Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com

24 April 2012
File No. 37732-970

US Environmental Protection Agency
Industrial NPDES Permits (CIP)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attention: Ms. Shelly Puleo

Subject: Notice of Intent (NOI)
Temporary Construction Dewatering
Massachusetts College of Art and Design – Center for Design and Media
Boston, Massachusetts

Dear Ms. Puleo:

On behalf of the project owner, the Division of Capitol Asset Management (DCAM), and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary discharge of construction site dewatering effluent under the RGP. Temporary construction dewatering is planned in support of the proposed renovations and below-grade construction of the existing Gymnasium Building located at 621 Huntington Avenue at the Massachusetts College of Art and Design in Boston, Massachusetts, as shown on Figure 1. We anticipate temporary construction dewatering will be conducted, as necessary, during excavation to construct new elevator pits and vestibule areas, pile caps and foundations, and during excavation for utility improvements.

Site History

The land in the vicinity of the Massachusetts College of Art is historically filled land along the edge of the Muddy River. Previous site usage was found from review of available Sanborn maps from 1888, 1897, 1919, 1950, 1964, 1988, 1990, 1993 and 1995 and other available site information. Sanborn maps from 1888 and 1897 indicate that the subject site was urban, developed land. Sanborn maps from 1919 and 1950 indicate that the City of Boston Girls Normal & Latin School had been built in 1906. The buildings that were constructed at that time are currently referred to as the Collins, East, North and South buildings. Sanborn maps from 1964 through 1995 indicate that the site was occupied by the State Teachers College at Boston. Kennedy Hall was constructed adjacent to the South Hall building in 1962. Sanborn maps from 1988 to 1995 indicate that in 1966 the Gymnasium building was built adjacent to the previously constructed East building. In 1974, the Tower building was built adjacent to the Gymnasium and North buildings.

Regulatory Background

Applicable Massachusetts Contingency Plan (MCP) Reportable Concentrations pursuant to the MCP 310

CMR 40.0000 for this site are RCS-1 for soil and RCGW-2 for groundwater (as site groundwater would not be considered to be, nor proximal to, a current or potential drinking water supply). Furthermore, any soils not exceeding the applicable MCP Reportable Concentrations are required to be managed in accordance with the Massachusetts Department of Environmental Protection (MassDEP) anti-degradation policy, which is outlined at 310 CMR 40.0032(3). There are no known releases in the vicinity of the Site.

Temporary Construction Dewatering Notice of Intent

In support of the NOI, Haley & Aldrich, Inc. collected a composite water sample from observation well HA-1(OW), located at the northwest corner of the Site, as shown on Figure 2. The sample was submitted in December 2011 to Alpha Analytical Laboratory of Westborough, Massachusetts for analysis for NPDES RGP permit parameters including VOCs, SVOCs, PAHs, total metals, TPH, pesticides, PCBs, Total Suspended Solids (TSS), chloride, total cyanide, total phenolics and total residual chlorine. The analytical results for the December 2011 groundwater sample identified concentrations of total copper, total iron, and total lead above applicable NPDES RGP Effluent Limits. A field filtered sample was also submitted to test for dissolved metals, as the presence of presence of total metals can sometimes be attributed to the solids content of the groundwater sample. The concentrations of dissolved metals were all below minimum acceptable limited established by the NPDES RGP. The results of water quality testing conducted for this NOI are summarized in Table I.

Dewatering is generally planned to be conducted from sumps or temporary dewatering wells located within the excavation limits. Dewatering is necessary to control groundwater, seepage, precipitation, surface water runoff and construction-generated water to enable construction in-the-dry. General construction including construction dewatering is currently anticipated to begin sometime between July 2012 and December 2012.

As part of the dewatering, an effluent treatment system will be designed by the Contractor to meet NPDES RGP discharge criteria. Prior to discharge, collected water will be routed through a sedimentation tank with an oil/water separator component and a bag filter, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental pretreatment may be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3.

Discharge of construction dewatering effluent under this RGP NOI will be to an existing 24-inch storm drain located near the Site on Tetlow Street; see Figure 4. The drain travels northeast along Palace Road and discharges into outfall SDO #047 at the Muddy River.

Dilution Factor Application for Metals

As noted previously, results from analytical testing on water samples collected at the site indicate concentrations of total lead, total copper, and total iron that exceed RGP discharge limits. Accordingly, a Dilution Factor (DF) was calculated for the detected levels of total metals greater than the applicable effluent limits. The calculated DF was used to find the appropriate Dilution Range concentrations for these metals. The DF was calculated using the following equation:

$$DF = (Q_d + Q_s)/Q_d$$

where Q_d is the maximum discharge flow rate, assumed to be 50 gallons per minute (GPM) or approximately 0.11 cubic feet per second (cfs), and Q_s is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years, assumed to be 1.07 cfs based on data collected by the United States Geological Survey (USGS). Using these assumed values, the DF is equal to 10.6.

According to Appendix IV of the Remediation General Permit, the total recoverable metals limitation for the calculated dilution factor of 10.6 for copper, iron, and lead iron is 52 µg/L, 5000 µg/L, and 13 µg/L, respectively. Therefore, if testing of the dewatering effluent indicates concentrations greater than these limits, additional pretreatment will be implemented.

Appendices

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The site operator is Walsh Brothers, Incorporated. Walsh Brothers is the construction manager and will hire a subcontractor to conduct the Site work, including the dewatering activities. An Owner's Representative will monitor the Contractor's dewatering activities on behalf of the project owner, the Division of Capitol Asset Management. In accordance with the requirements for this NOI submission, the Division of Capitol Asset Management as the project owner and Walsh Brothers as the site operator are listed as co-permittees for this NPDES RGP, and therefore both have signed the NOI form.

Closing

Thank you very much for your consideration of this NOI. Please feel free to contact us should you wish to discuss the information contained herein or if you need additional information.

Sincerely yours,
HALEY & ALDRICH, INC

Lee S. Vanzler
Senior Engineer

Heather B. Scranton, P.E.
Senior Project Manager

Attachments:

Table I – Summary of Groundwater Quality Data
Figure 1 – Project Locus
Figure 2 – Subsurface Exploration Location Plan
Figure 3 – Proposed Treatment System Schematic
Figure 4 – Boston Water and Sewer Commission Sewer Plan
Appendix A – Notice of Intent (NOI) for Remediation General Permit (RGP)
Appendix B – Best Management Practices Plan (BMPP)
Appendix C – National Register of Historic Places and Massachusetts Historical Commission Documentation
Appendix D – Endangered Species Act Documentation
Appendix E – Boston Water and Sewer Commission Permit Application
Appendix F – MADEP Transmittal Form for Permit Application BRP WM12
Appendix G – Laboratory Data Reports for Groundwater Sampling/Testing

c: MADEP; Attn: Division of Watershed Management, Rober Kubit
Boston Water and Sewer Commission; Attn: Francis McLaughlin
Division of Capitol Asset Management; Attn: Catherine Walsh
Walsh Brothers; Attn: Noah Manacas
Ennead Architects LLP; Attn: Charles C. Brainerd

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TABLE I
SUMMARY OF GROUNDWATER QUALITY DATA
MASSART - CENTER FOR DESIGN AND MEDIA
BOSTON, MASSACHUSETTS
FILE NO. 37732-120

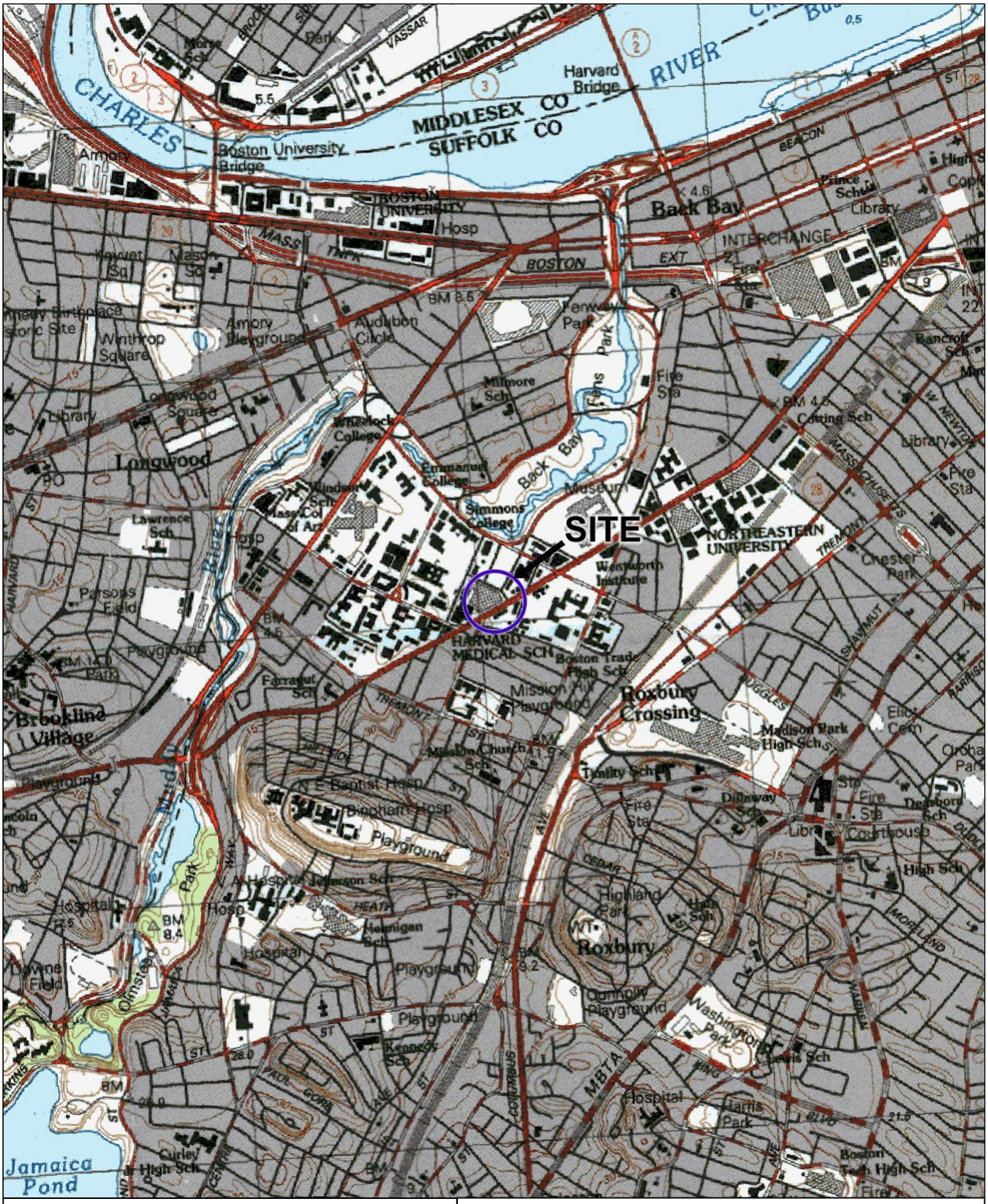
SAMPLE DESIGNATION	2008	NPDES	HA-1	HA-1
EXPLORATION DESIGNATION			HA-1(OW)	HA-1(OW)
SAMPLING DATE	RCGW-2	RGP	12/1/2011	12/8/2011
LAB SAMPLE ID	Reportable	Effluent	L1119967-01	L1120531-01
SAMPLE TYPE	Concentrations	Limits	GRAB	GRAB
VOCs by GC/MS (ug/L)				
Total VOCs by GC/MS	NA	NA	ND	-
SVOCs by GC/MS (ug/L)				
Bis(2-Ethylhexyl)phthalate	50000	6	-	4.5
Total SVOCs by GC/MS	NA	NA	-	4.5
SVOCs by GC/MS-SIM (ug/L)				
Total SVOCs by GC/MS-SIM	NA	NA	-	ND
EPH (ug/L)				
C9-C18 Aliphatics	5000	NA	ND(50)	-
C19-C36 Aliphatics	50000	NA	ND(50)	-
C11-C22 Aromatics, Adjusted	5000	NA	ND(50)	-
Total Metals (ug/L)				
Antimony, Total	8000	5.6	ND(0.25)	-
Arsenic, Total	900	10	2.9	-
Cadmium, Total	4	0.2	ND(0.1)	-
Chromium, Total	300	48.8	6.5	-
Copper, Total	100000	5.2	12.3	-
Iron, Total	NA	1000	4000	-
Lead, Total	10	1.3	**18.5**	-
Mercury, Total	20	0.9	ND(0.1)	-
Nickel, Total	200	29	7.1	-
Selenium, Total	100	5	2	-
Silver, Total	7	1.2	ND(0.2)	-
Zinc, Total	900	66.6	30.5	-
Dissolved Metals (ug/L)				
Antimony, Dissolved	8000	5.6	ND(0.25)	-
Arsenic, Dissolved	900	10	2.3	-
Cadmium, Dissolved	4	0.2	ND(0.1)	-
Chromium, Dissolved	300	48.8	0.5	-
Copper, Dissolved	100000	5.2	1.7	-
Iron, Dissolved	NA	1000	160	-
Lead, Dissolved	10	1.3	ND(0.25)	-
Mercury, Dissolved	20	0.9	ND(0.1)	-
Nickel, Dissolved	200	29	3.8	-
Selenium, Dissolved	100	5	2	-
Silver, Dissolved	7	1.2	ND(0.2)	-
Zinc, Dissolved	900	66.6	15.1	-

TABLE I
SUMMARY OF GROUNDWATER QUALITY DATA
MASSART - CENTER FOR DESIGN AND MEDIA
BOSTON, MASSACHUSETTS
FILE NO. 37732-120

SAMPLE DESIGNATION	2008	NPDES	HA-1	HA-1
EXPLORATION DESIGNATION			HA-1(OW)	HA-1(OW)
SAMPLING DATE	RCGW-2	RGP	12/1/2011	12/8/2011
LAB SAMPLE ID	Reportable	Effluent	L1119967-01	L1120531-01
SAMPLE TYPE	Concentrations	Limits	GRAB	GRAB
TPH (ug/L)	5000	5000	ND(2600)	-
Pesticides (ug/L)				
1,2-Dibromoethane	2	0.05	ND(0.005)	-
PCBs (ug/L)				
Total PCBs	5	0.000064	ND	-
Miscellaneous				
Solids, Total Suspended (ug/L)	NA	30000	2000000	**-**
Cyanide, Total (ug/L)	30	5.2	ND(2.5)	-
Chloride (ug/L)	NA	NA	480000	**-**
Chlorine, Total Residual (ug/L)	NA	11	ND(10)	**-**
Chromium, Hexavalent (ug/L)	300	11.4	ND(5)	-
Sulfate (ug/L)	NA	NA	72000	**-**
Phenolics, Total (ug/L)	NA	NA	ND(75)	**-**
Total Hardness (ug/L)	NA	NA	530000	**-**
Field Sampling Parameters				
pH (SU)	NA	6.5 to 8.3	7.45	**-**
Temperature (°C)	NA	NA	12.8	**-**
Conductivity (uS/cm)	NA	NA	1.028	**-**
Dissolved Oxygen (mg/L)	NA	NA	3.6	**-**
ORP (mV)	NA	NA	60.8	**-**
Turbidity (NTU)	NA	NA	828	**-**

NOTES:

1. This table includes only compounds detected on the dates indicated for VOCs, SVOCs, and PCBs.
2. **Red Bold** values indicate an exceedance of RCGW-2 criteria.
3. **Red Bold ND** values indicate that one-half the laboratory quantitation limit exceeds the RCGW-2 criteria.
4. Abbreviations: "NA" = not applicable; "-" = not analyzed
5. ND(2.5) indicates not detected, number in parentheses is one-half the laboratory reporting limit.



SITE COORDINATES:42°20'12"N 71°5'55"W

N
W
E
S

U.S.G.S. QUADRANGLE: BOSTON SOUTH, MA

HALEY & ALDRICH

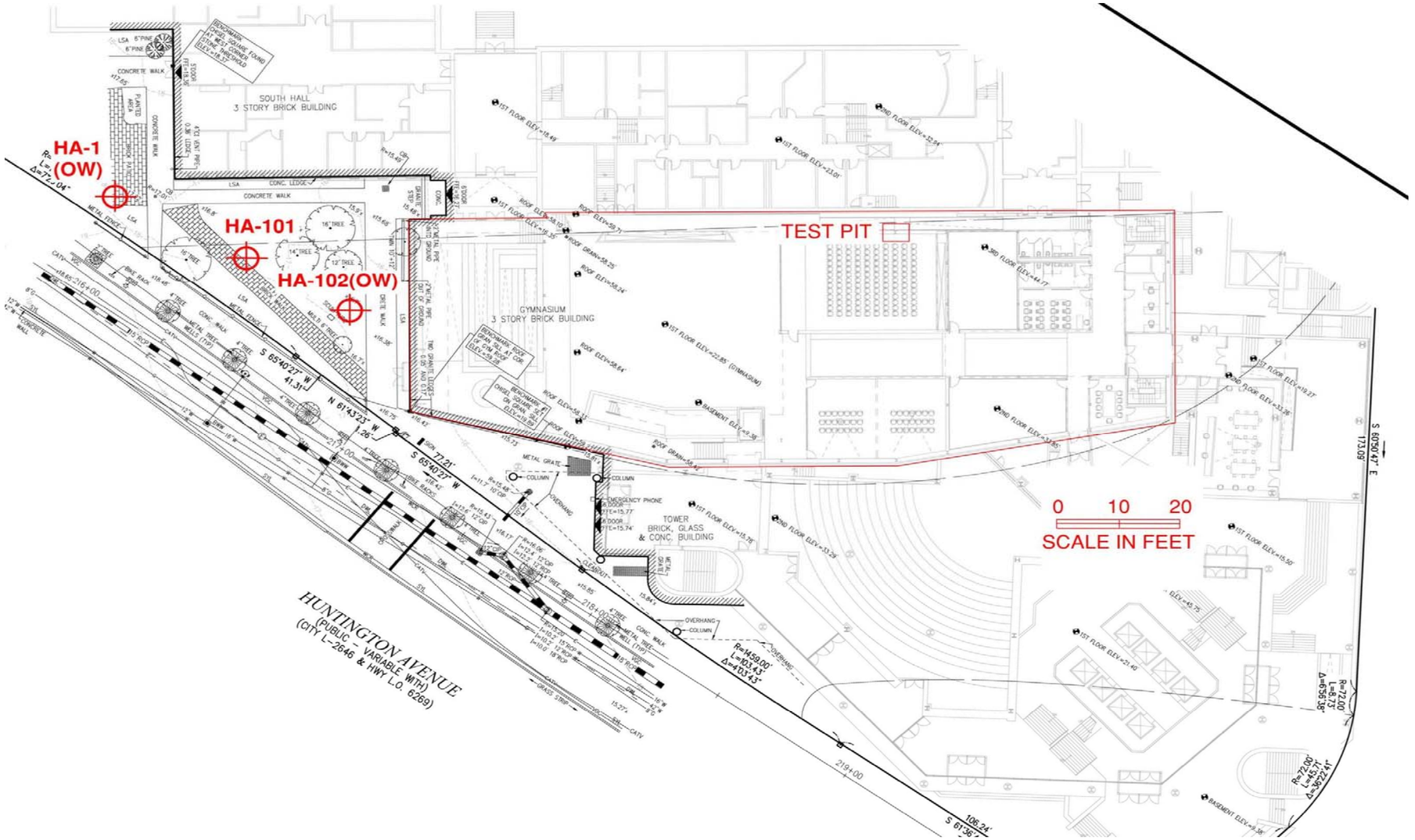
CENTER FOR DESIGN AND MEDIA
MASSACHUSETTS CENTER OF ART AND DESIGN
BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
MARCH 2012

FIGURE 1

37732-970 1.PDF



LEGEND:

HA-102(OW) — INDICATES APPROXIMATE DESIGNATION AND LOCATION OF EXPLORATION.

(OW) INDICATES OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE

NOTE:
1. BASE PLAN TAKEN FROM SV-1, EXISTING CONDITIONS PLAN OF LAND PREPARED BY VHB, INC. AND DATED 16 MAY 2011.
2. ELEVATIONS SHOWN REFER TO NAVD 1988. TO CONVERT TO:
   - ARCHITECTURAL PROJECT DATUM, ADD 6.53'
   - BOSTON CITY BASE, ADD 6.45'

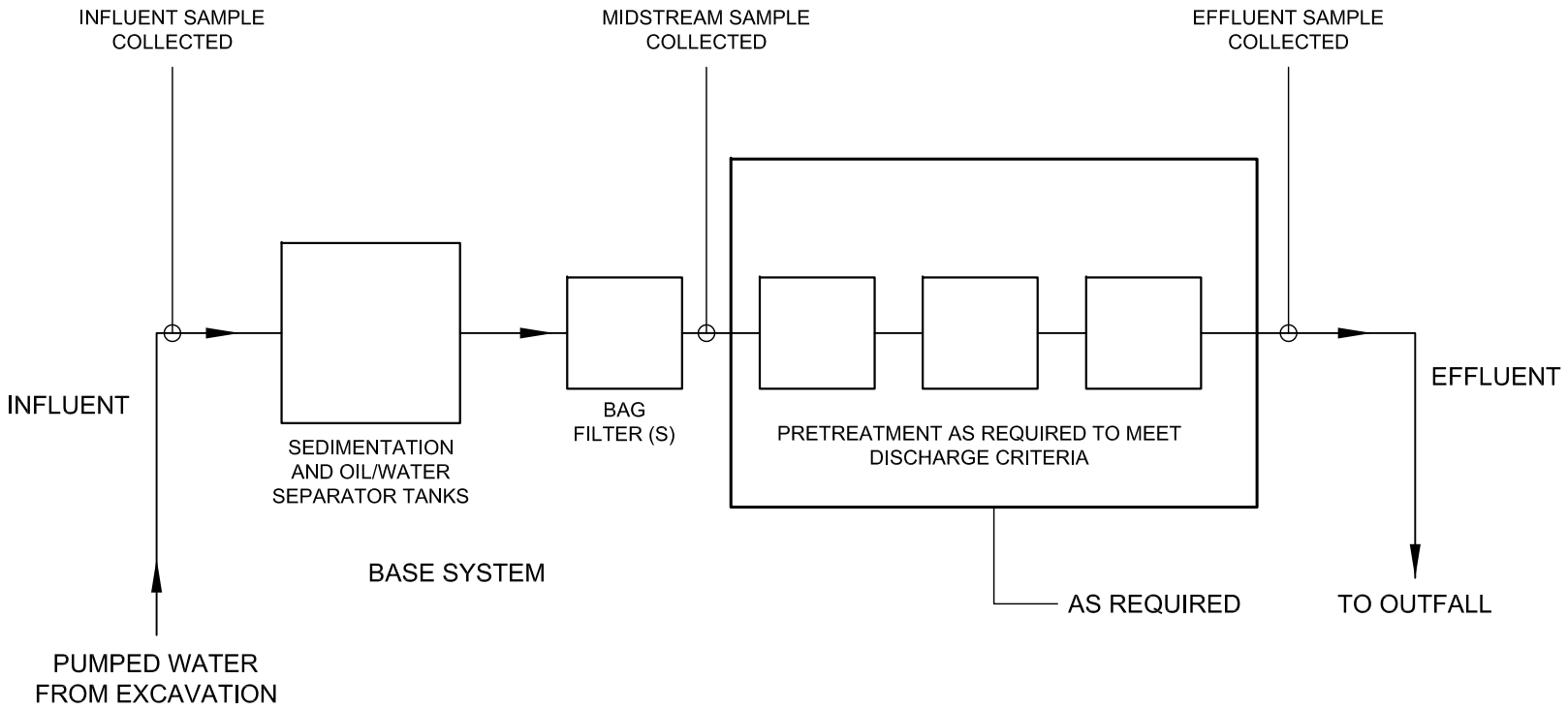
HALEY & ALDRICH

MASSACHUSETTS COLLEGE OF ART & DESIGN
CENTER FOR DESIGN & MEDIA
BOSTON, MASSACHUSETTS

SUBSURFACE EXPLORATION AND LOCATION PLAN

File No. 37732-110 DEC 2011

G:\37732\NPDES PERMIT APPLICATION\FIGURE 4 - PROPOSED TREATMENT SYSTEM SCHEMATIC.DWG



LEGEND:

DIRECTION OF FLOW

NOTE:

1. DETAILS OF TREATMENT SYSTEM MAY VARY FROM SYSTEM INDICATED ABOVE. SPECIFIC MEANS AND METHODS OF TREATMENT TO BE SELECTED BY CONTRACTOR. WATER WILL BE TREATED TO MEET REQUIRED EFFLUENT STANDARDS.

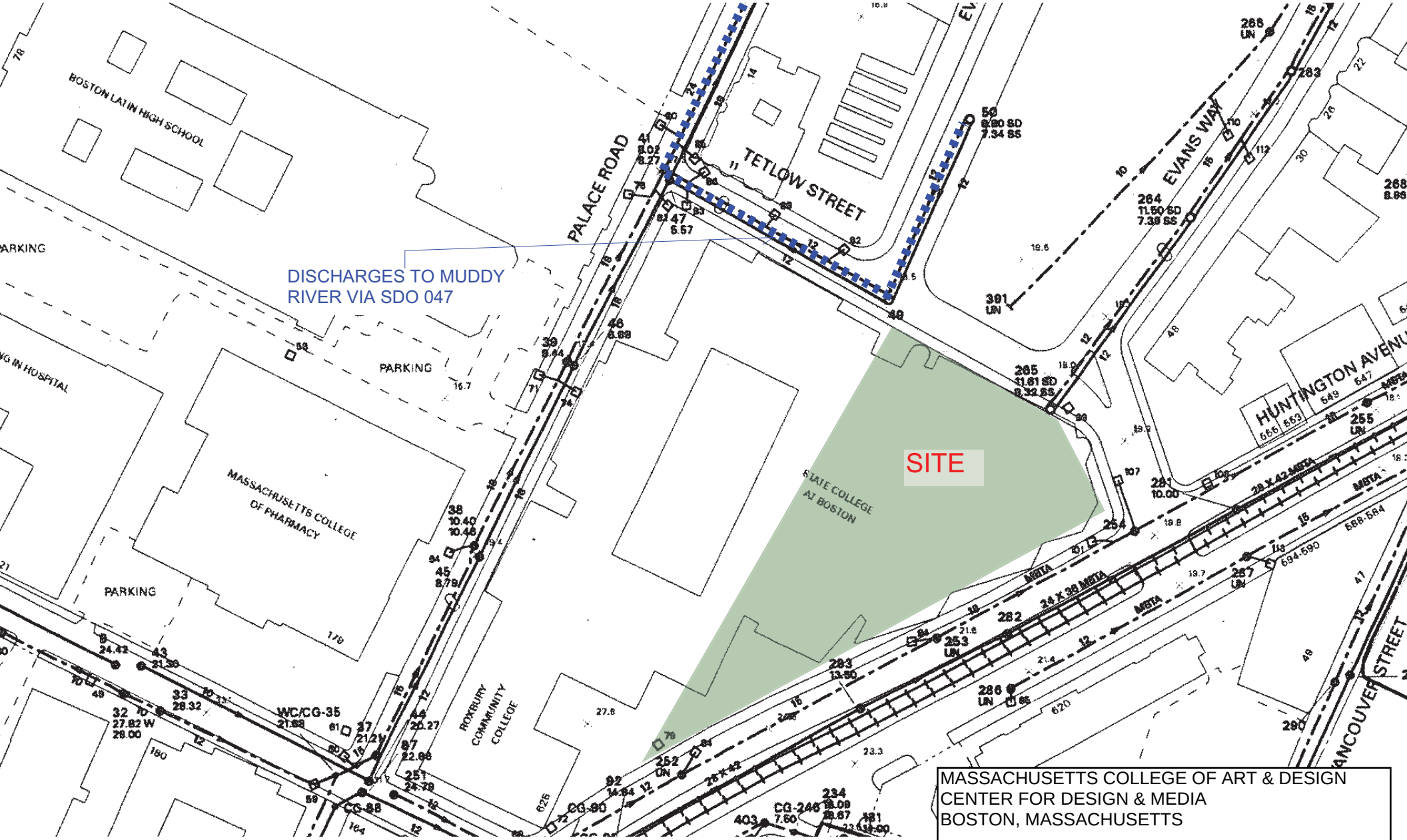
HALEY& ALDRICH

MASSACHUSETTS COLLEGE OF ART & DESIGN
CENTER FOR DESIGN & MEDIA
BOSTON, MASSACHUSETTS

PROPOSED TREATMENT SYSTEM SCHEMATIC

SCALE: NONE
MARCH 2012

FIGURE 3



MASSACHUSETTS COLLEGE OF ART & DESIGN
CENTER FOR DESIGN & MEDIA
BOSTON, MASSACHUSETTS

BOSTON WATER AND SEWER COMMISSION
SEWER PLAN

APRIL 2012 FIGURE 4

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of **facility/site**: MassArt - Ctr for Design and Media		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 42.3367 latitude: -71.0986	Facility SIC code(s): 1542	Street: 621 Huntington Avenue		
b) Name of **facility/site owner:**		Town: Boston		
Email address of facility/site owner: Catherine.Walsh@state.ma.us		State: MA	Zip: 02115	County: Suffolk
Telephone no. of facility/site **owner**: 617-727-4050				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ⊙ 3. Private ○ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):		Division of Capitol Asset Management (DCAM)		
Street: One Ashburton Place				
Town: Boston	State: MA	Zip: 02108	County: Suffolk	
c) Legal name of **operator**:		**Operator** telephone no: 617-878-4800		
Walsh Brothers, Incorporated		**Operator** fax no.:	**Operator** email:	
Operator contact name and title: Noah Manacas - Project Manager				
Address of **operator** (if different from owner):		Street: 210 Commercial Street		
Town: Boston	State: MA	Zip: 02109	County: Suffolk	

d) Check Y for "yes" or N for "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Y ○ N ⊙, if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y ○ N ⊙, if Y, date and tracking #:
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ⊙ N ○
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ⊙ N ○

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ○ N ⊙
If Y, please list:
1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ⊙,
if Y, number:
2. Final Dewatering General Permit? Y ○ N ⊙,
if Y, number:
3. EPA Construction General Permit? Y ○ N ⊙,
if Y, number:
4. Individual NPDES permit? Y ○ N ⊙,
if Y, number:
5. any other water quality related individual or general permit? Y ○ N ⊙, if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ○ N ⊙

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☒ B. Known Contaminated Sites ☐

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Temporary construction dewatering to facilitate renovations and addition to the Center for Design and Media.

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow: 0.112 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.067 CFS Is average flow a design value or estimate? Estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 42.33736 long. -71.09909 pt.2: lat. _____ long. _____;
pt.3: lat. _____ long. _____ pt.4: lat. _____ long. _____;
pt.5: lat. _____ long. _____ pt.6: lat. _____ long. _____;
pt.7: lat. _____ long. _____ pt.8: lat. _____ long. _____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ◉ or seasonal ○?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start 7/1/2012 end 12/31/2012

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See attached Figure 3- BWSC Sewer Map and Figure 4- Proposed Treatment System Schematic

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	GRAB	2540D	100	2000000			
2. Total Residual Chlorine (TRC)		☒	☐	1	GRAB	4500CL-D	20	ND			
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	GRAB	1664A	5200	ND			
4. Cyanide (CN)	57125	☒	☐	1	GRAB	4500CN-CE	5	ND			
5. Benzene (B)	71432	☒	☐	1	GRAB	8260 B	0.5	ND			
6. Toluene (T)	108883	☒	☐	1	GRAB	8260 B	0.75	ND			
7. Ethylbenzene (E)	100414	☒	☐	1	GRAB	8260 B	0.5	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	GRAB	8260 B	1	ND			
9. Total BTEX [2]	n/a	☒	☐	1	GRAB	8260 B	--	ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	GRAB	8260 B	2	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	GRAB	8260 B	1	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	GRAB	8260 B	10	ND			

***** Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

[2] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

[3] EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	GRAB	8260 B	2	ND			
14. Naphthalene	91203	☒	☐	1	GRAB	8260 B	2.5	ND			
15. Carbon Tetrachloride	56235	☒	☐	1	GRAB	8260 B	0.5	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	GRAB	8260 B	2.5	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	GRAB	8260 B	2.5	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	GRAB	8260 B	2.5	ND			
18a. Total dichlorobenzene		☒	☐	1	GRAB	8260 B	2.5	ND			
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	GRAB	8260 B	0.75	ND			
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	GRAB	8260 B	0.5	ND			
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	GRAB	8260 B	0.75	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	GRAB	8260 B	0.5	ND			
23. Methylene Chloride	75092	☒	☐	1	GRAB	8260 B	3	ND			
24. Tetrachloroethene (PCE)	127184	☒	☐	1	GRAB	8260 B	0.5	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	GRAB	8260 B	0.5	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	GRAB	8260 B	0.75	ND			
27. Trichloroethene (TCE)	79016	☒	☐	1	GRAB	8260 B	0.5	ND			

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	GRAB	8260 B	0.5	ND			
29. Acetone	67641	☒	☐	1	GRAB	8260 B	0.5	ND			
30. 1,4 Dioxane	123911	☐	☐	0							
31. Total Phenols	108952	☒	☐	1	GRAB	8270 C	5	ND			
32. Pentachlorophenol (PCP)	87865	☒	☐	1	GRAB	8270 C	0.8	ND			
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	GRAB	8270 C	5	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☐	☒	1	GRAB	8270 C	3	4.5			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	GRAB	8270 C	0.2	ND			
a. Benzo(a) Anthracene	56553	☒	☐	1	GRAB	8270 C	0.2	ND			
b. Benzo(a) Pyrene	50328	☒	☐	1	GRAB	8270 C	0.2	ND			
c. Benzo(b)Fluoranthene	205992	☒	☐	1	GRAB	8270 C	0.2	ND			
d. Benzo(k)Fluoranthene	207089	☒	☐	1	GRAB	8270 C	0.2	ND			
e. Chrysene	21801	☒	☐	1	GRAB	8270 C	0.2	ND			
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	GRAB	8270 C	0.2	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	GRAB	8270 C	0.2	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	GRAB	8270 C	0.2	ND			

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	GRAB	8270 C	0.2	ND			
i. Acenaphthylene	208968	☒	☐	1	GRAB	8270 C	0.2	ND			
j. Anthracene	120127	☒	☐	1	GRAB	8270 C	0.2	ND			
k. Benzo(ghi) Perylene	191242	☒	☐	1	GRAB	8270 C	0.2	ND			
l. Fluoranthene	206440	☒	☐	1	GRAB	8270 C	0.2	ND			
m. Fluorene	86737	☒	☐	1	GRAB	8270 C	0.2	ND			
n. Naphthalene	91203	☒	☐	1	GRAB	8270 C	0.2	ND			
o. Phenanthrene	85018	☒	☐	1	GRAB	8270 C	0.2	ND			
p. Pyrene	129000	☒	☐	1	GRAB	8270 C	0.2	ND			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	GRAB	608	0.25	ND			
38. Chloride	16887006	☐	☒	1	GRAB	300.0	5000	480000			
39. Antimony	7440360	☒	☐	1	GRAB	6020	0.5	ND			
40. Arsenic	7440382	☒	☐	1	GRAB	6020	0.5	2.9			
41. Cadmium	7440439	☐	☒	1	GRAB	6020	0.2	ND			
42. Chromium III (trivalent)	16065831	☒	☐	1	GRAB	6020	0.5	6.5			
43. Chromium VI (hexavalent)	18540299	☐	☐	0							
44. Copper	7440508	☒	☐	1	GRAB	6020	0.5	12.3			
45. Lead	7439921	☒	☐	1	GRAB	6020	0.5	18.5			
46. Mercury	7439976	☐	☒	1	GRAB	245.1	0.2	ND			
47. Nickel	7440020	☒	☐	1	GRAB	6020	0.5	7.1			
48. Selenium	7782492	☒	☐	1	GRAB	6020	1	2			
49. Silver	7440224	☐	☒	1	GRAB	6020	0.4	ND			
50. Zinc	7440666	☒	☐	1	GRAB	6020	5	30.5			
51. Iron	7439896	☒	☐	1	GRAB	200.7	50	4000			
Other (describe):		☐	☐		GRAB						

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
See Table 1 attached		☐	☐								
		☐	☐								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y◉ N○	If yes, which metals? Total Copper, Total Iron, and Total Lead (dissolved metals below limits)
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Total Copper DF: 10.6 Metal: Total Iron DF: 10.6 Metal: Total Lead DF: 10.6 Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y◉ N○ If Y, list which metals: Total Lead (note that dissolved lead is below effluent limits)

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

Collected dewatering effluent will be routed through a sedimentation tank and bag filters to remove suspended solids and undissolved chemical constituents (metals), as shown in the Proposed Treatment System Schematic included as Figure 3.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☐
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 50 gpm Maximum flow rate of treatment system 50 gpm
Design flow rate of treatment system N/A gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

Not applicable

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Effluent will be discharge to storm drain No. 48 located near the site, which discharges through a 24-inch drain line to outfall SDO 047 at the Muddy River.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 1.07 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ◉ N ○ If yes, for which pollutant(s)?

Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)? Listed under Cat. 5, "Waters requiring a TMDL" for E-Coli, DO, PCBs, Phosporous, Oil and Grease. Turbidity

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ○ B ◉ C ○ D ○ E ○ F ○

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ○ N ○ Underway ○

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ◉ N ○

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ○ 2 ◉ 3 ○

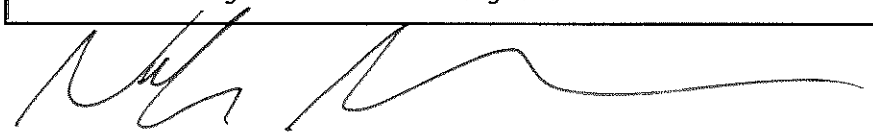
f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Massachusetts College of Art - Center for Design and Media
Operator signature:	
Printed Name &Title:	Noah Manacas, Project Manager
Date:	4/23/12

HALEY& ALDRICH

Calculations

File No. 37732-970
Sheet 1 of 1

Client MASSACHUSETTS COLLEGE OF ART AND DESIGN
Project CENTER FOR DESIGN AND MEDIA
Subject NPDES RGP NO1 – DILUTION FACTOR CALCULATION

Date 03/16/12
Computed By LSV
Checked By

DILUTION FACTOR, $DF = \frac{Qd + Qs}{Qd}$

WHERE: Qd = MAX DISCHARGE FLOW RATE IN CFS

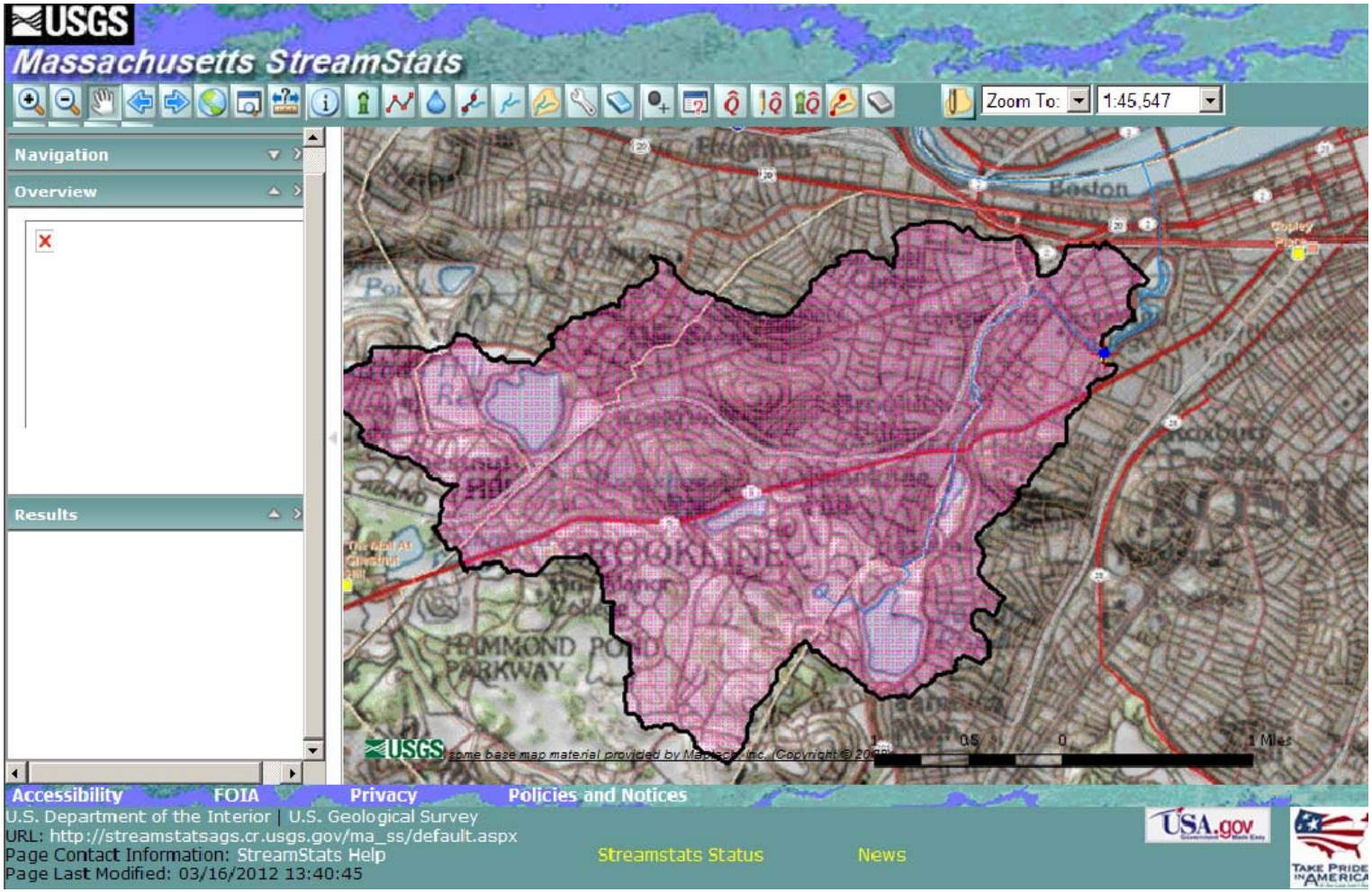
Qs = RECEIVING WATER 7Q10 FLOW (i.e. ANNUAL MINIMUM FLOW FOR 7 CONSECUTIVE DAYS WITH A RECURRENCE INTERVAL OF 10 YEARS)

Qd = 50 GPM (ASSUMED) = 0.112 CFS

Qs OBTAINED FROM http://ma.water.usgs.gov/streamstats/

= 1.07 CFS

$DF = \frac{0.112\,CFS + 1.07\,CFS}{0.112\,CFS}$ = **10.6 DILUTION FACTOR**


USGS
Massachusetts StreamStats
Zoom To:
1:45,547
Navigation
Overview
Results
Boston
HAMMOND POND PARKWAY
USGS some base map material provided by MassGIS, Inc. (Copyright © 2008)
0.5
0
1 Miles
Accessibility
FOIA
Privacy
Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
URL: http://streamstatsags.cr.usgs.gov/ma_ss/default.aspx
Page Contact Information: StreamStats Help
Page Last Modified: 03/16/2012 13:40:45
Streamstats Status
News
USA.gov
TAKE PRIDE IN AMERICA

USGS Massachusetts StreamStats

Streamstats Ungaged Site Report

Date: Fri Mar 16 2012 11:45:51 Mountain Daylight Time
Site Location: Massachusetts
NAD27 Latitude: 42.3390 (42 20 20)
NAD27 Longitude: -71.0983 (-71 05 54)
NAD83 Latitude: 42.3391 (42 20 21)
NAD83 Longitude: -71.0978 (-71 05 52)
Drainage Area: 6.58 mi2

Low Flows Basin Characteristics

100% Statewide Low Flow (6.58 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	6.58	1.61	149
Mean Basin Slope from 250K DEM (percent)	3.02	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.76	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Probability of Perennial Flow Basin Characteristics

100% Perennial Flow Probability (6.58 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	6.58 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	35.74	0	100
Percent Forest (percent)	6.43	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Low Flows Streamflow Statistics

Statistic	Flow (ft^3/s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	6.53	18		3.44	12.3
D60	5.42	20		1.21	24
D70	4.32	24		1.18	15.7
D75	3.65	26		1.06	12.4
D80	4.16	28		1.15	14.9
D85	3.31	32		0.77	14
D90	3.36	37		0.87	12.8
D95	2.01	46		0.4	9.85
D98	1.32	60		0.24	6.8
D99	1	65		0.17	5.58
M7D2Y	1.73	49		0.33	8.63
AUGD50	3.47	33		0.79	15
M7D10Y	1.07	71		0.17	6.37

The equation for estimating the probability of perennial flow is applicable for most areas of Massachusetts except eastern Buzzards Bay, Cape Cod, and the Island regions. The estimate obtained from the equation assumes natural flow conditions at the site. The equation also is best used for sites with drainage areas between 0.01 to 1.99 mi2, as errors beyond for basins beyond these bounds are unknown.

Probability of Perennial Flow Statistics

Statistic	Value	Standard Error (percent)
PROBPEREN	0.99	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDIATION GENERAL PERMIT (RGP)
TEMPORARY CONSTRUCTION DEWATERING
MASSACHUSETTS COLLEGE OF ART AND DESIGN – CENTER FOR DESIGN AND MEDIA
BOSTON, MASSACHUSETTS

Appendix B - Best Management Practices Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction site dewatering planned to occur during the proposed renovations and below-grade construction of the existing Gymnasium Building located at 621 Huntington Avenue at the Massachusetts College of Art and Design in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering will be conducted from sumps or temporary dewatering wells located within the excavation limits. The treatment system will be designed by the contractor. Prior to discharge, collected water will be routed through a sedimentation tank with an oil/water separator component with bag filter, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental pretreatment may be required to meet discharge criteria and if necessary, may include ion exchange. Discharge of construction dewatering effluent under this RGP NOI will be to an existing storm drain located along Evans Way. The storm drains travel a short distance northwest along Tetlow Street and then northeast along Palace Road where it discharges into Outfall #047 to the Muddy River.

Discharge Monitoring and Compliance

Regular sampling and testing of the treated effluent will be conducted as required by the RGP. This includes chemical testing required within the first month of discharging, and the monthly testing to be conducted through the end of the scheduled discharge.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the “system design flow” by regularly monitoring flow and adjusting the amount of construction dewatering as needed.

Monthly monitoring reports will be compiled and maintained at the site.

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the fractionation tanks, filters, hoses, pumps, and flow meters. Periodic maintenance will include changing bag filters and/or ion exchange units as required to meet discharge criteria. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Operator.

Miscellaneous Items

Due to the nature of the excavation, erosion control and the nature of the site and surrounding infrastructure, it is not anticipated that there will be any run off into the site from other sources, as well as no run off from the site.

Site security for the treatment system can be covered within the overall site security plan.

Management of Treatment System Materials

No potential sources of pollutants are anticipated during construction dewatering activities. Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and sumps to minimize handling. The contractor will establish staging areas on the site for any equipment or materials storage which may be possible sources of pollution away from any dewatering activities.

Sediment from the fractionalization tank used in the treatment system will be characterized and disposed of as soil at an appropriate receiving facility in accordance with applicable laws and regulations. If used, Ion Exchange resin will be likely recycled and/or manifested to the appropriate receiving facility. Bag filters, if used, will be placed in drums and manifested for off-site disposal.

Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Cultural Resource Information System

MACRIS

Scanned forms and photos now available for selected towns!

The Massachusetts Cultural Resource Information System (MACRIS) allows you to search the Massachusetts Historical Commission database for information on historic properties and areas in the Commonwealth.

Users of the database should keep in mind that it does not include information on all historic properties and areas in Massachusetts, nor does it reflect all the information on file on historic properties and areas at the Massachusetts Historical Commission.

Click here to begin your search of the MACRIS database.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Place: Fenway - Longwood; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BOS.JE	Emerald Necklace Parks		Boston	
BOS.JG	Massachusetts Mental Health Center		Boston	
BOS.JH	Massachusetts State Hospitals and State Schools		Boston	
BOS.TC	Emmanuel College Campus		Boston	
BOS.7517	Boston Public Latin High School	78 Ave Louis Pasteur	Boston	1922
BOS.9293	Riverway - Brookline Avenue Bridge	Brookline Ave	Boston	1894
BOS.7358	Simmons College - South Hall	321 Brookline Ave	Boston	1905
BOS.7357	Massachusetts School of Art	364 Brookline Ave	Boston	1929
BOS.7359	Boston Fire Engine House #3	411 Brookline Ave	Boston	1873
BOS.7414	Lyons, John B. Three-Family House	7 Fenwood Rd	Boston	1910
BOS.7410	Farragut Primary School	10 Fenwood Rd	Boston	1903
BOS.7415	Spillane, Jeremiah C. Two-Family House	11 Fenwood Rd	Boston	1903
BOS.7416	Spillane, Jeremiah C. Two-Family House	15 Fenwood Rd	Boston	1903
BOS.7411	Spillane, Jeremiah C. Two-Family House	36 Fenwood Rd	Boston	1900
BOS.7412	Spillane, Jeremiah C. Two-Family House	40 Fenwood Rd	Boston	1900
BOS.7417	Spillane, Jeremiah C. Two-Family House	43 Fenwood Rd	Boston	1905
BOS.7418	Spillane, Jeremiah C. Two-Family House	49 Fenwood Rd	Boston	1903
BOS.7711	Massachusetts Mental Health Center Main Building	74 Fenwood Rd	Boston	1912
BOS.7712	Massachusetts Mental Health Center Power House	74 Fenwood Rd	Boston	1912
BOS.7713	Massachusetts Mental Health Center Research Bldg.	74 Fenwood Rd	Boston	1954
BOS.7714	Massachusetts Mental Health Center Therapeutic Blg	74 Fenwood Rd	Boston	1957
BOS.9295	Massachusetts Mental Health Center Fence	74 Fenwood Rd	Boston	1912
BOS.7419	Crowley, Daniel Apartment Building	30 Francis St	Boston	1900

Inv. No.	Property Name	Street	Town	Year
BOS.7421	Ilse, Fredericka Three Decker	50 Francis St	Boston	1900
BOS.7422	Dooley, Rose H. Three Decker	56 Francis St	Boston	1901
BOS.7423	Donovan, Jereh Three Decker	58 Francis St	Boston	1901
BOS.7494	Bangs, Edward A. - Bangs, Outram Double House	553-555 Huntington Ave	Boston	1900
BOS.7495	Stanley, Martha Apartment Building	641 Huntington Ave	Boston	1888
BOS.7496	Holmes, William Apartment Building	643-645 Huntington Ave	Boston	1888
BOS.7497	Brigham, Peter Bent Hospital	721 Huntington Ave	Boston	1911
BOS.7498	Harmon, James Apartment House	733-739 Huntington Ave	Boston	1899
BOS.7499	Lyons, L. J. Apartment House	741-747 Huntington Ave	Boston	1899
BOS.9291	Longwood Avenue Bridge	Longwood Ave	Boston	1897
BOS.7504	Carlton Apartment Building	160 Longwood Ave	Boston	1892
BOS.7505	Westcourt Apartment Building	164 Longwood Ave	Boston	1900
BOS.7514	Massachusetts College of Pharmacy	179 Longwood Ave	Boston	1917
BOS.7506	Angell Memorial Animal Hospital	180 Longwood Ave	Boston	1915
BOS.7507	Harvard University Dental School and Hospital	188 Longwood Ave	Boston	1908
BOS.7515	Boston Lying-in Hospital	221 Longwood Ave	Boston	1922
BOS.7508	Harvard Medical School - Administrative Building	230-240 Longwood Ave	Boston	1906
BOS.7509	Harvard Medical School - Anatomy & Histology Bldg	230-240 Longwood Ave	Boston	1906
BOS.7510	Harvard Medical School - Physiological Chemistry	230-240 Longwood Ave	Boston	1906
BOS.7511	Harvard Medical School - Bacteriology & Pathology	230-240 Longwood Ave	Boston	1906
BOS.7512	Harvard Medical School - Pharmacology & Hygiene	230-240 Longwood Ave	Boston	1906
BOS.7516	Harvard Medical School - Vanderbilt Hall	245 Longwood Ave	Boston	1926
BOS.7513	Children's Hospital	300 Longwood Ave	Boston	1912
BOS.9292	Netherlands Road Bridge	Netherlands Rd	Boston	1894
BOS.7533	Girls Latin School	Palace Rd	Boston	1907
BOS.7534	Collins, Patrick A. Model School	Palace Rd	Boston	1907
BOS.7535	Boston Normal School	Palace Rd	Boston	1907
BOS.9288	Riverway Shelter and Toolhouse	Park Dr	Boston	1893
BOS.9289	Riverway - Chapel Street Bridge	Park Dr	Boston	1890
BOS.9290	Riverway - Bridle Path Bridge	Park Dr	Boston	1892
BOS.9617	Riverway Pathway	Park Dr	Boston	
BOS.7536	Riverway Administration Building	440 Park Dr	Boston	1898
BOS.7580	Simmons College - North Hall	86 Pilgrim Rd	Boston	1906
BOS.7581	Simmons College - Refectory	86R Pilgrim Rd	Boston	1905

Inv. No.	Property Name	Street	Town	Year
BOS.7582	Winsor School	103 Pilgrim Rd	Boston	1909
BOS.7583	New England Deaconess Hospital	175 Pilgrim Rd	Boston	1903
BOS.7584	Palmer Memorial Hospital	195 Pilgrim Rd	Boston	1927
BOS.9294	Route 9 Overpass and Retaining Wall	Rt 9	Boston	1936
BOS.7420	Crowley, Daniel Apartment Building	5 Saint Albans St	Boston	1900
BOS.7683	Rotch, Thomas M. Jr. Memorial Hospital for Infants	55 Shattuck St	Boston	1910
BOS.7684	Hastings, Mary C. Hews House	2 Short St	Boston	1875
BOS.7685	Pope - Hastings, Bulkley A. House	4 Short St	Boston	1855
BOS.7408	Gardner, Isabella Stewart Museum	280 The Fenway	Boston	1900
BOS.7409	Simmons Female College	300 The Fenway	Boston	1901
BOS.7413	Boston Academy of Notre Dame	400 The Fenway	Boston	1916
BOS.13247	Emmanuel College - Saint Ann Dormitory	400 The Fenway	Boston	1961
BOS.13248	Emmanuel College - Campus Shop	400 The Fenway	Boston	1962
BOS.13249	Emmanuel College - Loretto Hall	400 The Fenway	Boston	1963
BOS.13250	Emmanuel College - Marian Hall	400 The Fenway	Boston	1954
BOS.13251	Emmanuel College - Saint Joseph Hall	400 The Fenway	Boston	1966
BOS.7706	Green, Joseph Three-Family House	7 Vancouver St	Boston	1900

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 17, 2012

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

Total Approximate Acreage: 268,000 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River
(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp
(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley
(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed
(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor
(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog
(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills
(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)
(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed
(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed
(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp
(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay
(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin
(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed
(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds
(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary
(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag
(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay
(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River
(160 acres, 1980) Bourne

Rumney Marshes
(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System
(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin
(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit
(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed
(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River
(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay
(2,580 acres, 1979) Falmouth and Mashpee

Weir River
(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor
(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River
(800 acres, 1982) Hingham and Weymouth

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

Towns with ACECs within their Boundaries November 2010

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
Hull	Weir River
Ipswich	Great Marsh
Lancaster	Central Nashua River Valley
	Squannassit
Lee	Kampoosa Bog Drainage Basin
	Upper Housatonic River
Lenox	Upper Housatonic River
Leominster	Central Nashua River Valley
Lunenburg	Squannassit
Lynn	Rumney Marshes
Mansfield	Canoe River Aquifer
Mashpee	Waquoit Bay
Melrose	Golden Hills
Milton	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Mt. Washington	Karner Brook Watershed
	Schenob Brook
Newbury	Great Marsh
Norton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Norwood	Fowl Meadow and Ponkapoag Bog
Orleans	Inner Cape Cod Bay
	Pleasant Bay
Pepperell	Petapawag
	Squannassit
Peru	Hinsdale Flats Watershed
Pittsfield	Upper Housatonic River
Plymouth	Herring River Watershed
	Ellisville Harbor
Quincy	Neponset River Estuary
Randolph	Fowl Meadow and Ponkapoag Bog
Raynham	Hockomock Swamp
Revere	Rumney Marshes
Rowley	Great Marsh
Sandwich	Sandy Neck Barrier Beach System
Saugus	Rumney Marshes
	Golden Hills
Sharon	Canoe River Aquifer
	Fowl Meadow and Ponkapoag Bog
Sheffield	Schenob Brook
Shirley	Squannassit
Stockbridge	Kampoosa Bog Drainage Basin
Taunton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Truro	Wellfleet Harbor
Townsend	Squannassit
Tyngsborough	Petapawag
Upton	Miscoe-Warren-Whitehall Watersheds
Wakefield	Golden Hills
Washington	Hinsdale Flats Watershed
	Upper Housatonic River
Wellfleet	Wellfleet Harbor
W Bridgewater	Hockomock Swamp
Westborough	Cedar Swamp
Westwood	Fowl Meadow and Ponkapoag Bog
Weymouth	Weymouth Back River
Winthrop	Rumney Marshes

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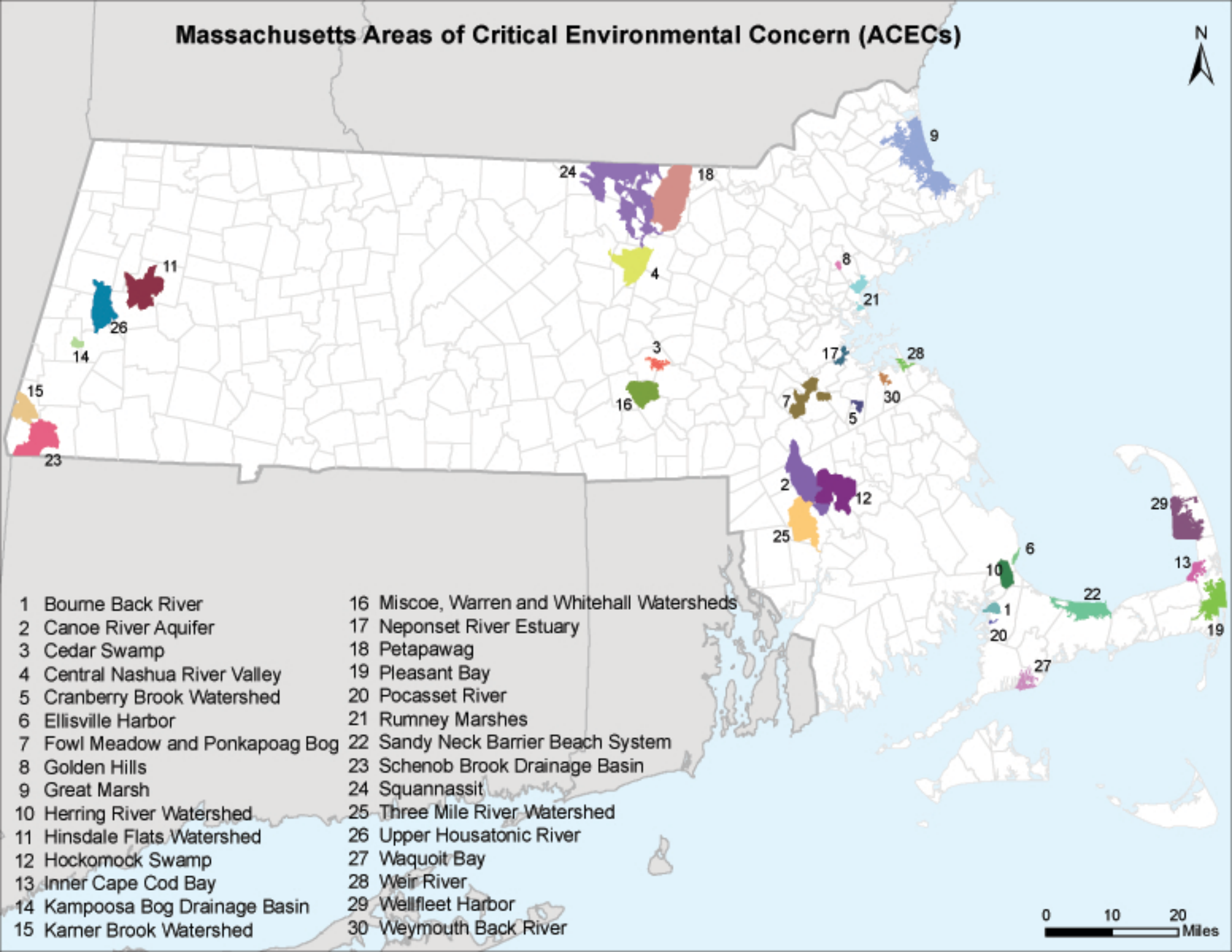
Massachusetts Areas of Critical Environmental Concern (ACECs)



1 Bourne Back River
2 Canoe River Aquifer
3 Cedar Swamp
4 Central Nashua River Valley
5 Cranberry Brook Watershed
6 Ellisville Harbor
7 Fowl Meadow and Ponkapoag Bog
8 Golden Hills
9 Great Marsh
10 Herring River Watershed
11 Hinsdale Flats Watershed
12 Hockomock Swamp
13 Inner Cape Cod Bay
14 Kampoosa Bog Drainage Basin
15 Karner Brook Watershed
16 Miscoe, Warren and Whitehall Watersheds
17 Neponset River Estuary
18 Petapawag
19 Pleasant Bay
20 Pocasset River
21 Rumney Marshes
22 Sandy Neck Barrier Beach System
23 Schenob Brook Drainage Basin
24 Squannassit
25 Three Mile River Watershed
26 Upper Housatonic River
27 Waquoit Bay
28 Weir River
29 Wellfleet Harbor
30 Weymouth Back River

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague, Warwick
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

Revised 06/22/2009

MassDEP - Bureau of Waste Site Cleanup

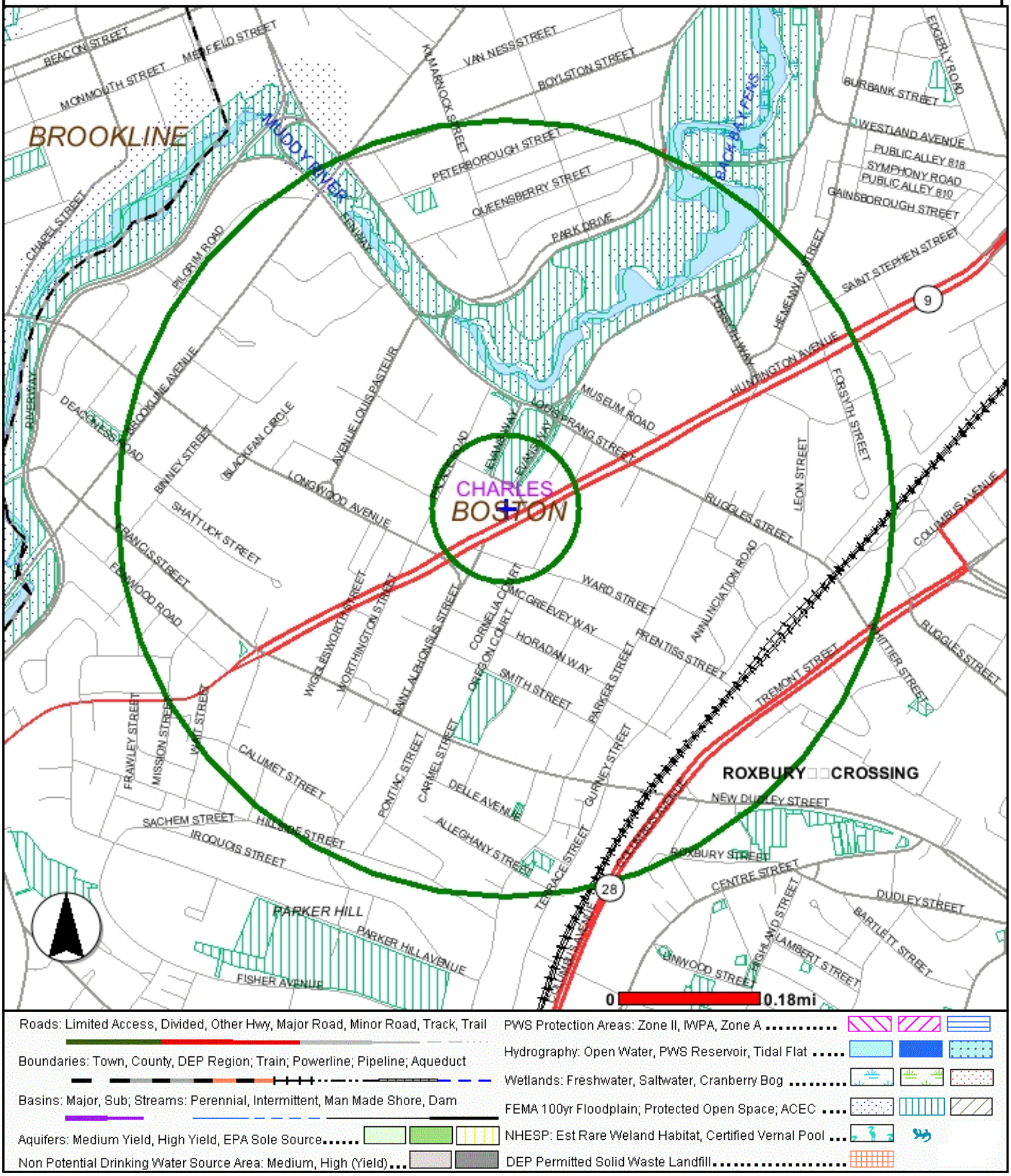
MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

Site Name:
Center for Design and Media
RTN:
NAD83 MA Coordinates:
233075mE, 898557mN

March 16, 2012

The information shown on this map is the best available at the date of printing. For more information please refer to www.mass.gov/mgis/massgis.htm

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
NHESP: Est Rare Weland Habitat, Certified Vernal Pool
DEP Permitted Solid Waste Landfill

The Official Website of the Department of Fish and Game (DFG)

Department of Fish and Game Commissioner Mary B. Griffin

DFG Home Mass.Gov Home State Agencies State Online Services

MassWildlife
Massachusetts Division of Fisheries & Wildlife
Wayne F. MacCallum, Director

Natural Heritage & Endangered Species

Home Recreation Wildlife Fisheries Natural Heritage Habitat Education Search MassWildlife

Rare Species by Town

MESA (Massachusetts Endangered Species Act) and Federal Status

Quick Links

» Town Index
» MESA List
» Contact Us

E = Endangered T = Threatened SC = Special Concern

Most Recent Observation

This field represents the most recent observation of that species in a town. However, because they are rare, many MESA-listed species are difficult to detect even when they are present. Natural Heritage does not have the resources to be able to conduct methodical species surveys in each town on a regular basis. Therefore, the fact that the 'Most Recent Observation' recorded for a species may be several years old should not be interpreted as meaning that the species no longer occurs in a town. However, Natural Heritage regards records older than twenty-five years historic.

Click on a town below to view MESA-listed species for that town. To print the species for a particular town, highlight the species using your mouse, go to Print under the File Menu, click on 'Selection' under 'Print Range' and click OK.

For more information about a particular species, view the list of Natural Heritage Fact Sheets.

These data were extracted from the database of the Natural Heritage and Endangered Species Program in September 2009.

Barnstable | Barre | Becket | Bedford | Belchertown | Bellingham | Belmont | Berkley | Berlin | Bernardston | Beverly | Billerica | Blackstone | Blandford | Bolton | Boston | Bourne | Boxborough | Boxford | Boylston | Braintree | Brewster | Bridgewater | Brimfield | Brockton | Brookfield | Brookline | Buckland | Burlington

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BARNSTABLE	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		2009
BARNSTABLE	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BARNSTABLE	Bird	Asio flammeus	Short-eared Owl	E		Historic
BARNSTABLE	Bird	Asio otus	Long-eared Owl	SC		1978
BARNSTABLE	Bird	Charadrius melodus	Piping Plover	T	T	2006
BARNSTABLE	Bird	Parula americana	Northern Parula	T		1989
BARNSTABLE	Bird	Sterna dougallii	Roseate Tern	E	E	2008

BARNSTABLE	Bird	Sterna hirundo	Common Tern	SC	2008
BARNSTABLE	Bird	Sterna paradisaea	Arctic Tern	SC	1901
BARNSTABLE	Bird	Sternula antillarum	Least Tern	SC	2007
BARNSTABLE	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC	1982
BARNSTABLE	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC	1951
BARNSTABLE	Butterfly/Moth	Cingilia catenaria	Chain Dot Geometer	SC	1954
BARNSTABLE	Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC	1994
BARNSTABLE	Butterfly/Moth	Itame sp. 1 nr. inextricata	Pine Barrens Itame	SC	1968
BARNSTABLE	Butterfly/Moth	Papaipema stenocelis	Chain Fern Borer Moth	T	1950
BARNSTABLE	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T	2004
BARNSTABLE	Butterfly/Moth	Pieris oleracea	Mustard White	T	1949
BARNSTABLE	Butterfly/Moth	Satyrium favonius	Oak Hairstreak	SC	1982
BARNSTABLE	Butterfly/Moth	Zale sp. 1 nr. lunifera	Pine Barrens Zale	SC	1951
BARNSTABLE	Crustacean	Eulimnadia agassizii	Agassiz's Clam Shrimp	E	2009
BARNSTABLE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC	2004
BARNSTABLE	Dragonfly/Damselfly	Enallagma carunculatum	Tule Bluet	SC	1941
BARNSTABLE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC	1989
BARNSTABLE	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T	2005
BARNSTABLE	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T	2004
BARNSTABLE	Fish	Notropis bifrenatus	Bridle Shiner	SC	1993
BARNSTABLE	Mussel	Alasmidonta undulata	Triangle Floater	SC	2007
BARNSTABLE	Mussel	Leptodea ochracea	Tidewater Mucket	SC	2007
BARNSTABLE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC	2007
BARNSTABLE	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T	2007
BARNSTABLE	Reptile	Terrapene carolina	Eastern Box Turtle	SC	2007
BARNSTABLE	Snail	Ferrissia walkeri	Walker's Limpet	SC	2006
BARNSTABLE	Vascular Plant	Amelanchier nantucketensis	Nantucket Shadbush	SC	1993
BARNSTABLE	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T	1916
BARNSTABLE	Vascular Plant	Carex mitchelliana	Mitchell's Sedge	T	1988
BARNSTABLE	Vascular Plant	Corema conradii	Broom Crowberry	SC	1916
BARNSTABLE	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC	1999

BARNSTABLE	Vascular Plant	Dichanthelium ovale ssp. pseudopubescens	Commons's Panic-grass	SC	1986
BARNSTABLE	Vascular Plant	Dichanthelium wrightianum	Wright's Panic-grass	SC	2004
BARNSTABLE	Vascular Plant	Lachnanthes caroliana	Redroot	SC	2004
BARNSTABLE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	2006
BARNSTABLE	Vascular Plant	Linum intercursum	Sandplain Flax	SC	1989
BARNSTABLE	Vascular Plant	Linum medium var. texanum	Rigid Flax	T	1983
BARNSTABLE	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	1898
BARNSTABLE	Vascular Plant	Listera cordata	Heartleaf Twayblade	E	1916
BARNSTABLE	Vascular Plant	Malaxis bayardii	Bayard's Green Adder's-mouth	E	1989
BARNSTABLE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1960s
BARNSTABLE	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC	1989
BARNSTABLE	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC	2003
BARNSTABLE	Vascular Plant	Rhexia mariana	Maryland Meadow Beauty	E	1967
BARNSTABLE	Vascular Plant	Rhynchospora nitens	Short-beaked Bald-sedge	T	2002
BARNSTABLE	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC	1995
BARNSTABLE	Vascular Plant	Rhynchospora torreyana	Torrey's Beak-sedge	E	2007
BARNSTABLE	Vascular Plant	Sabatia campanulata	Slender Marsh Pink	E	2008
BARNSTABLE	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC	2008
BARNSTABLE	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC	2004
BARNSTABLE	Vascular Plant	Scleria pauciflora	Papillose Nut Sedge	E	1986
BARNSTABLE	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC	1919
BARNSTABLE	Vascular Plant	Sphenopholis pensylvanica	Swamp Oats	T	1988
BARNSTABLE	Vascular Plant	Spiranthes vernalis	Grass-leaved Ladies'-tresses	T	1986
BARNSTABLE	Vascular Plant	Tipularia discolor	Cranefly Orchid	E	1983
BARNSTABLE	Vascular Plant	Utricularia subulata	Subulate Bladderwort	SC	1918

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BARRE	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2007

BARRE	Bird	Botaurus lentiginosus	American Bittern	E	1930
BARRE	Bird	Ixobrychus exilis	Least Bittern	E	2005
BARRE	Butterfly/Moth	Psectraglaea carnosa	Pink Sallow	SC	2007
BARRE	Dragonfly/Damselfly	Neurocordulia yamaskanensis	Stygian Shadowdragon	SC	2004
BARRE	Fish	Notropis bifrenatus	Bridle Shiner	SC	2005
BARRE	Mussel	Alasmidonta undulata	Triangle Floater	SC	1999
BARRE	Mussel	Strophitus undulatus	Creeper	SC	1999
BARRE	Reptile	Glyptemys insculpta	Wood Turtle	SC	2006
BARRE	Reptile	Terrapene carolina	Eastern Box Turtle	SC	2005
BARRE	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E	1865
BARRE	Vascular Plant	Clematis occidentalis	Purple Clematis	SC	2008
BARRE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1950
BARRE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1870
BARRE	Vascular Plant	Viola adunca	Sand Violet	SC	2006

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BECKET	Bird	Botaurus lentiginosus	American Bittern	E		1991
BECKET	Butterfly/Moth	Erora laeta	Early Hairstreak	T		2005
BECKET	Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		2004
BECKET	Dragonfly/Damselfly	Somatochlora forcipata	Forcipate Emerald	SC		1973
BECKET	Fish	Catostomus catostomus	Longnose Sucker	SC		1979
BECKET	Fish	Notropis bifrenatus	Bridle Shiner	SC		1994
BECKET	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
BECKET	Vascular Plant	Arceuthobium pusillum	Dwarf Mistletoe	SC		1904
BECKET	Vascular Plant	Carex livida	Glaucous Sedge	E		Historic
BECKET	Vascular Plant	Carex pauciflora	Few-flowered Sedge	E		Historic
BECKET	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		Historic
BECKET	Vascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E		2001

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BEDFORD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2009
BEDFORD	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1902
BEDFORD	Bird	Bartramia longicauda	Upland Sandpiper	E		2000
BEDFORD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1998
BEDFORD	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2008
BEDFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		1995
BEDFORD	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2004
BEDFORD	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1884

BEDFORD	Vascular Plant	Bolboschoenus fluviatilis	River Bulrush	SC	2002
BEDFORD	Vascular Plant	Carex oligosperma	Few-fruited Sedge	E	2007
BEDFORD	Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E	1882
BEDFORD	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1899
BEDFORD	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E	1885
BEDFORD	Vascular Plant	Nabalus serpentarius	Lion's Foot	E	1883
BEDFORD	Vascular Plant	Nuphar microphylla	Tiny Cow-lily	E	1883
BEDFORD	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1900
BEDFORD	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T	1888
BEDFORD	Vascular Plant	Scirpus longii	Long's Bulrush	T	2007
BEDFORD	Vascular Plant	Senna hebecarpa	Wild Senna	E	1883
BEDFORD	Vascular Plant	Viola brittoniana	Britton's Violet	T	2007

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELCHERTOWN	Amphibian	Ambystoma opacum	Marbled Salamander	T		2006
BELCHERTOWN	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1941
BELCHERTOWN	Bird	Botaurus lentiginosus	American Bittern	E		2008
BELCHERTOWN	Bird	Gallinula chloropus	Common Moorhen	SC		1932
BELCHERTOWN	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2008
BELCHERTOWN	Bird	Ixobrychus exilis	Least Bittern	E		2007
BELCHERTOWN	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1932
BELCHERTOWN	Bird	Tyto alba	Barn Owl	SC		1951
BELCHERTOWN	Crustacean	Eubranchipus intricatus	Intricate Fairy Shrimp	SC		1970s
BELCHERTOWN	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2008
BELCHERTOWN	Fish	Notropis bifrenatus	Bridle Shiner	SC		1998
BELCHERTOWN	Mammal	Synaptomys cooperi	Southern Bog Lemming	SC		1974
BELCHERTOWN	Reptile	Glyptemys insculpta	Wood Turtle	SC		2007
BELCHERTOWN	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2006
BELCHERTOWN	Vascular Plant	Acer nigrum	Black Maple	SC		1891
BELCHERTOWN	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1875
BELCHERTOWN	Vascular Plant	Blephilia ciliata	Downy Wood-mint	E		1891
BELCHERTOWN	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		2000

BELCHERTOWN	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1883
BELCHERTOWN	Vascular Plant	Podostemum ceratophyllum	Threadfoot	SC		1925
BELCHERTOWN	Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	SC		1871
BELCHERTOWN	Vascular Plant	Scheuchzeria palustris	Pod-grass	E		1872
BELCHERTOWN	Vascular Plant	Utricularia resupinata	Resupinate Bladderwort	T		1873

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELLINGHAM	Amphibian	Ambystoma opacum	Marbled Salamander	T		2007
BELLINGHAM	Fish	Lampetra appendix	American Brook Lamprey	T		2001
BELLINGHAM	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1894
BELLINGHAM	Vascular Plant	Goodyera repens	Dwarf Rattlesnake-plantain	E		1886
BELLINGHAM	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1986

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELMONT	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1800s
BELMONT	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		Historic
BELMONT	Bird	Tyto alba	Barn Owl	SC		1952
BELMONT	Bird	Gallinula chloropus	Common Moorhen	SC		Historic
BELMONT	Bird	Cistothorus platensis	Sedge Wren	E		1868
BELMONT	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2005
BELMONT	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1852
BELMONT	Vascular Plant	Carex gracilescens	Slender Woodland Sedge	E		1932

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERKLEY	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1913
BERKLEY	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1912
BERKLEY	Reptile	Glyptemys insculpta	Wood Turtle	SC		1991
BERKLEY	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		1982
BERKLEY	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2007
BERKLEY	Vascular Plant	Bidens eatonii	Eaton's Beggar-ticks	E		1923

BERKLEY	Vascular Plant	Cardamine longii	Long's Bitter-cress	E	1997
BERKLEY	Vascular Plant	Carex polymorpha	Variable Sedge	E	1908

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERLIN	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1800s
BERLIN	Amphibian	Ambystoma opacum	Marbled Salamander	T		2000
BERLIN	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1936
BERLIN	Bird	Ammodramus henslowii	Henslow's Sparrow	E		Historic
BERLIN	Mussel	Alasmidonta varicosa	Brook Floater (Swollen Wedgemussel)	E		1859
BERLIN	Reptile	Glyptemys insculpta	Wood Turtle	SC		1993
BERLIN	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1991
BERLIN	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1915
BERLIN	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1944

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERNARDSTON	Butterfly/Moth	Erora laeta	Early Hairstreak	T		1988
BERNARDSTON	Vascular Plant	Actaea racemosa	Black Cohosh	E		1998

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BEVERLY	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1925
BEVERLY	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		1987
BEVERLY	Vascular Plant	Magnolia virginiana	Sweetbay Magnolia	E		1995
BEVERLY	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1874
BEVERLY	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E		1878
BEVERLY	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1902

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BILLERICA	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2008
BILLERICA	Fish	Notropis bifrenatus	Bridle Shiner	SC		1961
BILLERICA	Reptile	Emydoidea blandingii	Blanding's Turtle	T		1992
BILLERICA	Vascular Plant	Liatris scariosa var. novae -angliae	New England Blazing Star	SC		1917
BILLERICA	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E		1889
BILLERICA	Vascular Plant	Nabalus serpentarius	Lion's Foot	E		1871

BILLERICA	Vascular Plant	Nuphar microphylla	Tiny Cow-lily	E	1869
BILLERICA	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1900
BILLERICA	Vascular Plant	Viola brittoniana	Britton's Violet	T	1915

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BLACKSTONE	Fish	Lampetra appendix	American Brook Lamprey	T		2001
BLACKSTONE	Mussel	Alasmidonta undulata	Triangle Floater	SC		1999
BLACKSTONE	Mussel	Strophitus undulatus	Creeper	SC		1999

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BLANDFORD	Bird	Bartramia longicauda	Upland Sandpiper	E		Historic
BLANDFORD	Bird	Botaurus lentiginosus	American Bittern	E		2005
BLANDFORD	Bird	Circus cyaneus	Northern Harrier	T		1923
BLANDFORD	Bird	Cistothorus platensis	Sedge Wren	E		1982
BLANDFORD	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2008
BLANDFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		1995
BLANDFORD	Vascular Plant	Rhododendron maximum	Great Laurel	T		1946
BLANDFORD	Vascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E		1919

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOLTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2006
BOLTON	Amphibian	Ambystoma opacum	Marbled Salamander	T		2008
BOLTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2007
BOLTON	Bird	Botaurus lentiginosus	American Bittern	E		1990
BOLTON	Bird	Ixobrychus exilis	Least Bittern	E		1985
BOLTON	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1984
BOLTON	Bird	Rallus elegans	King Rail	T		1999
BOLTON	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2009
BOLTON	Reptile	Glyptemys insculpta	Wood Turtle	SC		1999
BOLTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1989
BOLTON	Vascular Plant	Carex typhina	Cat-tail Sedge	T		1999
BOLTON	Vascular Plant	Corallorhiza odontorhiza	Autumn Coralroot	SC		2006

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOSTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2003
BOSTON	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1932
BOSTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1910
BOSTON	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1928
BOSTON	Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		1927
BOSTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1898
BOSTON	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BOSTON	Bird	Bartramia longicauda	Upland Sandpiper	E		1993
BOSTON	Bird	Falco peregrinus	Peregrine Falcon	E		2007
BOSTON	Bird	Gavia immer	Common Loon	SC		1824
BOSTON	Bird	Pooecetes gramineus	Vesper Sparrow	T		1985
BOSTON	Bird	Sterna hirundo	Common Tern	SC		2008
BOSTON	Bird	Sternula antillarum	Least Tern	SC		2007
BOSTON	Bird	Tyto alba	Barn Owl	SC		1989
BOSTON	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		Historic
BOSTON	Butterfly/Moth	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E		Historic
BOSTON	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		2001
BOSTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1934
BOSTON	Butterfly/Moth	Rhodoecia aurantiago	Orange Sallow Moth	T		1988
BOSTON	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2009
BOSTON	Fish	Gasterosteus aculeatus	Threespine Stickleback	T		2000
BOSTON	Mussel	Alasmidonta undulata	Triangle Floater	SC		2005
BOSTON	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1841
BOSTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1939
BOSTON	Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1896
BOSTON	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1800s
BOSTON	Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		1877
BOSTON	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1878
BOSTON	Vascular Plant	Boechera missouriensis	Green Rock-cress	T		1930
BOSTON	Vascular Plant	Carex striata	Walter's Sedge	E		Historic
BOSTON	Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil	T		1896
BOSTON	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1885

BOSTON	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1918
BOSTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1933
BOSTON	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1909
BOSTON	Vascular Plant	Lycopus rubellus	Gypsywort	E		1896
BOSTON	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		Historic
BOSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1884
BOSTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1908
BOSTON	Vascular Plant	Ranunculus micranthus	Tiny-flowered Buttercup	E		1891
BOSTON	Vascular Plant	Rumex pallidus	Seabeach Dock	T		1984
BOSTON	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		Historic
BOSTON	Vascular Plant	Scirpus longii	Long's Bulrush	T		1907
BOSTON	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		2001
BOSTON	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1909
BOSTON	Vascular Plant	Viola brittoniana	Britton's Violet	T		1909

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOURNE	Amphibian	Ambystoma opacum	Marbled Salamander	T		1936
BOURNE	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		2003
BOURNE	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1935
BOURNE	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		2001
BOURNE	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		2007
BOURNE	Bird	Charadrius melodus	Piping Plover	T	T	2006
BOURNE	Bird	Circus cyaneus	Northern Harrier	T		2007
BOURNE	Bird	Pooecetes gramineus	Vesper Sparrow	T		2006
BOURNE	Bird	Sterna dougallii	Roseate Tern	E	E	2008
BOURNE	Bird	Sterna hirundo	Common Tern	SC		2008
BOURNE	Bird	Sternula antillarum	Least Tern	SC		2007
BOURNE	Bird	Tyto alba	Barn Owl	SC		1974
BOURNE	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		1996
BOURNE	Butterfly/Moth	Acronicta albarufa	Barrens Daggermoth	T		1998
BOURNE	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC		1998
BOURNE	Butterfly/Moth	Catocala herodias gerhardi	Gerhard's Underwing Moth	SC		1999
BOURNE	Butterfly/Moth	Cicinnus melsheimeri	Melsheimer's Sack Bearer	T		1998
BOURNE	Butterfly/Moth	Cingilia catenaria	Chain Dot Geometer	SC		2006
BOURNE	Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC		2006
BOURNE	Butterfly/Moth	Itame sp. 1 nr. inextricata	Pine Barrens Itame	SC		1998

BOURNE	Butterfly/Moth	Metarranthis pilosaria	Coastal Swamp Metarranthis Moth	SC		1998
BOURNE	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BOURNE	Butterfly/Moth	Zale sp. 1 nr. lunifera	Pine Barrens Zale	SC		1997
BOURNE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC		2007
BOURNE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2004
BOURNE	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T		1998
BOURNE	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		2007
BOURNE	Fish	Notropis bifrenatus	Bridle Shiner	SC		1993
BOURNE	Mussel	Leptodea ochracea	Tidewater Mucket	SC		1996
BOURNE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1997
BOURNE	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		2004
BOURNE	Reptile	Pseudemys rubriventris pop. 1	Northern Red-bellied Cooter	E	E	2003
BOURNE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2009
BOURNE	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1901
BOURNE	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1915
BOURNE	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC		2000
BOURNE	Vascular Plant	Eleocharis ovata	Ovate Spike-sedge	E		1992
BOURNE	Vascular Plant	Hypericum adpressum	Creeping St. John's-wort	T		2007
BOURNE	Vascular Plant	Juncus debilis	Weak Rush	E		1993
BOURNE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		2005
BOURNE	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		1992
BOURNE	Vascular Plant	Malaxis bayardii	Bayard's Green Adder's-mouth	E		1919
BOURNE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		2006
BOURNE	Vascular Plant	Polygonum glaucum	Sea-beach Knotweed	SC		1913
BOURNE	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC		1994
BOURNE	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC		1986
BOURNE	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC		1996
BOURNE	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC		1994
BOURNE	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		1913
BOURNE	Vascular Plant	Spiranthes vernalis	Grass-leaved Ladies'-tresses	T		1896
BOURNE	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1995
BOURNE	Vascular Plant	Triosteum perfoliatum	Broad Tinker's-weed	E		2004

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation

BOXBOROUGH	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC	2007
BOXBOROUGH	Reptile	Emydoidea blandingii	Blanding's Turtle	T	2003
BOXBOROUGH	Reptile	Glyptemys insculpta	Wood Turtle	SC	2002
BOXBOROUGH	Reptile	Terrapene carolina	Eastern Box Turtle	SC	2001

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOXFORD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2008
BOXFORD	Amphibian	Ambystoma opacum	Marbled Salamander	T		1983
BOXFORD	Bird	Tyto alba	Barn Owl	SC		1957
BOXFORD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1999
BOXFORD	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		Historic
BOXFORD	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2008
BOXFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		2000
BOXFORD	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1883
BOXFORD	Vascular Plant	Carex livida	Glaucous Sedge	E		1890
BOXFORD	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1909
BOXFORD	Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1881
BOXFORD	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1882
BOXFORD	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		2004
BOXFORD	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		2004
BOXFORD	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1905
BOXFORD	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1953
BOXFORD	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1881
BOXFORD	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E		2004
BOXFORD	Vascular Plant	Senna hebecarpa	Wild Senna	E		1882
BOXFORD	Vascular Plant	Sparganium natans	Small Bur-reed	E		1997
BOXFORD	Vascular Plant	Viola adunca	Sand Violet	SC		2004

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOYLSTON	Amphibian	Ambystoma opacum	Marbled Salamander	T		1995
BOYLSTON	Bird	Gavia immer	Common Loon	SC		2008
BOYLSTON	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2009
BOYLSTON	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1978
BOYLSTON	Butterfly/Moth	Rhodoecia aurantiago	Orange Sallow Moth	T		2008
BOYLSTON	Fish	Notropis bifrenatus	Bridle Shiner	SC		1951
BOYLSTON	Reptile	Glyptemys insculpta	Wood Turtle	SC		1983

BOYLSTON	Vascular Plant	Hydrophyllum canadense	Broad Waterleaf	E	1943
BOYLSTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1932
BOYLSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	2000

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRAINTREE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC		1970
BRAINTREE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1969
BRAINTREE	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		1989
BRAINTREE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		2000
BRAINTREE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1997
BRAINTREE	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1922
BRAINTREE	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1886

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BREWSTER	Bird	Charadrius melodus	Piping Plover	T	T	2006
BREWSTER	Bird	Parula americana	Northern Parula	T		2006
BREWSTER	Bird	Sterna dougallii	Roseate Tern	E	E	2008
BREWSTER	Bird	Sterna hirundo	Common Tern	SC		2008
BREWSTER	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		1981
BREWSTER	Butterfly/Moth	Apamea inebriata	Drunk Apamea Moth	SC		1981
BREWSTER	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC		1982
BREWSTER	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BREWSTER	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2000
BREWSTER	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T		2003
BREWSTER	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T		2005
BREWSTER	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		1987
BREWSTER	Fish	Notropis bifrenatus	Bridle Shiner	SC		1961
BREWSTER	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		2002
BREWSTER	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2008
BREWSTER	Vascular Plant	Carex mitchelliana	Mitchell's Sedge	T		2006
BREWSTER	Vascular Plant	Corema conradii	Broom Crowberry	SC		1994
BREWSTER	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC		2006
BREWSTER	Vascular Plant	Dichanthelium dichotomum ssp. mattamuskeetense	Mattamuskeet Panic-grass	E		1918

BREWSTER	Vascular Plant	Dichanthelium ovale ssp. pseudopubescens	Commons's Panic-grass	SC	2006
BREWSTER	Vascular Plant	Gamochaeta purpurea	Purple Cudweed	E	1924
BREWSTER	Vascular Plant	Isoetes acadiensis	Acadian Quillwort	E	1989
BREWSTER	Vascular Plant	Lachnanthes caroliana	Redroot	SC	2002
BREWSTER	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1931
BREWSTER	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	2006
BREWSTER	Vascular Plant	Mertensia maritima	Oysterleaf	E	2001
BREWSTER	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1992
BREWSTER	Vascular Plant	Opuntia humifusa	Prickly Pear	E	1989
BREWSTER	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC	2003
BREWSTER	Vascular Plant	Rhexia mariana	Maryland Meadow Beauty	E	2008
BREWSTER	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC	1986
BREWSTER	Vascular Plant	Rumex pallidus	Seabeach Dock	T	1994
BREWSTER	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC	2004
BREWSTER	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC	2008
BREWSTER	Vascular Plant	Spartina cynosuroides	Salt Reedgrass	T	2004
BREWSTER	Vascular Plant	Utricularia resupinata	Resupinate Bladderwort	T	2002

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRIDGEWATER	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1997
BRIDGEWATER	Bird	Asio otus	Long-eared Owl	SC		1978
BRIDGEWATER	Bird	Bartramia longicauda	Upland Sandpiper	E		1980
BRIDGEWATER	Bird	Tyto alba	Barn Owl	SC		1981
BRIDGEWATER	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BRIDGEWATER	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1994
BRIDGEWATER	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T		2004
BRIDGEWATER	Mussel	Alasmidonta undulata	Triangle Floater	SC		1999
BRIDGEWATER	Mussel	Leptodea ochracea	Tidewater Mucket	SC		1997
BRIDGEWATER	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1997

BRIDGEWATER	Reptile	Glyptemys insculpta	Wood Turtle	SC		2004
BRIDGEWATER	Reptile	Pseudemys rubriventris pop. 1	Northern Red-bellied Cooter	E	E	2005
BRIDGEWATER	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2009
BRIDGEWATER	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E		2005
BRIDGEWATER	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1912
BRIDGEWATER	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC		2005
BRIDGEWATER	Vascular Plant	Scirpus longii	Long's Bulrush	T		1988

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRIMFIELD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2000
BRIMFIELD	Bird	Botaurus lentiginosus	American Bittern	E		1997
BRIMFIELD	Bird	Ixobrychus exilis	Least Bittern	E		2007
BRIMFIELD	Dragonfly/Damselfly	Ophiogomphus aspersus	Brook Snaketail	SC		2004
BRIMFIELD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1999
BRIMFIELD	Mussel	Alasmidonta undulata	Triangle Floater	SC		1982
BRIMFIELD	Mussel	Strophitus undulatus	Creeper	SC		1982
BRIMFIELD	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
BRIMFIELD	Vascular Plant	Isoetes lacustris	Lake Quillwort	E		1930

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROCKTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1909
BROCKTON	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2003
BROCKTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1900
BROCKTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1902

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROOKFIELD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1990

BROOKFIELD	Amphibian	Ambystoma opacum	Marbled Salamander	T	1996
BROOKFIELD	Bird	Bartramia longicauda	Upland Sandpiper	E	Historic
BROOKFIELD	Bird	Botaurus lentiginosus	American Bittern	E	2008
BROOKFIELD	Bird	Cistothorus platensis	Sedge Wren	E	1992
BROOKFIELD	Bird	Haliaeetus leucocephalus	Bald Eagle	E	2008
BROOKFIELD	Bird	Ixobrychus exilis	Least Bittern	E	2007
BROOKFIELD	Bird	Podilymbus podiceps	Pied-billed Grebe	E	1993
BROOKFIELD	Bird	Rallus elegans	King Rail	T	2007
BROOKFIELD	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC	2003
BROOKFIELD	Fish	Notropis bifrenatus	Bridle Shiner	SC	2003
BROOKFIELD	Mussel	Alasmidonta undulata	Triangle Floater	SC	1999
BROOKFIELD	Vascular Plant	Carex polymorpha	Variable Sedge	E	2004
BROOKFIELD	Vascular Plant	Clematis occidentalis	Purple Clematis	SC	2007
BROOKFIELD	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	2007
BROOKFIELD	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E	1898
BROOKFIELD	Vascular Plant	Poa saltuensis ssp. languida	Drooping Speargrass	E	2000
BROOKFIELD	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E	1998
BROOKFIELD	Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	SC	2007
BROOKFIELD	Vascular Plant	Scirpus longii	Long's Bulrush	T	2000

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROOKLINE	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		Historic
BROOKLINE	Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		Historic
BROOKLINE	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1905
BROOKLINE	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		1932
BROOKLINE	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1897
BROOKLINE	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1903
BROOKLINE	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T		1902
BROOKLINE	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1912

BROOKLINE	Vascular Plant	Viola brittoniana	Britton's Violet	T	1913

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BUCKLAND	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1989
BUCKLAND	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2001
BUCKLAND	Butterfly/Moth	Erora laeta	Early Hairstreak	T		1988
BUCKLAND	Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		2004
BUCKLAND	Dragonfly/Damselfly	Gomphus abbreviatus	Spine-crowned Clubtail	E		2004
BUCKLAND	Dragonfly/Damselfly	Neurocordulia yamaskanensis	Stygian Shadowdragon	SC		2004
BUCKLAND	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		2004
BUCKLAND	Fish	Catostomus catostomus	Longnose Sucker	SC		1989
BUCKLAND	Reptile	Glyptemys insculpta	Wood Turtle	SC		2007
BUCKLAND	Vascular Plant	Alnus viridis ssp. crispa	Mountain Alder	T		2004
BUCKLAND	Vascular Plant	Amelanchier sanguinea	Roundleaf Shadbush	SC		1911
BUCKLAND	Vascular Plant	Aplectrum hyemale	Putty-root	E		1904
BUCKLAND	Vascular Plant	Corallorhiza odontorhiza	Autumn Coralroot	SC		2006
BUCKLAND	Vascular Plant	Huperzia selago	Mountain Firmoss	E		1899
BUCKLAND	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1913
BUCKLAND	Vascular Plant	Platanthera dilatata	Leafy White Orchis	T		1932
BUCKLAND	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		1907
BUCKLAND	Vascular Plant	Symphyotrichum tradescantii	Tradescant's Aster	T		2002

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BURLINGTON	Fish	Notropis bifrenatus	Bridle Shiner	SC		1994
BURLINGTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1998
BURLINGTON	Vascular Plant	Carex polymorpha	Variable Sedge	E		2008
BURLINGTON	Vascular Plant	Nabalus serpentarius	Lion's Foot	E		1906

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Updated: October 27, 2009

Massachusetts Division of Fisheries and Wildlife, 1 Rabbit Hill Rd, Westborough, MA 01581
Tel: (508) 389-6300; Fax: (508) 389-7890
Natural Heritage & Endangered Species Program Tel: (508) 389-6360; Fax: (508) 389-7891

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Division of Capitol Asset Management (DCAM) Address: One Ashburton Place, Boston, MA 02108

Phone number: 617-727-4050 Fax number: _____

Contact person name: Catherine Walsh Title: Project Manager

Cell number: 617-727-4050 Email address: Catherine.Walsh@state.ma.us

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify):_____

Owner's Information (if different from above):

Owner of property being dewatered: _____

Owner's mailing address: _____ Phone number: _____

Location of Discharge & Proposed Treatment System(s):

Street number and name: 621 Huntington Avenue Neighborhood Fenway - Longwood

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer ☒ Storm Drain ☐ Other (specify):_____

Describe Proposed Pre-Treatment System(s): Sedimentation Tank

BWSC Outfall No. SDO 047 Receiving Waters Muddy River by way of Outfall

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Temporary Discharges (Provide Anticipated Dates of Discharge): From 7/1/2012 To 12/31/2012

☐ Groundwater Remediation	☐ Tank Removal/Installation	☒ Foundation Excavation
☐ Utility/Manhole Pumping	☐ Test Pipe	☒ Trench Excavation
☐ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

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1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

BWSC Use Only: Date Received _____ Comments: _____

Enter your transmittal number → X250865 (Transmittal Number)

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

1. Permit Code: 7 or 8 character code from permit instructions	2. Name of Permit Category
BRPWM 12	EPA General Permit: Groundwater Remediation

3. Type of Project or Activity: Temporary Construction Dewatering

B. Applicant Information – Firm or Individual

1. Name of Firm - Or, if party needing this approval is an individual enter name below: Division of Capitol Asset Management (DCAM)

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI
Walsh	Catherine	

5. Street Address: One Ashburton Place

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Boston	MA	02108	617-878-4800	

11. Contact Person	12. e-mail address (optional)
Catherine Walsh	catherine.walsh@state.ma.us

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual: Massachsuetts College of Art and Design

2. Street Address: 621 Huntington Avenue

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Boston	MA	02115	617-879-7000	

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual: Haley & Aldrich, Inc.

2. Address: 465 Medford Street Suite 2200

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Boston	MA	02129	617-886-7341	

8. Contact Person	9. LSP Number (BWSC Permits only)
Cole E. Worthy	6812

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less).
   There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	Dollar Amount	Date
69569	775	3/22/2012

ANALYTICAL REPORT

Lab Number:	L1119967
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Heather Scranton
Phone:	(617) 886-7400
Project Name:	MASS ART
Project Number:	37732-120
Report Date:	12/07/11

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

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1119967-01	HA-1	Not Specified	12/01/11 11:00
L1119967-02	TRIP BLANK	Not Specified	12/01/11 00:00

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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.

For additional information, please contact Client Services at 800-624-9220.

Volatile Organics

L1119967-01 and -02: The pH of the samples was greater than two; however, the samples were analyzed within the method required holding time.

Pesticides

An LCS/LCSD was performed in lieu of a Matrix Spike and Laboratory Duplicate due to insufficient sample volume available for analysis.

EPH

The WG505912-2 LCS recovery, associated with L1119967-01, was outside the acceptance criteria for Hexatriacontane (C36) (202%); however, the target carbon ranges and analytes were within overall method allowances. The results of the original analysis are reported.

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Case Narrative (continued)

The WG505912-2/-3 LCS/LCSD RPD, associated with L1119967-01, is above the acceptance criteria for Hexatriacontane (C36) (57%).

Total Metals

The WG505847-4 MS recovery, performed on L1119967-01, is above the acceptance criteria for Iron (230%). A post digestion spike was performed with an acceptable recovery of 80%.

Dissolved Metals

The WG505851-3 Laboratory Duplicate RPD, performed on L1119967-01, is outside the acceptance criteria for Arsenic (34%) and Zinc (78%). The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the laboratory duplicate.

Solids, Total Suspended

L1119967-01 has an elevated detection limit due to the dilution required by the elevated concentration present in the sample.

Sulfate

L1119967-01 has an elevated detection limit due to the dilution required by the elevated concentration present in the sample.

Phenolics, Total

L1119967-01 has an elevated detection limit due to the dilution required by the sample matrix.

Chloride

L1119967-01 has an elevated detection limit due to the dilution required to quantitate the result within the calibration range.

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: Lisa Westerlind

Title: Technical Director/Representative Date: 12/07/11

ORGANICS

VOLATILES

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-01
Client ID: HA-1
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 12/05/11 12:11
Analyst: PD

Date Collected: 12/01/11 11:00
Date Received: 12/01/11
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: MASS ART **Lab Number:** L1119967

Project Number: 37732-120 **Report Date:** 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-01 Date Collected: 12/01/11 11:00

Client ID: HA-1 Date Received: 12/01/11

Sample Location: Not Specified Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: MASS ART
Lab Number: L1119967
Project Number: 37732-120
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-01
Client ID: HA-1
Sample Location: Not Specified
Date Collected: 12/01/11 11:00
Date Received: 12/01/11
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	100		70-130

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID:	L1119967-01	Date Collected:	12/01/11 11:00
Client ID:	HA-1	Date Received:	12/01/11
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	12/05/11 08:40
Analytical Date:	12/05/11 11:50		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-02
Client ID: TRIP BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 12/06/11 12:59
Analyst: PD

Date Collected: 12/01/11 00:00
Date Received: 12/01/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: MASS ART **Lab Number:** L1119967

Project Number: 37732-120 **Report Date:** 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-02 Date Collected: 12/01/11 00:00

Client ID: TRIP BLANK Date Received: 12/01/11

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-02
Client ID: TRIP BLANK
Sample Location: Not Specified
Date Collected: 12/01/11 00:00
Date Received: 12/01/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID:	L1119967-02	Date Collected:	12/01/11 00:00
Client ID:	TRIP BLANK	Date Received:	12/01/11
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	12/06/11 07:30
Analytical Date:	12/06/11 09:02		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 12/05/11 10:48
Analyst: SH
Extraction Date: 12/05/11 08:40

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG505998-1					
1,2-Dibromoethane	ND		ug/l	0.010	--
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/05/11 11:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG506097-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/05/11 11:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG506097-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/05/11 11:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG506097-3					
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	100		70-130

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 12/06/11 08:15
Analyst: SH

Extraction Date: 12/06/11 07:30

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG506253-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/06/11 09:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG506385-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/06/11 09:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG506385-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 12/06/11 09:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG506385-3					
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG505998-2								
1,2-Dibromoethane	117		-		70-130	-		20
1,2-Dibromo-3-chloropropane	109		-		70-130	-		20
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG506097-1 WG506097-2								
Chlorobenzene	94		94		75-130	0		25
Benzene	84		83		76-127	1		25
Toluene	94		94		76-125	0		25
1,1-Dichloroethene	81		80		61-145	1		25
Trichloroethene	83		82		71-120	1		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG506097-1 WG506097-2

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		101		70-130
Toluene-d8	115		115		70-130
4-Bromofluorobenzene	105		106		70-130
Dibromofluoromethane	101		100		70-130

Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG506253-2 WG506253-3

1,2-Dibromoethane	108		109		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG506385-1 WG506385-2								
Chlorobenzene	104		102		75-130	2		25
Benzene	108		107		76-127	1		25
Toluene	106		104		76-125	2		25
1,1-Dichloroethene	107		102		61-145	5		25
Trichloroethene	111		109		71-120	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		100		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	102		100		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505998-3 QC Sample: L1119775-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.256	0.305	119		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.256	0.280	109		-	-		70-130	-		20

PETROLEUM HYDROCARBONS

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID:	L1119967-01	Date Collected:	12/01/11 11:00
Client ID:	HA-1	Date Received:	12/01/11
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	12/02/11 23:40
Analytical Date:	12/05/11 20:51	Cleanup Method1:	EPH-04-1
Analyst:	MW	Cleanup Date1:	12/05/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	81		40-140
o-Terphenyl	82		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	88		40-140

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 12/05/11 18:38
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 12/02/11 23:40
Cleanup Method1: EPH-04-1
Cleanup Date1: 12/05/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG505912-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	82		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	74		40-140
2-Bromonaphthalene	78		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG505912-2 WG505912-3								
C9-C18 Aliphatics	63		61		40-140	3		25
C19-C36 Aliphatics	98		86		40-140	13		25
C11-C22 Aromatics	80		83		40-140	4		25
Naphthalene	74		76		40-140	3		25
2-Methylnaphthalene	83		84		40-140	1		25
Acenaphthylene	81		80		40-140	1		25
Acenaphthene	82		83		40-140	1		25
Fluorene	80		84		40-140	5		25
Phenanthrene	82		84		40-140	2		25
Anthracene	78		79		40-140	1		25
Fluoranthene	80		83		40-140	4		25
Pyrene	82		84		40-140	2		25
Benzo(a)anthracene	75		80		40-140	6		25
Chrysene	78		83		40-140	6		25
Benzo(b)fluoranthene	76		81		40-140	6		25
Benzo(k)fluoranthene	78		83		40-140	6		25
Benzo(a)pyrene	76		78		40-140	3		25
Indeno(1,2,3-cd)Pyrene	76		80		40-140	5		25
Dibenzo(a,h)anthracene	72		77		40-140	7		25
Benzo(ghi)perylene	76		78		40-140	3		25
Nonane (C9)	40		40		30-140	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG505912-2 WG505912-3								
Decane (C10)	49		49		40-140	0		25
Dodecane (C12)	65		63		40-140	3		25
Tetradecane (C14)	74		72		40-140	3		25
Hexadecane (C16)	78		76		40-140	3		25
Octadecane (C18)	80		79		40-140	1		25
Nonadecane (C19)	80		80		40-140	0		25
Eicosane (C20)	81		80		40-140	1		25
Docosane (C22)	81		80		40-140	1		25
Tetracosane (C24)	81		81		40-140	0		25
Hexacosane (C26)	82		82		40-140	0		25
Octacosane (C28)	86		83		40-140	4		25
Triacontane (C30)	112		93		40-140	19		25
Hexatriacontane (C36)	**202**	Q	113		40-140	**57**	Q	25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	75		68		40-140
o-Terphenyl	77		84		40-140
2-Fluorobiphenyl	80		84		40-140
2-Bromonaphthalene	81		80		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID:	L1119967-01	Date Collected:	12/01/11 11:00
Client ID:	HA-1	Date Received:	12/01/11
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	12/02/11 22:34
Analytical Date:	12/05/11 16:43	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/03/11
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/03/11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	90		30-150
Decachlorobiphenyl	42		30-150

Project Name: MASS ART

Project Number: 37732-120

Lab Number: L1119967

Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 12/05/11 15:47
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 12/02/11 22:34
Cleanup Method1: EPA 3665A
Cleanup Date1: 12/03/11
Cleanup Method2: EPA 3660B
Cleanup Date2: 12/03/11

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG505906-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	90		30-150
Decachlorobiphenyl	93		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505906-3 QC Sample: L1119962-02 Client ID: MS Sample												
Aroclor 1016	ND	2.17	1.87	86		-	-		40-140	-		50
Aroclor 1260	ND	2.17	1.68	77		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	86				30-150
Decachlorobiphenyl	78				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG505906-2								
Aroclor 1016	89		-		40-140	-		50
Aroclor 1260	81		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	91				30-150
Decachlorobiphenyl	86				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505906-4 QC Sample: L1119962-02 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	82		91		30-150
Decachlorobiphenyl	73		83		30-150

METALS

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-01
Client ID: HA-1
Sample Location: Not Specified
Matrix: Water
Date Collected: 12/01/11 11:00
Date Received: 12/01/11
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Arsenic, Total	0.0029		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Chromium, Total	0.0065		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Copper, Total	0.0123		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Iron, Total	4.0		mg/l	0.05	--	1	12/02/11 15:30	12/06/11 15:13	EPA 3005A	19,200.7	AI
Lead, Total	0.0185		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	--	1	12/06/11 11:30	12/06/11 16:25	EPA 245.1	3,245.1	JP
Nickel, Total	0.0071		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Selenium, Total	0.002		mg/l	0.001	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Zinc, Total	0.0305		mg/l	0.0050	--	1	12/02/11 15:30	12/05/11 22:24	EPA 3005A	1,6020	BM
Total Hardness by SM 2340B - Westborough Lab											
Hardness	530		mg/l	0.66	--	1	12/02/11 15:30	12/06/11 15:13	EPA 3005A	19,200.7	AI
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Arsenic, Dissolved	0.0023		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Chromium, Dissolved	0.0005		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Copper, Dissolved	0.0017		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Iron, Dissolved	0.16		mg/l	0.05	--	1	12/02/11 15:30	12/07/11 10:16	EPA 3005A	19,200.7	AI
Lead, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Mercury, Dissolved	ND		mg/l	0.0002	--	1	12/06/11 11:30	12/06/11 18:55	EPA 245.1	3,245.1	JP
Nickel, Dissolved	0.0038		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Selenium, Dissolved	0.002		mg/l	0.001	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Silver, Dissolved	ND		mg/l	0.0004	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM
Zinc, Dissolved	0.0151		mg/l	0.0050	--	1	12/02/11 15:30	12/05/11 21:34	EPA 3005A	1,6020	BM

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG505847-1										
Iron, Total	ND		mg/l	0.05	--	1	12/02/11 15:30	12/06/11 15:07	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab for sample(s): 01 Batch: WG505847-1										
Hardness	ND		mg/l	0.66	--	1	12/02/11 15:30	12/06/11 15:07	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG505849-1										
Antimony, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Arsenic, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Chromium, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Copper, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Lead, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Nickel, Total	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Selenium, Total	ND		mg/l	0.001	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Zinc, Total	ND		mg/l	0.0050	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG505850-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	12/02/11 15:30	12/07/11 10:10	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG505851-1										
Antimony, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Arsenic, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Chromium, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Copper, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Lead, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Nickel, Dissolved	ND		mg/l	0.0005	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Selenium, Dissolved	ND		mg/l	0.001	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Silver, Dissolved	ND		mg/l	0.0004	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM
Zinc, Dissolved	ND		mg/l	0.0050	--	1	12/02/11 15:30	12/05/11 21:09	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG506423-1										
Mercury, Total	ND		mg/l	0.0002	--	1	12/06/11 11:30	12/06/11 16:10	3,245.1	JP

Prep Information

Digestion Method: EPA 245.1

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG506455-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	12/06/11 11:30	12/06/11 18:12	3,245.1	JP

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG505847-2								
Iron, Total	92		-		85-115	-		
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 Batch: WG505847-2								
Hardness	95		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG505849-2								
Antimony, Total	97		-		80-120	-		
Arsenic, Total	108		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Chromium, Total	101		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	106		-		80-120	-		
Nickel, Total	104		-		80-120	-		
Selenium, Total	110		-		80-120	-		
Silver, Total	101		-		80-120	-		
Zinc, Total	107		-		80-120	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG505850-2								
Iron, Dissolved	96		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG505851-2					
Antimony, Dissolved	97	-	80-120	-	
Arsenic, Dissolved	108	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Copper, Dissolved	103	-	80-120	-	
Lead, Dissolved	106	-	80-120	-	
Nickel, Dissolved	104	-	80-120	-	
Selenium, Dissolved	110	-	80-120	-	
Silver, Dissolved	101	-	80-120	-	
Zinc, Dissolved	107	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG506423-2					
Mercury, Total	106	-	85-115	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG506455-2					
Mercury, Dissolved	108	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505847-4 QC Sample: L1119967-01 Client ID: HA-1												
Iron, Total	4.0	1	6.3	**230**		-	-		75-125	-		20
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505847-4 QC Sample: L1119967-01 Client ID: HA-1												
Hardness	530	66.2	600	106		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505849-4 QC Sample: L1119967-01 Client ID: HA-1												
Antimony, Total	ND	0.5	0.5119	102		-	-		80-120	-		20
Arsenic, Total	0.0029	0.12	0.1353	110		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0551	108		-	-		80-120	-		20
Chromium, Total	0.0065	0.2	0.2124	103		-	-		80-120	-		20
Copper, Total	0.0123	0.25	0.2712	104		-	-		80-120	-		20
Lead, Total	0.0185	0.51	0.5639	107		-	-		80-120	-		20
Nickel, Total	0.0071	0.5	0.5217	103		-	-		80-120	-		20
Selenium, Total	0.002	0.12	0.128	105		-	-		80-120	-		20
Silver, Total	ND	0.05	0.050	100		-	-		80-120	-		20
Zinc, Total	0.0305	0.5	0.5511	104		-	-		80-120	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505850-4 QC Sample: L1119967-01 Client ID: HA-1												
Iron, Dissolved	0.16	1	1.1	94		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505851-4 QC Sample: L1119967-01 Client ID: HA-1										
Antimony, Dissolved	ND	0.5	0.5186	104		-	-	80-120	-	20
Arsenic, Dissolved	0.0023	0.12	0.1285	105		-	-	80-120	-	20
Cadmium, Dissolved	ND	0.051	0.0531	104		-	-	80-120	-	20
Chromium, Dissolved	0.0005	0.2	0.1991	99		-	-	80-120	-	20
Copper, Dissolved	0.0017	0.25	0.2487	99		-	-	80-120	-	20
Lead, Dissolved	ND	0.51	0.5390	106		-	-	80-120	-	20
Nickel, Dissolved	0.0038	0.5	0.5014	100		-	-	80-120	-	20
Selenium, Dissolved	0.002	0.12	0.126	103		-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.0493	99		-	-	80-120	-	20
Zinc, Dissolved	0.0151	0.5	0.5231	102		-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506423-4 QC Sample: L1119762-01 Client ID: MS Sample										
Mercury, Total	ND	0.001	0.0014	**139**	Q	-	-	70-130	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506455-4 QC Sample: L1120161-01 Client ID: MS Sample										
Mercury, Dissolved	ND	0.001	0.0014	**142**	Q	-	-	70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505847-3 QC Sample: L1119967-01 Client ID: HA-1						
Iron, Total	4.0	4.2	mg/l	5		20
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505847-3 QC Sample: L1119967-01 Client ID: HA-1						
Hardness	530	540	mg/l	2		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505849-3 QC Sample: L1119967-01 Client ID: HA-1						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0029	0.0034	mg/l	15		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0065	0.0067	mg/l	4		20
Copper, Total	0.0123	0.0129	mg/l	5		20
Lead, Total	0.0185	0.0195	mg/l	5		20
Nickel, Total	0.0071	0.0074	mg/l	3		20
Selenium, Total	0.002	0.002	mg/l	2		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0305	0.0307	mg/l	1		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505850-3 QC Sample: L1119967-01 Client ID: HA-1						
Iron, Dissolved	0.16	0.16	mg/l	0		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505851-3 QC Sample: L1119967-01 Client ID: HA-1						
Antimony, Dissolved	ND	ND	mg/l	NC		20
Arsenic, Dissolved	0.0023	0.0032	mg/l	**34**	Q	20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	0.0005	0.0006	mg/l	9		20
Copper, Dissolved	0.0017	0.0018	mg/l	8		20
Lead, Dissolved	ND	0.0038	mg/l	NC		20
Nickel, Dissolved	0.0038	0.0039	mg/l	4		20
Selenium, Dissolved	0.002	0.002	mg/l	11		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Zinc, Dissolved	0.0151	0.0345	mg/l	**78**	Q	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506423-3 QC Sample: L1119762-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506455-3 QC Sample: L1120161-01 Client ID: DUP Sample						
Mercury, Dissolved	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

SAMPLE RESULTS

Lab ID: L1119967-01
Client ID: HA-1
Sample Location: Not Specified
Matrix: Water
Date Collected: 12/01/11 11:00
Date Received: 12/01/11
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	2000		mg/l	100	NA	20	-	12/02/11 13:00	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	12/01/11 21:45	12/06/11 14:03	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/02/11 05:00	30,4500CL-D	KK
Sulfate	72		mg/l	50	--	5	12/02/11 14:40	12/02/11 14:40	1,9038	SD
TPH	ND		mg/l	5.20	--	1.3	12/06/11 00:30	12/06/11 15:00	74,1664A	AT
Phenolics, Total	ND		mg/l	0.15	--	5	12/05/11 17:30	12/05/11 22:02	4,420.1	TP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/02/11 05:05	12/02/11 05:17	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	480		mg/l	5.0	--	10	-	12/02/11 18:56	44,300.0	AU

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1119967
Report Date: 12/07/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG505647-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/01/11 21:45	12/06/11 13:37	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG505713-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/02/11 05:05	12/02/11 05:13	30,3500CR-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG505714-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/02/11 05:00	30,4500CL-D	KK
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG505742-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	12/02/11 13:00	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG505842-1										
Sulfate	ND		mg/l	10	--	1	12/02/11 14:40	12/02/11 14:40	1,9038	SD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG506183-1										
Phenolics, Total	ND		mg/l	0.03	--	1	12/05/11 17:30	12/05/11 21:56	4,420.1	TP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG506215-1										
Chloride	ND		mg/l	0.50	--	1	-	12/02/11 18:08	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG506246-1										
TPH	ND		mg/l	4.00	--	1	12/06/11 00:30	12/06/11 15:00	74,1664A	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG505647-2								
Cyanide, Total	108		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG505713-2								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG505714-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG505842-2								
Sulfate	95		-		84-119	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG506183-2								
Phenolics, Total	99		-		82-111	-		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG506215-2								
Chloride	110		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG506246-2								
TPH	90		-		64-132	-		34

Matrix Spike Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505647-4 QC Sample: L1119762-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.205	102		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505713-4 QC Sample: L1119967-01 Client ID: HA-1												
Chromium, Hexavalent	ND	0.1	0.113	113		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505842-3 QC Sample: L1119953-01 Client ID: MS Sample												
Sulfate	17	40	59	105		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506183-3 QC Sample: L1119962-02 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.77	96		-	-		77-124	-		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506215-3 QC Sample: L1119865-01 Client ID: MS Sample												
Chloride	40	4	43	75		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506246-3 QC Sample: L1119821-02 Client ID: MS Sample												
TPH	ND	20.8	15.5	74		-	-		64-132	-		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505647-3 QC Sample: L1119762-01 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505713-3 QC Sample: L1119967-01 Client ID: HA-1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505714-3 QC Sample: L1119948-01 Client ID: DUP Sample						
Chlorine, Total Residual	0.61	0.62	mg/l	2		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505742-2 QC Sample: L1119961-01 Client ID: DUP Sample						
Solids, Total Suspended	360	340	mg/l	6		32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG505842-4 QC Sample: L1119953-01 Client ID: DUP Sample						
Sulfate	17	17	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506183-4 QC Sample: L1119962-02 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506215-4 QC Sample: L1119865-01 Client ID: DUP Sample						
Chloride	40	40	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG506246-4 QC Sample: L1119821-03 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1119967
Report Date: 12/07/11

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(*)
L1119967-01A	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	8260(7)
L1119967-01B	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	8260(7)
L1119967-01C	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	504(14)
L1119967-01D	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	504(14)
L1119967-01E	Amber 1000ml HCl preserved	A	<2	3.5	Y	Absent	EPH-10(14)
L1119967-01F	Amber 1000ml HCl preserved	A	<2	3.5	Y	Absent	EPH-10(14)
L1119967-01G	Amber 1000ml Na2S2O3	A	7	3.5	Y	Absent	PCB-608(7)
L1119967-01H	Amber 1000ml Na2S2O3	A	7	3.5	Y	Absent	PCB-608(7)
L1119967-01I	Amber 1000ml HCl preserved	A	N/A	3.5	Y	Absent	TPH-1664(28)
L1119967-01J	Amber 1000ml HCl preserved	A	N/A	3.5	Y	Absent	TPH-1664(28)
L1119967-01K	Amber 500ml H2SO4preserved	A	<2	3.5	Y	Absent	TPHENOL-420(28)
L1119967-01L	Plastic 1000ml unpreserved	A	7	3.5	Y	Absent	TSS-2540(7)
L1119967-01M	Plastic 1000ml unpreserved	A	7	3.5	Y	Absent	CL-300(28),SO4-9038(28),TRC-4500(1)
L1119967-01N	Plastic 500ml unpreserved	A	7	3.5	Y	Absent	HEXCR-3500(1)
L1119967-01O	Plastic 250ml NaOH preserved	A	>12	3.5	Y	Absent	TCN-4500(14)
L1119967-01P	Plastic 500ml HNO3 preserved	A	<2	3.5	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),HARDU(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1119967-01Q	Plastic 250ml HNO3 preserved	A	<2	3.5	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L1119967-02A	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	8260(7)
L1119967-02B	Vial Na2S2O3 preserved	A	N/A	3.5	Y	Absent	504(14)

*Values in parentheses indicate holding time in days

Project Name:	MASS ART	**Lab Number:**	L1119967
Project Number:	37732-120	**Report Date:**	12/07/11

GLOSSARY

Acronyms

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

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 five times (5x) 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.
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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value 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.

Report Format: Data Usability Report

Project Name:	MASS ART	**Lab Number:**	L1119967
Project Number:	37732-120	**Report Date:**	12/07/11

Data Qualifiers

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MASS ART	**Lab Number:**	L1119967
Project Number:	37732-120	**Report Date:**	12/07/11

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, 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.

Certificate/Approval Program Summary

Last revised November 17, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B**,** 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix.

ALPHA Job # L1119967

HALEY & ALDRICH
Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

CHAIN OF COUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO.	37732-120	LABORATORY	Alpha	DELIVERY DATE	12/01/11
PROJECT NAME	Mass Art	ADDRESS	Westborough, MA	TURNAROUND TIME	STD
H&A CONTACT	H. Scranton	CONTACT	Gina, H	PROJECT MANAGER	H. Scranton

Analysis Requested

Sample No.	Date	Time	Depth	Type	① VOA	② ABNs / PAH only	③ MCP Metals	④ Pesticides / PCBs	⑤ VPH Full Suite / C-ranges only	⑥ EPH Full Suite / C-ranges only	⑦ TPH (specify)	⑧ TCLP (specify)	⑨ Reactivity / Ignitability / Corrosivity	⑩	⑪	⑫	Number of Containers
HA-1	12/01/11	11:00	—	AQ	X	X	X	X	X	X	X	X	X	X	X	X	17
Tripblank 1																X	1
Tripblank 2															X		1

19 pcs

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.
① EPH
② TPH
③ TSS
④ Cl, TRC, sulfate
⑤ Total RGP Metals, Hardness
⑥ Dissolved RGP metals (ff)
⑦ Hex Cr
⑧ TCN
⑨ Total Phenol
⑩ PCB-608
⑪ EDB/504
⑫ 624

LIQUID

	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫
VOA Vial											2	X
Amber Glass	X	X							X	X		
Plastic Bottle			X →	→	→	→	→	X				
Preservative	AF	AF	A	A	AD	ABD	A	AC	AE	AH	AH	AH
Volume mL	1000	1000	1000	1000	500	250	500	250	500	1000	40	40

SOLID

VOA Vial	
Amber Glass	
Clear Glass	
Preservative	
Volume	

Sampled and Relinquished by	Received by
Sign Cody [signature]	Sign [signature]
Print Cody Smith	Print [illegible]
Firm H&A	Firm Alpha
Date 12-01-11 Time 1530	Date 12-1-11 Time 1530
Relinquished by	**Received by**
Sign [signature]	Sign [signature]
Print	Print Jon Angell
Firm	Firm Alpha
Date 12-1-11 Time	Date 12.1.11 Time 1700
Relinquished by	**Received by**
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

Sampling Comments

Please call Heather Scranton before Analyzeing trip blanks

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

PRESERVATION KEY

A Sample chilled · B Sample filtered · C NaOH · D HNO_3 · E H_2SO_4 · F HCL · G Methanol · H Water/NaHSO4 (circle)

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

✓ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

NA Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

NA This Chain of Custody Record (specify) ________ includes ________ does not include samples defined as Drinking Water Samples.

NA If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) ________ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory · CANARY - Project Manager · PINK - Haley & Aldrich Laboratory

AUGUST 2008

ANALYTICAL REPORT

Lab Number:	L1120531
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Heather Scranton
Phone:	(617) 886-7400
Project Name:	MASS ART
Project Number:	37732-120
Report Date:	12/14/11

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

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1120531-01	HA-1	Not Specified	12/08/11 08:10

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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.

For additional information, please contact Client Services at 800-624-9220.

Semivolatile Organics

The WG507259-2/-3 LCS/LCSD RPDs, associated with L1120531-01, are above the acceptance criteria for 4-Chlorophenyl phenyl ether (32%), 2-Chlorophenol (34%), 4-Nitrophenol (51%), and 2,4-Dinitrophenol (48%).

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: Cynthia McQueen

Title: Technical Director/Representative Date: 12/14/11

ORGANICS

SEMIVOLATILES

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1120531
Report Date: 12/14/11

SAMPLE RESULTS

Lab ID:	L1120531-01	Date Collected:	12/08/11 08:10
Client ID:	HA-1	Date Received:	12/08/11
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	12/10/11 11:46
Analytical Date:	12/13/11 13:21		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	--	1
Bis(2-Ethylhexyl)phthalate	4.5		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1120531
Report Date: 12/14/11

SAMPLE RESULTS

Lab ID: L1120531-01
Client ID: HA-1
Sample Location: Not Specified
Date Collected: 12/08/11 08:10
Date Received: 12/08/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
P-Chloro-M-Cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	66		41-149

Project Name: MASS ART
Project Number: 37732-120
Lab Number: L1120531
Report Date: 12/14/11

SAMPLE RESULTS

Lab ID:	L1120531-01	Date Collected:	12/08/11 08:10
Client ID:	HA-1	Date Received:	12/08/11
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C-SIM	Extraction Date:	12/10/11 11:45
Analytical Date:	12/14/11 09:42		
Analyst:	JC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	70		41-149

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 12/12/11 14:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 12/10/11 11:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG507259-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 12/12/11 14:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 12/10/11 11:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG507259-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
P-Chloro-M-Cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 12/12/11 14:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 12/10/11 11:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG507259-1					
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	74		41-149

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C-SIM
Analytical Date: 12/12/11 12:38
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 12/10/11 11:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG507261-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C-SIM
Analytical Date: 12/12/11 12:38
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 12/10/11 11:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG507261-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	80		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG507259-2 WG507259-3								
Acenaphthene	49		66		37-111	30		30
1,2,4-Trichlorobenzene	43		58		39-98	30		30
2-Chloronaphthalene	56		76		40-140	30		30
1,2-Dichlorobenzene	45		61		40-140	30		30
1,4-Dichlorobenzene	43		58		36-97	30		30
2,4-Dinitrotoluene	58		77		24-96	28		30
2,6-Dinitrotoluene	54		72		40-140	29		30
Fluoranthene	56		75		40-140	29		30
4-Chlorophenyl phenyl ether	50		69		40-140	**32**	Q	30
n-Nitrosodi-n-propylamine	50		66		41-116	28		30
Butyl benzyl phthalate	52		70		40-140	30		30
Anthracene	55		72		40-140	27		30
Pyrene	55		73		26-127	28		30
P-Chloro-M-Cresol	54		73		23-97	30		30
2-Chlorophenol	48		68		27-123	**34**	Q	30
2-Nitrophenol	54		72		30-130	29		30
4-Nitrophenol	19		32		10-80	**51**	Q	30
2,4-Dinitrophenol	33		54		20-130	**48**	Q	30
Pentachlorophenol	48		63		9-103	27		30
Phenol	22		28		12-110	24		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG507259-2 WG507259-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	35		46		21-120
Phenol-d6	23		29		10-120
Nitrobenzene-d5	56		73		23-120
2-Fluorobiphenyl	56		73		15-120
2,4,6-Tribromophenol	63		81		10-120
4-Terphenyl-d14	61		77		41-149

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG507261-2 WG507261-3

Acenaphthene	73		71		37-111	3		40
2-Chloronaphthalene	111		107		40-140	4		40
Fluoranthene	77		75		40-140	3		40
Anthracene	67		68		40-140	1		40
Pyrene	75		73		26-127	3		40
Pentachlorophenol	71		71		9-103	0		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG507261-2 WG507261-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		42		21-120
Phenol-d6	31		29		10-120
Nitrobenzene-d5	87		81		23-120
2-Fluorobiphenyl	76		73		15-120
2,4,6-Tribromophenol	91		89		10-120
4-Terphenyl-d14	77		72		41-149

Project Name: MASS ART
Project Number: 37732-120

Lab Number: L1120531
Report Date: 12/14/11

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(*)
L1120531-01A	Amber 1000ml unpreserved	A	7	2.1	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1120531-01B	Amber 1000ml unpreserved	A	7	2.1	Y	Absent	8270TCL(7),8270TCL-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	MASS ART	**Lab Number:**	L1120531
Project Number:	37732-120	**Report Date:**	12/14/11

GLOSSARY

Acronyms

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

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 five times (5x) 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.
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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value 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.

Report Format: Data Usability Report

Project Name:	MASS ART	**Lab Number:**	L1120531
Project Number:	37732-120	**Report Date:**	12/14/11

Data Qualifiers

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MASS ART	**Lab Number:**	L1120531
Project Number:	37732-120	**Report Date:**	12/14/11

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

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.

Certificate/Approval Program Summary

Last revised December 9, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix.

ALPHA Job # L1120531

CHAIN OF CUSTODY RECORD

HALEY & ALDRICH
Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400
Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO.	37732-120	LABORATORY	ALPHA
PROJECT NAME	MASS ART	ADDRESS	WESTBOROUGH MA
H&A CONTACT	H. SCRANTON	CONTACT	GINA HALL
DELIVERY DATE	12/8/2011		
TURNAROUND TIME	STD		
PROJECT MANAGER	H. SCRANTON		

Sample No.	Date	Time	Depth	Type	Analysis Requested: 8270 SIM PAH	Number of Containers
HA-1	12/8/2011	8:10		AQ	X	2

2 PCS

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless directed.

Sampled and Relinquished by	Received by
Sign: Chris Sullivan	Sign: Desmond Crawford
Print: Chris Sullivan	Print: Desmond Crawford
Firm: H&A	Firm: Haley & Aldrich
Date: 12/8/2011 Time: 9:30	Date: 12/9/11 Time: 09:30
Relinquished by	**Received by**
Sign: Desmond Crawford	Sign:
Print: Desmond Crawford	Print:
Firm: Haley & Aldrich	Firm:
Date: 12/8/11 Time: 15:25	Date: 12.8.11 Time: 15:30
Relinquished by	**Received by**
Sign:	Sign:
Print:	Print: Jon Angell
Firm:	Firm: Alpha
Date: 12.8.11 Time: 17:00	Date: 12/8/11 Time: 1700

LIQUID	
VOA Vial	
Amber Glass	X
Plastic Bottle	
Preservative	A
Volume	2 1L

SOLID	
VOA Vial	
Amber Glass	
Clear Glass	
Preservative	
Volume	

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

Sampling Comments

THIS DATA GOES W/ SAMPLES Collected on 12/1/2011

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory

AUGUST 2008

Form 3003

Serial_No:12141113:52