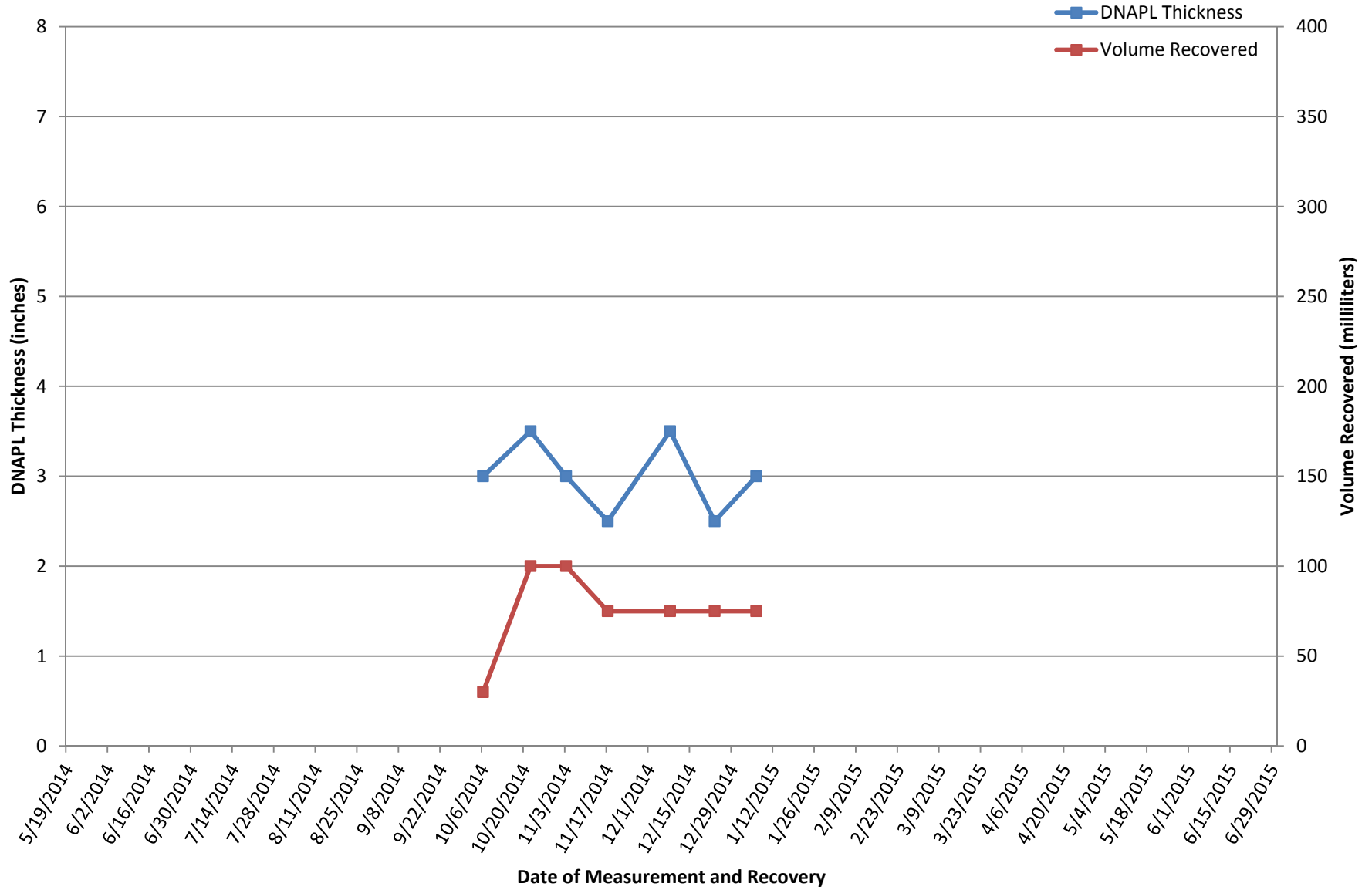
# Aerovox Site

## Cumulative Volume of DNAPL Recovered By Monitoring Well

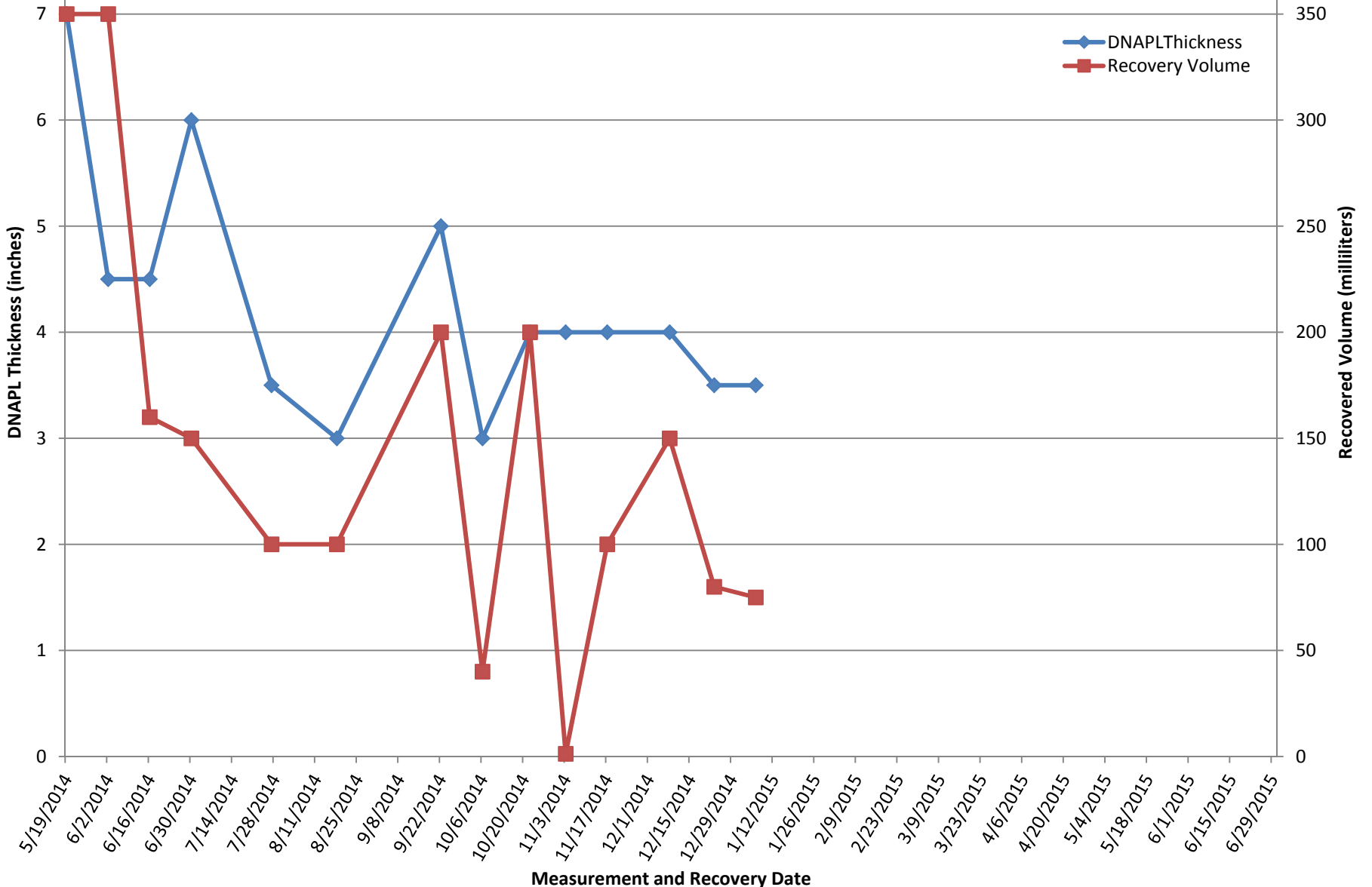


# Aerovox Site

## MW-15B DNAPL Thickness and Recovery by Event



# Aerovox Site MW-15D DNAPL Measurement and Recovery by Event



# **APPENDIX B**

## **DNAPL Analytical Report**



## ANALYTICAL REPORT

Lab Number:	L1422969
Client:	URS Corporation 1155 Elm Street Manchester, NH 03101
ATTN:	Judith LeClair
Phone:	(603) 893-0616
Project Name:	AEROVOX IRA
Project Number:	39744051.40003
Report Date:	10/29/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

---

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1422969-01	MW15D/B DNAPL	OIL	NEW BEDFORD, MA	09/30/14 09:30	09/30/14

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

### MADEP MCP Response Action Analytical Report Certification

**This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.**

<b>An affirmative response to questions A through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
<b>For any questions answered "No", please refer to the case narrative section on the following page(s).</b>		

**Please note that sample matrix information is located in the Sample Results section of this report.**





**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

---

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

### Case Narrative (continued)

#### Report Submission

This final report replaces the partial report issued October 7, 2014, and includes the results of all requested analyses.

The analyses of Viscosity and Interfacial Tension were subcontracted; however, the laboratory was unable to perform these analyses due to the elevated PCB concentrations in the sample.

#### MCP Related Narratives

##### Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The continuing calibration standard, associated with L1422969-01, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

##### PCBs

In reference to question G:


One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

L1422969-01: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene and decachlorobiphenyl (all at 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 10/29/14

# ORGANICS

# VOLATILES

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**SAMPLE RESULTS**

Lab ID: L1422969-01 D2  
 Client ID: MW15D/B DNAPL  
 Sample Location: NEW BEDFORD, MA  
 Matrix: Oil  
 Analytical Method: 97,8260C  
 Analytical Date: 10/07/14 09:02  
 Analyst: MV  
 Percent Solids: Results reported on an 'AS RECEIVED' basis.

Date Collected: 09/30/14 09:30  
 Date Received: 09/30/14  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Trichloroethene	20000000		ug/kg	500000	--	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**SAMPLE RESULTS**

Lab ID: L1422969-01 D  
 Client ID: MW15D/B DNAPL  
 Sample Location: NEW BEDFORD, MA  
 Matrix: Oil  
 Analytical Method: 97,8260C  
 Analytical Date: 10/06/14 19:49  
 Analyst: MV  
 Percent Solids: Results reported on an 'AS RECEIVED' basis.

Date Collected: 09/30/14 09:30  
 Date Received: 09/30/14  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	1000000	--	200
1,1-Dichloroethane	ND		ug/kg	150000	--	200
Chloroform	ND		ug/kg	150000	--	200
Carbon tetrachloride	ND		ug/kg	100000	--	200
1,2-Dichloropropane	ND		ug/kg	350000	--	200
Dibromochloromethane	ND		ug/kg	100000	--	200
1,1,2-Trichloroethane	ND		ug/kg	150000	--	200
Tetrachloroethene	8100000		ug/kg	100000	--	200
Chlorobenzene	ND		ug/kg	100000	--	200
1,2-Dichloroethane	ND		ug/kg	100000	--	200
1,1,1-Trichloroethane	ND		ug/kg	100000	--	200
Bromodichloromethane	ND		ug/kg	100000	--	200
trans-1,3-Dichloropropene	ND		ug/kg	100000	--	200
cis-1,3-Dichloropropene	ND		ug/kg	100000	--	200
1,3-Dichloropropene, Total	ND		ug/kg	100000	--	200
Bromoform	ND		ug/kg	400000	--	200
1,1,2,2-Tetrachloroethane	ND		ug/kg	100000	--	200
Chloromethane	ND		ug/kg	400000	--	200
Vinyl chloride	ND		ug/kg	200000	--	200
Chloroethane	ND		ug/kg	200000	--	200
1,1-Dichloroethene	ND		ug/kg	100000	--	200
trans-1,2-Dichloroethene	ND		ug/kg	150000	--	200
Trichloroethene	32000000	E	ug/kg	100000	--	200
1,2-Dichlorobenzene	ND		ug/kg	400000	--	200
1,3-Dichlorobenzene	ND		ug/kg	400000	--	200
1,4-Dichlorobenzene	2000000		ug/kg	400000	--	200
cis-1,2-Dichloroethene	1300000		ug/kg	100000	--	200
1,2-Dichloroethene, Total	1300000		ug/kg	100000	--	200
Dichlorodifluoromethane	ND		ug/kg	1000000	--	200
1,2-Dibromoethane	ND		ug/kg	400000	--	200

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**SAMPLE RESULTS**

**Lab ID:** L1422969-01 D  
**Client ID:** MW15D/B DNAPL  
**Sample Location:** NEW BEDFORD, MA

**Date Collected:** 09/30/14 09:30  
**Date Received:** 09/30/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,3-Dichloropropane	ND		ug/kg	400000	--	200
1,1,1,2-Tetrachloroethane	ND		ug/kg	100000	--	200
o-Chlorotoluene	ND		ug/kg	400000	--	200
p-Chlorotoluene	ND		ug/kg	400000	--	200
Hexachlorobutadiene	ND		ug/kg	400000	--	200
1,2,4-Trichlorobenzene	13000000		ug/kg	400000	--	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	94		70-130

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 10/06/14 10:49  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG728757-3					
Methylene chloride	ND		ug/kg	5000	--
1,1-Dichloroethane	ND		ug/kg	750	--
Chloroform	ND		ug/kg	750	--
Carbon tetrachloride	ND		ug/kg	500	--
1,2-Dichloropropane	ND		ug/kg	1800	--
Dibromochloromethane	ND		ug/kg	500	--
1,1,2-Trichloroethane	ND		ug/kg	750	--
Tetrachloroethene	ND		ug/kg	500	--
Chlorobenzene	ND		ug/kg	500	--
1,2-Dichloroethane	ND		ug/kg	500	--
1,1,1-Trichloroethane	ND		ug/kg	500	--
Bromodichloromethane	ND		ug/kg	500	--
trans-1,3-Dichloropropene	ND		ug/kg	500	--
cis-1,3-Dichloropropene	ND		ug/kg	500	--
1,3-Dichloropropene, Total	ND		ug/kg	500	--
Bromoform	ND		ug/kg	2000	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	500	--
Chloromethane	ND		ug/kg	2000	--
Vinyl chloride	ND		ug/kg	1000	--
Chloroethane	ND		ug/kg	1000	--
1,1-Dichloroethene	ND		ug/kg	500	--
trans-1,2-Dichloroethene	ND		ug/kg	750	--
Trichloroethene	ND		ug/kg	500	--
1,2-Dichlorobenzene	ND		ug/kg	2000	--
1,3-Dichlorobenzene	ND		ug/kg	2000	--
1,4-Dichlorobenzene	ND		ug/kg	2000	--
cis-1,2-Dichloroethene	ND		ug/kg	500	--
1,2-Dichloroethene, Total	ND		ug/kg	500	--
Dichlorodifluoromethane	ND		ug/kg	5000	--



**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 10/06/14 10:49  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG728757-3					
1,2-Dibromoethane	ND		ug/kg	2000	--
1,3-Dichloropropane	ND		ug/kg	2000	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	500	--
o-Chlorotoluene	ND		ug/kg	2000	--
p-Chlorotoluene	ND		ug/kg	2000	--
Hexachlorobutadiene	ND		ug/kg	2000	--
1,2,4-Trichlorobenzene	ND		ug/kg	2000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	90		70-130

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 10/07/14 08:35  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG728757-6					
Methylene chloride	ND		ug/kg	5000	--
1,1-Dichloroethane	ND		ug/kg	750	--
Chloroform	ND		ug/kg	750	--
Carbon tetrachloride	ND		ug/kg	500	--
1,2-Dichloropropane	ND		ug/kg	1800	--
Dibromochloromethane	ND		ug/kg	500	--
1,1,2-Trichloroethane	ND		ug/kg	750	--
Tetrachloroethene	ND		ug/kg	500	--
Chlorobenzene	ND		ug/kg	500	--
1,2-Dichloroethane	ND		ug/kg	500	--
1,1,1-Trichloroethane	ND		ug/kg	500	--
Bromodichloromethane	ND		ug/kg	500	--
trans-1,3-Dichloropropene	ND		ug/kg	500	--
cis-1,3-Dichloropropene	ND		ug/kg	500	--
1,3-Dichloropropene, Total	ND		ug/kg	500	--
Bromoform	ND		ug/kg	2000	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	500	--
Chloromethane	ND		ug/kg	2000	--
Vinyl chloride	ND		ug/kg	1000	--
Chloroethane	ND		ug/kg	1000	--
1,1-Dichloroethene	ND		ug/kg	500	--
trans-1,2-Dichloroethene	ND		ug/kg	750	--
Trichloroethene	ND		ug/kg	500	--
1,2-Dichlorobenzene	ND		ug/kg	2000	--
1,3-Dichlorobenzene	ND		ug/kg	2000	--
1,4-Dichlorobenzene	ND		ug/kg	2000	--
cis-1,2-Dichloroethene	ND		ug/kg	500	--
1,2-Dichloroethene, Total	ND		ug/kg	500	--
Dichlorodifluoromethane	ND		ug/kg	5000	--

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 10/07/14 08:35  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG728757-6					
1,2-Dibromoethane	ND		ug/kg	2000	--
1,3-Dichloropropane	ND		ug/kg	2000	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	500	--
o-Chlorotoluene	ND		ug/kg	2000	--
p-Chlorotoluene	ND		ug/kg	2000	--
Hexachlorobutadiene	ND		ug/kg	2000	--
1,2,4-Trichlorobenzene	ND		ug/kg	2000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	90		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-1 WG728757-2								
Methylene chloride	106		82		70-130	26	Q	20
1,1-Dichloroethane	112		112		70-130	0		20
Chloroform	108		108		70-130	0		20
Carbon tetrachloride	110		111		70-130	1		20
1,2-Dichloropropane	104		108		70-130	4		20
Dibromochloromethane	86		87		70-130	1		20
1,1,2-Trichloroethane	100		101		70-130	1		20
Tetrachloroethene	108		108		70-130	0		20
Chlorobenzene	102		103		70-130	1		20
Trichlorofluoromethane	128		127		70-130	1		20
1,2-Dichloroethane	112		115		70-130	3		20
1,1,1-Trichloroethane	114		113		70-130	1		20
Bromodichloromethane	98		100		70-130	2		20
trans-1,3-Dichloropropene	92		94		70-130	2		20
cis-1,3-Dichloropropene	94		97		70-130	3		20
1,1-Dichloropropene	115		116		70-130	1		20
Bromoform	78		80		70-130	3		20
1,1,2,2-Tetrachloroethane	94		97		70-130	3		20
Benzene	109		109		70-130	0		20
Toluene	99		99		70-130	0		20
Ethylbenzene	102		100		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-1 WG728757-2								
Chloromethane	134	Q	125		70-130	7		20
Bromomethane	115		113		70-130	2		20
Vinyl chloride	133	Q	127		70-130	5		20
Chloroethane	121		122		70-130	1		20
1,1-Dichloroethene	113		111		70-130	2		20
trans-1,2-Dichloroethene	111		109		70-130	2		20
Trichloroethene	109		110		70-130	1		20
1,2-Dichlorobenzene	99		102		70-130	3		20
1,3-Dichlorobenzene	104		104		70-130	0		20
1,4-Dichlorobenzene	103		105		70-130	2		20
Methyl tert butyl ether	94		96		70-130	2		20
p/m-Xylene	99		96		70-130	3		20
o-Xylene	97		96		70-130	1		20
cis-1,2-Dichloroethene	104		105		70-130	1		20
Dibromomethane	97		101		70-130	4		20
1,2,3-Trichloropropane	100		98		70-130	2		20
Styrene	95		97		70-130	2		20
Dichlorodifluoromethane	121		114		70-130	6		20
Acetone	101		103		70-130	2		20
Carbon disulfide	108		100		70-130	8		20
2-Butanone	101		100		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-1 WG728757-2								
4-Methyl-2-pentanone	74		79		70-130	7		20
2-Hexanone	76		79		70-130	4		20
Bromochloromethane	101		104		70-130	3		20
Tetrahydrofuran	112		114		70-130	2		20
2,2-Dichloropropane	109		106		70-130	3		20
1,2-Dibromoethane	90		93		70-130	3		20
1,3-Dichloropropane	102		102		70-130	0		20
1,1,1,2-Tetrachloroethane	96		97		70-130	1		20
Bromobenzene	96		98		70-130	2		20
n-Butylbenzene	114		114		70-130	0		20
sec-Butylbenzene	107		107		70-130	0		20
tert-Butylbenzene	102		102		70-130	0		20
o-Chlorotoluene	108		105		70-130	3		20
p-Chlorotoluene	106		108		70-130	2		20
1,2-Dibromo-3-chloropropane	67	Q	73		70-130	9		20
Hexachlorobutadiene	98		99		70-130	1		20
Isopropylbenzene	103		103		70-130	0		20
p-Isopropyltoluene	104		105		70-130	1		20
Naphthalene	81		86		70-130	6		20
n-Propylbenzene	107		107		70-130	0		20
1,2,3-Trichlorobenzene	96		98		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-1 WG728757-2								
1,2,4-Trichlorobenzene	100		103		70-130	3		20
1,3,5-Trimethylbenzene	105		106		70-130	1		20
1,2,4-Trimethylbenzene	102		103		70-130	1		20
Ethyl ether	101		94		70-130	7		20
Isopropyl Ether	116		119		70-130	3		20
Ethyl-Tert-Butyl-Ether	98		102		70-130	4		20
Tertiary-Amyl Methyl Ether	89		92		70-130	3		20
1,4-Dioxane	79		80		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	109		110		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	96		96		70-130
Dibromofluoromethane	104		104		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-4 WG728757-5								
Methylene chloride	91		88		70-130	3		20
1,1-Dichloroethane	106		99		70-130	7		20
Chloroform	101		96		70-130	5		20
Carbon tetrachloride	100		90		70-130	11		20
1,2-Dichloropropane	101		98		70-130	3		20
Dibromochloromethane	84		81		70-130	4		20
1,1,2-Trichloroethane	97		93		70-130	4		20
Tetrachloroethene	98		90		70-130	9		20
Chlorobenzene	95		91		70-130	4		20
Trichlorofluoromethane	117		102		70-130	14		20
1,2-Dichloroethane	111		108		70-130	3		20
1,1,1-Trichloroethane	104		95		70-130	9		20
Bromodichloromethane	92		90		70-130	2		20
trans-1,3-Dichloropropene	90		87		70-130	3		20
cis-1,3-Dichloropropene	92		89		70-130	3		20
1,1-Dichloropropene	103		97		70-130	6		20
Bromoform	76		72		70-130	5		20
1,1,2,2-Tetrachloroethane	93		92		70-130	1		20
Benzene	100		95		70-130	5		20
Toluene	92		86		70-130	7		20
Ethylbenzene	92		87		70-130	6		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-4 WG728757-5								
Chloromethane	121		108		70-130	11		20
Bromomethane	110		102		70-130	8		20
Vinyl chloride	123		110		70-130	11		20
Chloroethane	114		106		70-130	7		20
1,1-Dichloroethene	102		90		70-130	13		20
trans-1,2-Dichloroethene	100		92		70-130	8		20
Trichloroethene	99		94		70-130	5		20
1,2-Dichlorobenzene	95		92		70-130	3		20
1,3-Dichlorobenzene	98		94		70-130	4		20
1,4-Dichlorobenzene	98		93		70-130	5		20
Methyl tert butyl ether	95		92		70-130	3		20
p/m-Xylene	88		84		70-130	5		20
o-Xylene	89		86		70-130	3		20
cis-1,2-Dichloroethene	98		94		70-130	4		20
Dibromomethane	96		95		70-130	1		20
1,2,3-Trichloropropane	98		96		70-130	2		20
Styrene	90		86		70-130	5		20
Dichlorodifluoromethane	110		94		70-130	16		20
Acetone	109		104		70-130	5		20
Carbon disulfide	89		80		70-130	11		20
2-Butanone	106		102		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-4 WG728757-5								
4-Methyl-2-pentanone	80		82		70-130	2		20
2-Hexanone	83		82		70-130	1		20
Bromochloromethane	98		94		70-130	4		20
Tetrahydrofuran	119		116		70-130	3		20
2,2-Dichloropropane	97		89		70-130	9		20
1,2-Dibromoethane	92		88		70-130	4		20
1,3-Dichloropropane	98		96		70-130	2		20
1,1,1,2-Tetrachloroethane	92		88		70-130	4		20
Bromobenzene	94		89		70-130	5		20
n-Butylbenzene	102		96		70-130	6		20
sec-Butylbenzene	96		90		70-130	6		20
tert-Butylbenzene	93		88		70-130	6		20
o-Chlorotoluene	97		93		70-130	4		20
p-Chlorotoluene	99		94		70-130	5		20
1,2-Dibromo-3-chloropropane	71		70		70-130	1		20
Hexachlorobutadiene	92		88		70-130	4		20
Isopropylbenzene	94		88		70-130	7		20
p-Isopropyltoluene	95		89		70-130	7		20
Naphthalene	84		83		70-130	1		20
n-Propylbenzene	97		91		70-130	6		20
1,2,3-Trichlorobenzene	96		92		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG728757-4 WG728757-5								
1,2,4-Trichlorobenzene	97		94		70-130	3		20
1,3,5-Trimethylbenzene	96		92		70-130	4		20
1,2,4-Trimethylbenzene	95		91		70-130	4		20
Ethyl ether	100		96		70-130	4		20
Isopropyl Ether	116		110		70-130	5		20
Ethyl-Tert-Butyl-Ether	100		97		70-130	3		20
Tertiary-Amyl Methyl Ether	89		87		70-130	2		20
1,4-Dioxane	93		94		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	102		102		70-130

# PCBS

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**SAMPLE RESULTS**

Lab ID: L1422969-01 D  
 Client ID: MW15D/B DNAPL  
 Sample Location: NEW BEDFORD, MA  
 Matrix: Oil  
 Analytical Method: 97,8082  
 Analytical Date: 10/07/14 14:17  
 Analyst: TQ  
 Percent Solids: Results reported on an 'AS RECEIVED' basis.

Date Collected: 09/30/14 09:30  
 Date Received: 09/30/14  
 Field Prep: Not Specified  
 Extraction Method: EPA 3580A  
 Extraction Date: 10/04/14 14:48  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 10/05/14  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 10/05/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>MCP Polychlorinated Biphenyls - Westborough Lab</b>							
Aroclor 1016	ND		mg/kg	38300	--	10000	A
Aroclor 1221	ND		mg/kg	38300	--	10000	A
Aroclor 1232	ND		mg/kg	38300	--	10000	A
Aroclor 1242	381000		mg/kg	38300	--	10000	B
Aroclor 1248	ND		mg/kg	38300	--	10000	A
Aroclor 1254	124000		mg/kg	38300	--	10000	A
Aroclor 1260	ND		mg/kg	38300	--	10000	A
Aroclor 1262	ND		mg/kg	38300	--	10000	A
Aroclor 1268	ND		mg/kg	38300	--	10000	A
PCBs, Total	505000		mg/kg	38300	--	10000	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8082  
 Analytical Date: 10/05/14 13:24  
 Analyst: TQ

Extraction Method: EPA 3580A  
 Extraction Date: 10/04/14 14:48  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 10/05/14  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 10/05/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG728145-1						
Aroclor 1016	ND		mg/kg	3.78	--	A
Aroclor 1221	ND		mg/kg	3.78	--	A
Aroclor 1232	ND		mg/kg	3.78	--	A
Aroclor 1242	ND		mg/kg	3.78	--	A
Aroclor 1248	ND		mg/kg	3.78	--	A
Aroclor 1254	ND		mg/kg	3.78	--	A
Aroclor 1260	ND		mg/kg	3.78	--	A
Aroclor 1262	ND		mg/kg	3.78	--	A
Aroclor 1268	ND		mg/kg	3.78	--	A
PCBs, Total	ND		mg/kg	3.78	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	132		30-150	B



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG728145-2 WG728145-3									
Aroclor 1016	86		90		40-140	5		30	A
Aroclor 1260	74		77		40-140	4		30	A

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	84		88		30-150	A
Decachlorobiphenyl	101		109		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		93		30-150	B
Decachlorobiphenyl	127		133		30-150	B

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

#### Cooler Information Custody Seal

##### Cooler

A Absent

#### Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1422969-01A	Vial unpreserved	A	N/A	2.3	Y	Absent	MCP-8082-10(365),MCP-8260-CHLR-10(14)
L1422969-01B	Vial HCl preserved	A	N/A	2.3	Y	Absent	SHIPPING(0)
L1422969-01C	Vial unpreserved	A	N/A	2.3	Y	Absent	MCP-8082-10(365)
L1422969-01D	Amber 250ml unpreserved	A	N/A	2.3	Y	Absent	SHIPPING()

\*Values in parentheses indicate holding time in days



**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

## GLOSSARY

### Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Total:** With respect to Organic analyses, a "Total" result is defined as the summation of results for individual isomers or Aroclors. If a "Total" result is requested, the results of its individual components will also be reported. This is applicable to "Total" results for methods 8260, 8081 and 8082.

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**Report Format:** Data Usability Report



**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

#### **Data Qualifiers**

- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** AEROVOX IRA  
**Project Number:** 39744051.40003

**Lab Number:** L1422969  
**Report Date:** 10/29/14

## REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

Last revised April 15, 2014

**The following analytes are not included in our NELAP Scope of Accreditation:**

### Westborough Facility

**EPA 524.2:** Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

**EPA 8260C:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

**EPA 8330A/B:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

**EPA 8270D:** 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**EPA 625:** 4-Chloroaniline, 4-Methylphenol.

**SM4500:** Soil: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

### Mansfield Facility

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:**

### Drinking Water

**EPA 200.8:** Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

**EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

**EPA 332:** Perchlorate.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

### Non-Potable Water

**EPA 200.8:** Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

**EPA 200.7:** Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

**EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F,**

**EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,**

**SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

**EPA 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



# CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

## Project Information

Project Name: Aerovox IRA  
Project Location: New Bedford, MA  
Project #: 39744051.40003  
Project Manager: J. LeClair / M. Wade  
ALPHA Quote #:

## Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
Date Due: 10/8/14 Time:

Date Rec'd in Lab: 9/30/14

ALPHA Job #: U422969

## Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

## Billing Information

Same as Client info PO #:

## Client Information

Client: URS  
Address: 1155 Elm St, Suite 401  
Manchester, NH 03101  
Phone: (603) 606-4818  
Fax: (603) 401-7322  
Email: judith.leclair@urs.com  
 These samples have been previously analyzed by Alpha.

## Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## Regulatory Requirements/Report Limits

State / Fed Program MA MCP Criteria

## MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

Yes  No Are MCP Analytical Methods Required?  
 Yes  No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS PCB + CVOC Subcontracted Physical Parameters	SAMPLE HANDLING	TOTAL # BOTTLES
	Filtration _____	
	<input type="checkbox"/> Done	
	<input type="checkbox"/> Not needed	
	<input type="checkbox"/> Lab to do	
	<input type="checkbox"/> Preservation	
	<input type="checkbox"/> Lab to do	
	(Please specify below)	
	Sample Specific Comments	

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	3	1	Sample Specific Comments
		Date	Time					
22969 01	MW15D/B DNAPL	9.30.14	0930	DNAPL	JKH			Hold subcontracted samples for Melissa Gulli 4

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By: <u>Affrey K. Vanhook</u>	Date/Time: <u>9/30/14 1650</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/30/14 1650</u>
---	--------------------------------	---------------------------------	--------------------------------

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 Terms and Conditions. See reverse side.

7A  
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1422969

Instrument ID: Voall10.i      Calibration Date: 06-OCT-2014      Time: 09:06

Lab File ID: 1006A01      Init. Calib. Date(s): 28-SEP-2      28-SEP-2

Sample No: 8260 CCAL      Init. Calib. Times : 10:14      13:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.23145	.28111	.1	21	20	F
chloromethane	.52656	.705	.1	34	20	F
vinyl chloride	.47097	.6252	.1	33	20	F
bromomethane	.18458	.21284	.1	15	20	
chloroethane	.24071	.29155	.1	21	20	F
trichlorofluoromethane	.42917	.55084	.1	28	20	F
ethyl ether	.18706	.18972	.05	1	20	
1,1,-dichloroethene	.2484	.27982	.1	13	20	
carbon disulfide	.89982	.97584	.1	8	20	
methylene chloride	100	106	.1	6	20	
acetone	100	101	.1	1	20	
trans-1,2-dichloroethene	.29267	.3243	.1	11	20	
methyl tert butyl ether	.87703	.82321	.1	-6	20	
Diisopropyl Ether	1.6052	1.8645	.05	16	20	
1,1-dichloroethane	.67287	.75412	.2	12	20	
Ethyl-Tert-Butyl-Ether	1.3902	1.3676	.05	-2	20	
cis-1,2-dichloroethene	.32435	.3384	.1	4	20	
2,2-dichloropropane	.47557	.51806	.05	9	20	
bromochloromethane	.14332	.14499	.05	1	20	
chloroform	.5551	.60144	.2	8	20	
carbontetrachloride	.40946	.44866	.1	10	20	
tetrahydrofuran	.13468	.15038	.05	12	20	
1,1,1-trichloroethane	.47945	.54656	.1	14	20	
2-butanone	.19229	.19386	.1	1	20	
1,1-dichloropropene	.39342	.45352	.05	15	20	
benzene	1.1487	1.2525	.5	9	20	
Tertiary-Amyl Methyl Ether	.87055	.77087	.05	-11	20	
1,2-dichloroethane	.51663	.5768	.1	12	20	
trichloroethene	.30944	.33848	.2	9	20	
dibromomethane	.17047	.16564	.05	-3	20	
1,2-dichloropropane	.36212	.37734	.1	4	20	
bromodichloromethane	.40576	.39832	.2	-2	20	
1,4-dioxane	.00315	.0025	.05	-21	20	F
cis-1,3-dichloropropene	.47817	.45032	.2	-6	20	
toluene	1.0377	1.0294	.4	-1	20	
4-methyl-2-pentanone	.15639	.11512	.1	-26	20	F
tetrachloroethene	.4222	.45761	.2	8	20	
trans-1,3-dichloropropene	.57343	.52448	.1	-9	20	

FORM VII MCP-8260-CHLR-10

7A  
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1422969

Instrument ID: Voall10.i      Calibration Date: 06-OCT-2014      Time: 09:06

Lab File ID: 1006A01      Init. Calib. Date(s): 28-SEP-2      28-SEP-2

Sample No: 8260 CCAL      Init. Calib. Times : 10:14      13:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	.26066	.25996	.1	0	20
chlorodibromomethane	.37731	.32532	.1	-14	20
1,3-dichloropropane	.55471	.56314	.05	2	20
1,2-dibromoethane	.32082	.29004	.1	-10	20
2-hexanone	.41535	.31415	.1	-24	20
chlorobenzene	1.0698	1.0864	.5	2	20
ethyl benzene	100	102	.1	2	20
1,1,1,2-tetrachloroethane	.39607	.38037	.05	-4	20
p/m xylene	200	198	.1	-1	20
o xylene	.74896	.72548	.3	-3	20
styrene	1.2323	1.1725	.3	-5	20
bromoform	.49372	.38316	.1	-22	20
isopropylbenzene	3.6015	3.6981	.1	3	20
bromobenzene	.91938	.88448	.05	-4	20
n-propylbenzene	4.0977	4.3793	.05	7	20
1,1,2,2,-tetrachloroethane	.77091	.7225	.3	-6	20
2-chlorotoluene	2.5859	2.7919	.05	8	20
1,3,5-trimethylbenzene	2.9877	3.1321	.05	5	20
1,2,3-trichloropropane	.62029	.62089	.05	0	20
4-chlorotoluene	2.5433	2.6997	.05	6	20
tert-butylbenzene	2.5981	2.6598	.05	2	20
1,2,4-trimethylbenzene	3.0448	3.1032	.05	2	20
sec-butylbenzene	3.7752	4.0325	.05	7	20
p-isopropyltoluene	3.2510	3.3692	.05	4	20
1,3-dichlorobenzene	1.7058	1.7669	.6	4	20
1,4-dichlorobenzene	1.7192	1.7759	.5	3	20
n-butylbenzene	2.8075	3.2082	.05	14	20
1,2-dichlorobenzene	1.5905	1.5693	.4	-1	20
1,2-dibromo-3-chloropropane	.12939	.08722	.05	-33	20
hexachlorobutadiene	.68223	.66924	.05	-2	20
1,2,4-trichlorobenzene	1.1473	1.1520	.2	0	20
naphthalene	2.7002	2.1819	.05	-19	20
1,2,3-trichlorobenzene	1.0884	1.0415	.05	-4	20
dibromofluoromethane	.24823	.25718	.05	4	30
1,2-dichloroethane-d4	.32778	.35841	.05	9	30
toluene-d8	1.2512	1.2441	.05	-1	30
4-bromofluorobenzene	.94147	.90737	.05	-4	30

FORM VII MCP-8260-CHLR-10



TOGETHER WE POWER THE WORLD<sup>SM</sup>

The World Leader in Diagnostic Instruments and Knowledge Services for Electric Power

January 7, 2015

Melissa Gulli  
Alpha Analytical  
222 International Dr # 155  
Portsmouth, NH 03801

**Doble Materials Laboratory  
Report 146837**

One sample of a 2-phase liquid was received for testing on December 11, 2014. The chain of custody form was duly signed when received.

As requested by the customer, the following tests were conducted.

Test	Viscosity at 40°C ASTM D445	Specific Gravity D4052 at 60°F	Surface Tension Doble Method	Interfacial Tension ASTM D971
Phase 1, Water (?)	0.742 mm <sup>2</sup> /s	0.9986	41.4 mN/m	Could not be performed <sup>1</sup>
Phase 2	22.6 mm <sup>2</sup> /s	1.2297	22.9 mN/m	Could not be performed <sup>2</sup>

Note 1: IFT could not be performed as the specific gravity was too close to that of water and thus no interface formed between the water and the sample layer in order to pull the platinum ring through.

Note 2: IFT could not be performed as the specific gravity was greater than that of water which is 1. The equipment is made to pull the platinum ring from sample/water interface in which the sample is on top of the water not below it. Because the material (phase 2) was heavier than water, the task would involve pushing the platinum ring from sample through the water layer. Most of the analytical equipment manufactured to perform this teste (such as ours) can only pull and not push, thus the test could not be conducted.

I hope that this report provides you with helpful information on this subject. If you have any questions or comments please feel free to contact me.

Sincerely,

Lance Lewand  
Director, Insulating Materials Laboratory  
Doble Engineering Company



# CHAIN OF CUSTODY

PAGE OF



Westborough, MA  
 TEL: 508-898-9220  
 FAX: 508-898-9193

Manfield, MA  
 TEL: 508-822-9300  
 FAX: 508-822-3288

## Project Information

Project Name:

Project Location: MA

Project #:

Project Manager: Melissa Gulli

ALPHA Quote #:

Turn-Around Time

## Client Information

Client: Alpha Analytical Lab

Address: 8 Walkup Drive

Westborough, Ma 01581

Phone: 508-898-9220

Fax:

Email: mgulli@alphalab.com,  
 reporting@alphalab.com

These samples have been Previously analyzed by Alpha

X Standard  Rush (ONLY IF PRE-APPROVED)

Due Date: 12/24/14 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Please reference Alpha Job #L1429713 on this report.

Date Rec'd in Lab

ALPHA Job #: L1429713

## Report Information Data Deliverables Billing Information

FAX

EMAIL

Same as Client Info

PO #:

ADEX

Add'l Deliverables

## Regulatory Requirements/Report Limits

State/Fed Program

Criteria

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Yes

No

Are MCP Analytical Methods Required?

Yes

No

Are CT RCP (Reasonable Confidence Protocols) Required?

## ANALYSIS

Dynamic Viscosity	Fluid Density	Surface Tension	Interfacial Tension														
X	X	X	X														
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
	MW15D/B DNAPL	9/30/14	09:30	OIL	

PLEASE ANSWER QUESTIONS ABOVE!

Container Type	V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**IS YOUR PROJECT MA MCP or CT RCP?**

FORM NO: 01-01 (0)  
 (rev. 30-JUL-07)

Relinquished By:	Date/Time	Received By:	Date/Time

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.



## **APPENDIX C**

### **IDW Manifest for 12-12-14 Pickup**

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number  
2. Page 1 of  
3. Emergency Response Phone  
4. Manifest Tracking Number  
**007078192 FLE**

5. Generator's Name and Mailing Address  
New Bedford City of  
130 William Street Room 304  
New Bedford, MA 01940  
Generator's Site Address (if different than mailing address)  
Arrow Facility 210 NRP 740 Bellville Avenue  
New Bedford, MA 01745

6. Transporter 1 Company Name  
U.S. EPA ID Number  
John Horton Environmental Services Inc  
MA0053452037

7. Transporter 2 Company Name  
U.S. EPA ID Number

8. Designated Facility Name and Site Address  
U.S. EPA ID Number  
John Horton of Incinerator Inc  
1300 Avenue  
New Bedford, MA 01940  
MA0053452037

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
1.	HAZARDOUS WASTE, LIQUID, N.O.S., (PERCHLOROETHYLENE), 9, PG I	001	DF	10	P	MA001		
2.	NON-REGULATED MATERIAL, WATER AND OIL LIQUID FLUIDS	003	OM	600	P	MA003		
3.								
4.								

14. Special Handling Instructions and Additional Information  
1. CHECK LOG 1 OF 45 BEHIND  
2. CHECK LOGS 3 OF 45

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.  
Generator's/Offoror's Printed/Typed Name  
Signature  
Month Day Year  
12/12/14

16. International Shipments  
 Import to U.S.  Export from U.S.  
Port of entry/exit:  
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials  
Transporter 1 Printed/Typed Name  
Signature  
Month Day Year  
12/12/14  
Transporter 2 Printed/Typed Name  
Signature  
Month Day Year

18. Discrepancy  
18a. Discrepancy Indication Space  
 Quantity  Type  Residue  Partial Rejection  Full Rejection

18b. Alternate Facility (or Generator)  
Manifest Reference Number:  
U.S. EPA ID Number  
Month Day Year

18c. Signature of Alternate Facility (or Generator)  
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)  
1. 1111 2. 1111 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a  
Printed/Typed Name  
Signature  
Month Day Year

GENERATOR  
INFL  
TRANSPORTER  
DESIGNATED FACILITY

On a manifest for the transportation services for and will accept the waste the generator is shipping.