UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL

November 18, 2010

William J. Betters,
Director of LSP Services
Green Environmental, Inc.
120 Longwater Drive
Norwell, MA 02061

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Residential Property site located at 76 Lynn Avenue, Hull MA 02045; Authorization # MAG910469.

Dear Mr. Betters:

Based on the review of a Notice of Intent (NOI) submitted on behalf of the owner Ita Leonard, for the residential property referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants for which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the check list does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: http://www.epa.gov/region1/npdes/mass.html#dgp.

Please note also the following: (1) the list of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months, and (2) using the latitude and longitude reported we determined that the effluent from this facility will be discharged into the Hull Bay an area denoted by the State's Boston Harbor Drainage Area classified as SB suitable for shell-fishing, and not into the Hingham Bay as reported in the NOI. It is important to note that the effluent limits for all the metals reported believed present in the NOI are subject to the treatment

requirements associated with the Dilution Factor Range (DFR) of 1-5 required for coastal waters. Therefore, the compliance limits for the metals arsenic of 36 ug/L, trivalent chromium of 100 ug/L, copper of 3.7 ug/L, 8.5 of 1.3 ug/L , nickel of 8.2 ug/L, zinc of 85.6 ug/L and iron of 1,000 ug/L, are required for treatment. Also, please note that EPA allows discharges to saline waters. However, there is no dilution afforded for these discharges to calculate certain metals limits, unless a dilution factor has been approved by the State prior to submission of NOIs. In order to allow for a dilution calculation for discharges to saltwater bodies, applicants will need to prepare new or produce existing site-specific data, e.g., flow modeling, which will be reviewed by EPA and the State prior to obtaining site specific permit limits.

This general permit and authorization to discharge will expire on September 9, 2015. This project reportedly will terminate on January 8, 2011. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,

David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Permit Number:	**MAG910469**
Date Permit Issued:	November, 2010
Facility/Site Name:	Residential Property
Facility/Site Address:	76 Lynn Avenue, Hull, MA 02045, Plymouth County
	Email address of owner: ileonard2007@comcast.net; Phone n: 617.523.1031
Legal Name of Operator	Green Environmental, Inc.; Telephone n: 617 479-0550
Operator contact name, title, and Address:	William J. Betters, Licensed Site Professional, 120 Longwater Drive, Norwell, MA 02061;Telephone n: 617.479.5150
	Email wbetters@greenenvironmental
Estimated Date of Completion:	January 8, 2011.
Category and Sub-Category:	Category I- Petroleum Related Site Remediation, Sub-category B- Fuel Oils and Other Oils Sites
Receiving Water:	Hull Bay (Boston Harbor Drainage System)

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL
	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/l ** Saltwater = 7.5 ug/l **/ Me#330.5/ML 20ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l/ Me# 1664A/5.0mg/LmL
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
√	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
√	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
√	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
√	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
√	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/l)/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l /Me#8260C/ ML 10ug/L
	12.tert-Butyl Alcohol (TBA)	Monitor Only (ug/L)/ Me#8260C/ ML

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
	(TertiaryButanol)	10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L) /Me#8260C/ ML 10ug/L
√	14. Naphthalene [5]	20 ug/l /Me#8260C/ ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/l /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/l /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/l /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/l - NH only /Me#8260C/ ML5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/l /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/l/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/l /Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/l/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/l/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/l /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only (ug/L) /Me#8260C/ ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML50 ug/L
√	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML50 ug/L
√	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML5ug/L,Me#604 &625/ML10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
	a. Benzo(a) Anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	b. Benzo(a) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L,

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
		Me#610/ML5ug/L& Me#625/ML5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	e. Chrysene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
√	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
√	h. Acenaphthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug /L & Me#625/ML5ug/L
	i. Acenaphthylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
√	m. Fluorene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
√	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L / Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
	39. Antimony	5.6			
√	40. Arsenic **	10	36		
	41. Cadmium **	0.2	8.9		
√	42. Chromium III (trivalent) **	48.8	100		
	43. Chromium VI (hexavalent)	11.4	50.3		

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
	**				
√	44. Copper **	5.2	3.7		
√	45. Lead **	1.3	8.5		
	46. Mercury **	0.9	1.1		
√	47. Nickel **	29	8.2		
	48. Selenium **	5	71		
	49. Silver	1.2	2.2		
√	50. Zinc **	66.6	85.6		
√	51. Iron	1,000			

	Other Parameters	Limit
	52. Instantaneous Flow	Site specific in CFS
	53. Total Flow	Site specific in CFS
	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab[13]
√	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab[13]
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab[13]
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab[14]
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab[14]
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab[14]
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab[14]
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab[14]
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab[14]
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab[14]
	64. Maximum Change in Temperature in MA – Any Class SB water body - October to June	4°F; 1/Month/Grab[14]

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

[14] Temperature sampling per Method 170.1

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**: Residential Property		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -70.877603 latitude: 42.286361	Facility SIC code(s): N/A	Street: 76 Lynn Avenue		
b) Name of **facility/site owner:** Ita Leonard		Town: Hull		
Email address of facility/site owner: 'ileonard2007@comcast.net		State: MA	Zip: 02045	County: Plymouth
Telephone no. of facility/site **owner**: 617-523-1031				
Fax no. of facility/site **owner**: NA		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 76 Lynn Avenue				
Town: Hull	State: MA	Zip: 02045	County: Norfolk	
c) Legal name of **operator**: Green Environmental, Inc.		**Operator** telephone no: 617-479-0550		
		Operator fax no.: 617-479-5150	**Operator** email: wbetters@greenenvironment	
Operator contact name and title: William J. Betters - Licensed Site Professional				
Address of **operator** (if different from owner):		Street: 120 Longwater Drive		
Town: Norwell	State: MA	Zip: 02061	County: Plymouth	

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:

Post treatment groundwater remediation discharge to a storm drain.

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 0.114005 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.0445602 Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	42.286361	long	-70.877603	;	
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 11-8-2010 end 1-8-2011

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). attached

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and ✓ Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	**Believe Absent**	**Believe Present**	**# of Samples (1 min-imum)**	**Type of Sample (e.g., grab)**	**Analytical Method Used (method #)**	**Minimum Level (ML) of Test Method**	**Maximum daily value**		**Avg. daily value**	
							concentration (ug/l)	**mass (kg)**	**concentration (ug/l)**	**mass (kg)**
1. Total Suspended Solids		✓	1	grab	2540D	4,000	27,500	30.0	27,500	13.5
2. Total Residual Chlorine	✓		1	grab	4500CLD	20				
3. Total Petroleum Hydrocarbons		✓	1	grab	1664	6,400	170,000	185.3	170,000	83.4
4. Cyanide	✓		1	grab	4500CNE	10				
5. Benzene		✓	1	grab	8260B	2.5	82	0.089	82	0.04
6. Toluene		✓	1	grab	8260B	3.8	180	0.196	180	0.088
7. Ethylbenzene		✓	1	grab	8260B	2.5	110	0.12	110	0.054
8. (m,p,o) Xylenes		✓	1	grab	8260B	5	560	0.611	560	0.275
9. Total BTEX[4]		✓	1	grab	8260B	5	932	1.016	932	0.457

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide [5] (1,2- Dibromo-methane)	✓		1	grab	504.1	0.01				
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	8260B	5				
12. tert-Butyl Alcohol (TBA)	✓		1	grab	8260B	150				
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	8260B	10				
14. Naphthalene		✓	1	grab	8260B	12	190	0.207	190	0.093
15. Carbon Tetra-chloride	✓		1	grab	8260B	2.5				
16. 1,4 Dichlorobenzene	✓		1	grab	8260B	12				
17. 1,2 Dichlorobenzene	✓		1	grab	8260B	12				
18. 1,3 Dichlorobenzene	✓		1	grab	8260B	12				
19. 1,1 Dichloroethane	✓		1	grab	8260B	3.8				
20. 1,2 Dichloroethane	✓		1	grab	8260B	2.5				
21. 1,1 Dichloroethylene	✓		1	grab	8260B	2.5				
22. cis-1,2 Dichloro-ethylene	✓		1	grab	8260B	2.5				
23. Dichloromethane (Methylene Chloride)	✓		1	grab	8260B	15				
24. Tetrachloroethylene	✓		1	grab	8260B	2.5				

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	grab	8260B	2.5				
26. 1,1,2 Trichloroethane	✓		1	grab	8260B	3.8				
27. Trichloroethylene	✓		1	grab	8260B	2.5				
28. Vinyl Chloride	✓		1	grab	8260B	5				
29. Acetone	✓		1	grab	8260B	25				
30. 1,4 Dioxane	✓		1	grab	8260B	1,200				
31. Total Phenols		✓	1	grab	420.1	30	90	0.098	90	0.044
32. Pentachlorophenol	✓		1	grab	8270C	8				
33. Total Phthalates [6] (Phthalate esthers)	✓		1	grab	8270C	5				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270C	5				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270C	2				
a. Benzo(a) Anthracene	✓		1	grab	8270C	2				
b. Benzo(a) Pyrene	✓		1	grab	8270C	2				
c. Benzo(b)Fluoranthene	✓		1	grab	8270C	2				
d. Benzo(k) Fluoranthene	✓		1	grab	8270C	2				
e. Chrysene	✓		1	grab	8270C	2				

[6]The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (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)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270C	2				
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270C	2				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270C	2	131.8	0.144	131.8	0.065
h. Acenaphthene		✓	1	grab	8270C	2	4.6	0.005	4.6	0.002
i. Acenaphthylene	✓		1	grab	8270C	2				
j. Anthracene	✓		1	grab	8270C	2				
k. Benzo(ghi) Perylene	✓		1	grab	8270C	2				
l. Fluoranthene	✓		1	grab	8270C	2				
m. Fluorene		✓	1	grab	8270C	2	7.3	0.008	7.3	0.004
n. Naphthalene-		✓	1	grab	8270C	2	190	0.207	190	0.093
o. Phenanthrene		✓	1	grab	8270C	2	9.9	0.011	9.9	0.005
p. Pyrene	✓		1	grab	8270C	2				
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.278				
***38.* Antimony**	✓		1	grab	6020	0.5				
39. Arsenic		✓	1	grab	6020	0.5	1.8	0.002	1.8	0.001
40. Cadmium	✓		1	grab	6020	0.2				
41. Chromium III		✓	1	grab	6020	0.5	3	0.003	3	0.001
42. Chromium VI	✓		1	grab	3500CRD	50				

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	grab	6020	0.5	1.9	0.002	1.9	0.001
44. Lead		✓	1	grab	6020	0.5	2.6	0.003	2.6	0.001
45. Mercury	✓		1	grab	245.1	0.2				
46. Nickel		✓	1	grab	6020	0.5	1.6	0.002	1.6	0.001
47. Selenium	✓		1	grab	6020	1				
48. Silver	✓		1	grab	6020	0.4				
49. Zinc		✓	1	grab	6020	5	11.8	0.013	11.8	0.006
50. Iron		✓	1	grab	200.7	50	3,400	3.707	3,400	1.668
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y_✓_ N____	If yes, which metals? Iron
Step 2: For any metals which have **reasonable potential** to 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? Metals: N/A - saltwater DF: _____	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 "Yes," list which metals:

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)
		☐	☐								
		☐	☐								

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? Iron
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: N/A Salt water DF: Metal: DF: Metal: DF: 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:

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:

Groundwater treatment system consisting of two bag filters in line wtih two 500-lb activated carbon cans. See attached diagram & text.

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 20 (est) gpm Maximum flow rate of treatment system 50 (est) gpm
Design flow rate of treatment system 50 (est) gpm

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

None

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:

Discharge to storm drain located on Lynn Avenue, which ultimately discharges to Hingham Bay (Boston Harbor).

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 SB

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water N/A - Marine 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)? pathogens

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.

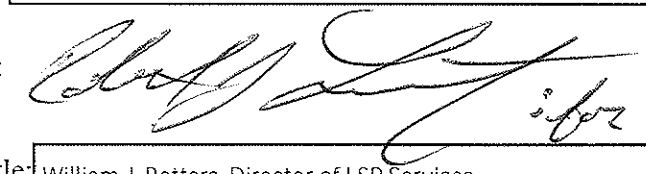
7. Supplemental information.

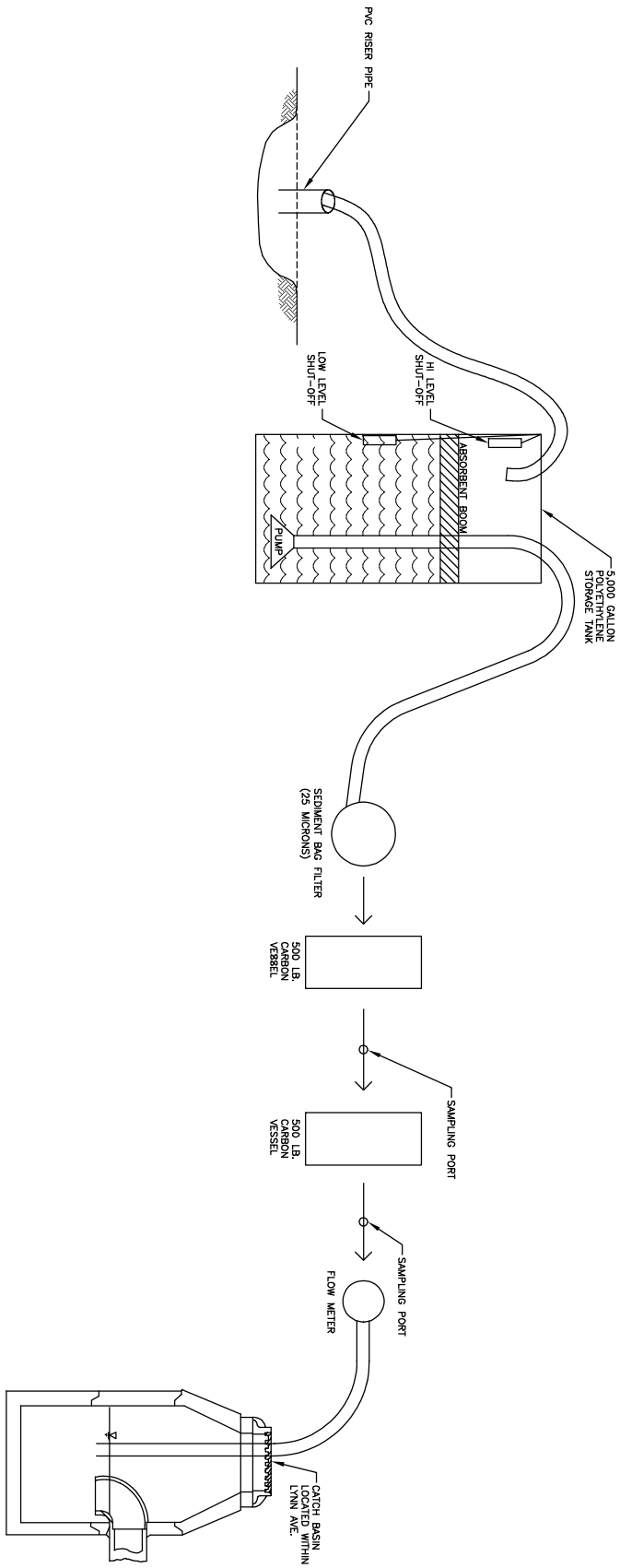
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

According to communication with EPA Region 1, information from permit RGP permit number MAG910447 (abutting property and co-mingled plume) was suitable for use in preparing this RGP Notice of Intent. Specifically, information was used in Sections 3 & 6. This information is included with the notice of intent.

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:	Private Residence - 76 Lynn Avenue, Hull , MA
Operator signature:	
Printed Name &Title:	William J. Betters, Director of LSP Services
Date:	November 3, 2010



GROUNDWATER TREATMENT SCHAMATIC PROFILE

N.T.S.

GREEN ENVIRONMENTAL

Green Environmental Inc., 120 Longwater Drive, Norwell, MA 02061
Telephone (617) 479-0550 Fax (617) 479-5150
www.GreenEnvironmental.com
Engineering and Environmental Services

SCALE: N.T.S. | DATE: NOVEMBER 4, 2010

DATE	NO.	REVISIONS	BY

FILE PATH & NAME: 6996/SCHEMATIC PROFILE PROJECT NO. 6996	ITA LEONARD 76 LYNN AVENUE HULL, MA 02045	GROUNDWATER TREATMENT PROFILE 76 LYNN AVENUE HULL, MA 02045	GROUNDWATER TREATMENT SCHAMATIC PROFILE	DESIGNED BY: MU DRAWN BY: APH CHECKED BY: RJL APPROVED BY: RJL

GREEN
ENVIRONMENTAL

CONSULTING SERVICES

CONTRACTING SERVICES

WASTE MANAGEMENT

CIVIL ENGINEERING

SITE DESIGN

- Dewatering sumps will be installed as necessary to facilitate dewatering of the excavation. Groundwater will be extracted from the sump and transferred to a 5,000 gallon polyethylene storage tank. The tank has been situated on the southern side of the residence.

- Absorbents will be placed within the polyethylene storage tank to manage the separate phase product. GREEN will maintain the absorbent booms and replace them as needed. Storage tank also includes both high and low level auto-shutoffs.

- Treatment will consist of a 2-unit sediment bag filter to manage suspended solids; and (2) 500-lb. carbon vessels, each filled with 500 lbs. of virgin liquid phase granular activated carbon, to manage petroleum.

- Effluent testing will be conducted in accordance with MassDEP and EPA requirements.

Granular Activated Carbon Units

52 Accord Park Drive
Norwell, MA 02061

Phone: (617) 479-0550

Fax: (617) 479-5150

Green Environmental Inc., 120 Longwater Drive, Norwell, MA 02061
Telephone (617) 479-0550 Fax (617) 479-5150
www.GreenEnvironmental.com
Engineering and Environmental Services

SCALE: N.T.S. | DATE: NOVEMBER 4, 2010

DATE	NO.	REVISIONS	BY

FILE PATH & NAME: 6996/SCHEMATIC PROFILE

PROJECT NO. 6996

ITA LEONARD
76 LYNN AVENUE
HULL, MA 02045

GROUNDWATER TREATMENT PROFILE
76 LYNN AVENUE
HULL, MA 02045

GROUNDWATER TREATMENT
DISCHARGE PATH

DESIGNED BY: MU
DRAWN BY: APH
CHECKED BY: RJL
APPROVED BY: RJL

MA DEP - Bureau of Waste Site Cleanup

Site Scoring Map: 500 feet & 0.5 Mile Radii

SITE NAME:

76 Lynn Avenue
76 Lynn Avenue
Hull, MA 02045
UTM Coordinates 4683265 345224

RTN: 4-22571

The information shown on this map is the best available at the date of printing. Please refer to the data source descriptions document.

MASSGIS — Office of Geographic and Environmental Information
Massachusetts Executive Office of Energy & Environmental Affairs

Roads: Limited Access, Divided, Major Road, Connector, Street, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dams

Potentially Productive Aquifers: Medium,High Yield

Non-Potential Drinking Water Source Area: Medium,High Yield

EPA Sole Source Aquifer; FEMA 100-year floodplain

Public Water Supplies: Ground,Surface,Non Community

Approved Zone2; IWPA; Surface Water Supply Zone A

Hydrography: Open Water, Reservoir, Tidal Flat

Wetlands: Fresh,Salt,NHESP Wetlands Habitat

Cranberry Bog; Protected Open Space; ACEC

DEP Permitted Solid Waste Landfills; Certified Vernal Pools

N NW NE W E SW SE S

SCALE 1:15,000

0 0.3 0.6 Miles
0 0.4 0.8 Kilometers

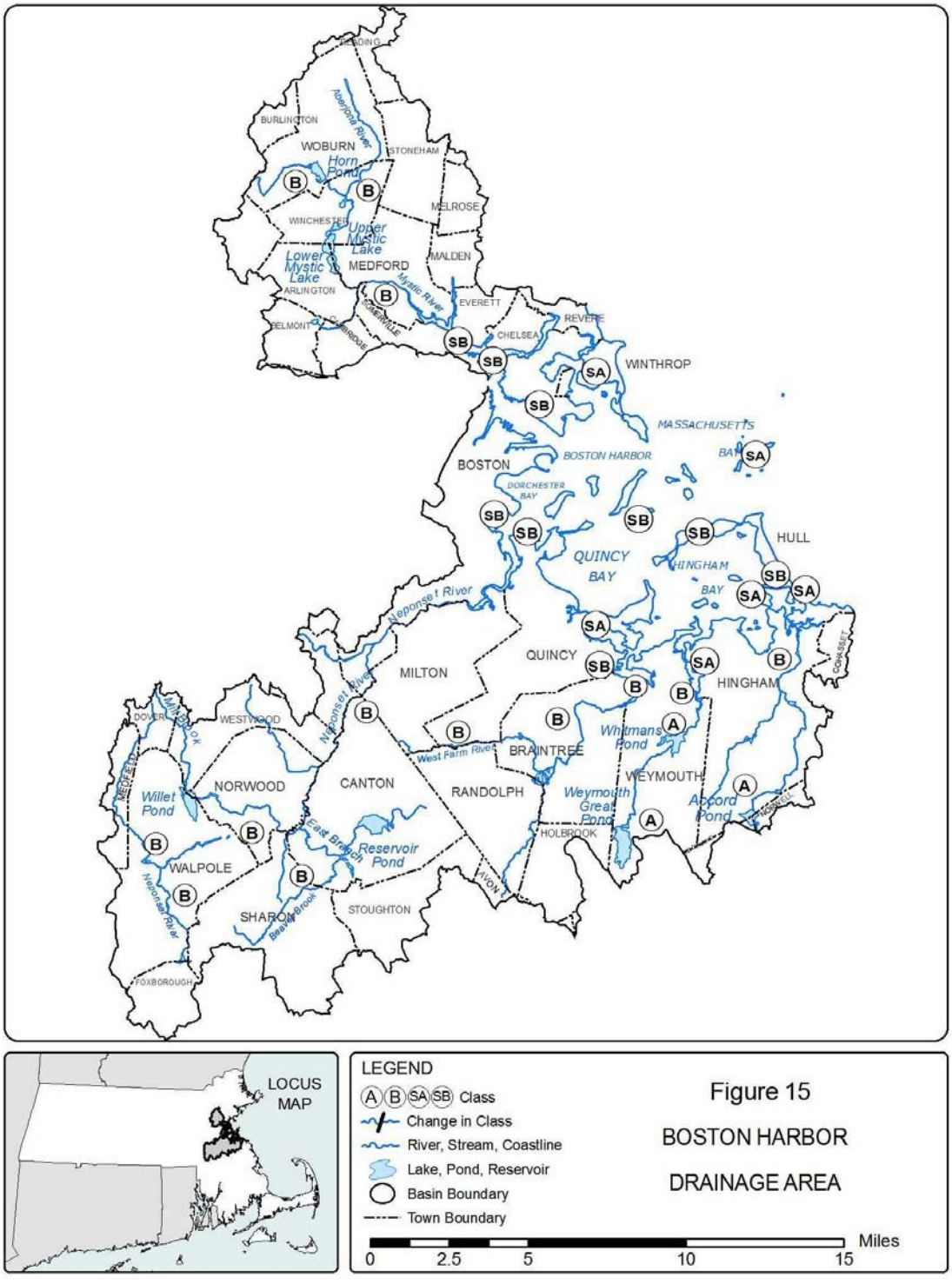
June 17, 2010

Massachusetts Category 5 Waters
"Waters requiring a TMDL"

NAME	SEGMENT ID	DESCRIPTION	SIZE	POLLUTANT NEEDING TMDL [EPA APPROVAL DATE-DOCUMENT CONTROL NUMBER]
West River (5131800)	MA51-12_2008	Upton WWTP, Upton to confluence with Blackstone River, Uxbridge.	9.3 miles	-Metals -Nutrients -pH -Organic enrichment/Low DO -Salinity/TDS/chlorides
West River Pond (51177)	MA51177_2008	Uxbridge	33.8 acres	-Noxious aquatic plants -(Exotic species*)
Woodbury Pond (51185)	MA51185_2008	Sutton	5.0 acres	-Noxious aquatic plants -(Exotic species*)
Woolshop Pond (51186)	MA51186_2008	Millbury	4.9 acres	-Noxious aquatic plants -Turbidity -(Exotic species*)
Boston Harbor				
Boston Harbor (70901)	MA70-01_2008	The area extending into Massachusetts Bay from the line between Fort Dawes on Deer Island to The Graves, and from The Graves south to Point Allerton; across Hull and West guts; across the mouths of Quincy and Dorchester bays, Boston Inner Harbor and Winthrop Bay (including President Roads and Nantasket Roads).	24.2 sq mi	-Priority organics -Pathogens
Boston Inner Harbor (70902)	MA70-02_2008	From the Mystic and Chelsea rivers, Chelsea/Boston, to the line between Governors Island and Fort Independence, East Boston/Boston (including Fort Point, Reserved and Little Mystic channels).	2.5 sq mi	-Priority organics -Pathogens
Dorchester Bay (70903)	MA70-03_2008	From the mouth of the Neponset River, Boston/Quincy to the line between Head Island and the north side of Thompson Island and the line between the south point of Thompson Island, Boston and Chapel Rocks, Quincy.	3.5 sq mi	-Priority organics -Pathogens -Suspended solids -Turbidity
Hingham Bay (70905)	MA70-06_2008	The area north of the mouth of the Weymouth Fore River extending on the west along the line between Nut Island and the south point of West Head, and on the east side along a line from Prince Head just east of Pig Rock to the mouth of the Weymouth Fore River (midway between Lower Neck and Manot Beach), Quincy.	1.0 sq mi	-Pathogens
Hingham Bay (70905)	MA70-07_2008	The area defined between Peddocks Island and Windmill Point; from Windmill Point southeast to Bumkin Island; from Bumkin Island southeast to Sunset Point; from Sunset Point across the mouth of the Weir River to Worlds End; from Worlds End across the mouth of Hingham Harbor to Crow Point; from Beach Lane, Hingham across the mouth of the Weymouth Back River to Lower Neck; and from Lower Neck midway across the mouth of the Weymouth Fore River.	4.8 sq mi	-Pathogens
Hingham Harbor (70906)	MA70-08_2008	Hingham Harbor inside a line from Crows Point to Worlds End, Hingham.	1.1 sq mi	-Pathogens
Hull Bay (70907)	MA70-09_2008	The area defined east of a line from Windmill Point to Bumpkin Island and from Bumpkin Island to Sunset Point, Hull.	2.5 sq mi	-Pathogens
Pleasure Bay (70909)	MA70-11_2008	A semi-enclosed bay, the flow restricted through two channels between Castle and Head islands, Boston	0.22 sq mi	-Priority organics -Pathogens
Quincy Bay (70904)	MA70-04_2008	From Bromfield Street near the Wallaston Yacht Club, northeast to N42.2781 W70.9941, southeast to N42.2735 W70.9678, and south to Newton Street on the northerly shore of Houghs Neck, Quincy.	1.2 sq mi	-Priority organics -Pathogens

* - non Pollutant
[ ] – TMDL (Restorative)
< > – TMDL (Protective)

4.06: continued



4.06: continued

TABLE 15
BOSTON HARBOR DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Inside a line from the southerly tip of Deer Island to Boston Lighthouse to Point Allerton in Hull except as denoted below	-	SB	Shellfishing
Boston Inner Harbor westerly inside a line from the southern tip of Governors Island to Fort Independence including the Charles, Mystic, Island End and Chelsea (Creek) Rivers and Reserved, Fort Point and Little Mystic Channels	-	SB(CSO)	
Dorchester Bay	-	SB	Shellfishing CSO
Quincy Bay in Quincy from Bromfield Street near the Wallaston Yacht Club northerly to bouy "C 1" southeasterly to the "Willows", sometimes known as Lord's Point on the northerly shore of Houghs Neck in Quincy	-	SA	Shellfishing
Remainder of Quincy Bay	-	SB	Shellfishing
Hingham Harbor in Hingham inside a line from Crows Point to Worlds End Promontery	-	SA	Shellfishing
Hull Bay	-	SB	Shellfishing
Other coastal and marine waters in the Boston Harbor Drainage Area	-	SB	Shellfishing
Aberjona River			
Source to outlet Mishawum Lake	118.4 - 15.1	B	Warm Water
Outlet Mishawum Lake to inlet Mystic Lake	15.1 - 9.2	B	Warm Water
Upper Mystic Lake	9.2 - 8.1	B	Warm Water
Lower Mystic Lake	8.1 - 7.4	B	Warm Water
Mystic River			
Outlet Lower Mystic Lake to Amelia Earhart Dam	7.4 - 2.0	B	Warm Water CSO
Amelia Earhart Dam to confluence with the Chelsea River	2.0 - 0.0	SB(CSO)	Shellfishing

ANALYTICAL REPORT

Lab Number:	L1002382
Client:	Vertex Environmental Services, Inc. 400 Libbey Industrial Parkway Weymouth, MA 02189
ATTN:	Jessica Fox
Project Name:	78 LYNN AVE.
Project Number:	15510
Report Date:	02/19/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1002382-01	AE-106	HULL, MA	02/17/10 14:00
L1002382-02	VES-2	HULL, MA	02/17/10 15:20
L1002382-03	TRIP BLANK	HULL, MA	02/17/10 00:00

Project Name:	78 LYNN AVE.	**Lab Number:**	L1002382
Project Number:	15510	**Report Date:**	02/19/10

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.

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.

Report Submission

The analyses of Total Suspended Solids and Total Cyanide were subcontracted. A copy of the laboratory report is included as an addendum.

Sample Receipt

A Trip Blank was received in the laboratory but not listed on the Chain of Custody. At the client's request, the Trip Blank was not analyzed.

Project Name: 78 LYNN AVE. **Lab Number:** L1002382
Project Number: 15510 **Report Date:** 02/19/10

Case Narrative (continued)

Volatile Organics

L1002382-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

Semivolatile Organics by SIM

L1002382-01 has elevated detection limits due to the dilution required by the sample matrix.

Metals

The WG401229-3 Laboratory Duplicate RPD, associated with L1002382-01, is above the acceptance criteria for Zinc (41%); however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

Chromium, Hexavalent

L1002382-01 has an elevated detection limit due to the dilution required by the sample matrix.

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: 

Title: Technical Director/Representative Date: 02/19/10

ORGANICS

VOLATILES

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID:	L1002382-01	Date Collected:	02/17/10 14:00
Client ID:	AE-106	Date Received:	02/17/10
Sample Location:	HULL, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260B		
Analytical Date:	02/18/10 10:28		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab					
Methylene chloride	ND		ug/l	15	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Benzene	82		ug/l	2.5	5
Toluene	180		ug/l	3.8	5
Ethylbenzene	110		ug/l	2.5	5
Vinyl chloride	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
Trichloroethene	ND		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
Methyl tert butyl ether	ND		ug/l	5.0	5
p/m-Xylene	330		ug/l	5.0	5
o-Xylene	230		ug/l	5.0	5
cis-1,2-Dichloroethene	ND		ug/l	2.5	5
Acetone	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
Naphthalene	190		ug/l	12	5
Tert-Butyl Alcohol	ND		ug/l	150	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	5
1,4-Dioxane	ND		ug/l	1200	5

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-01 Date Collected: 02/17/10 14:00

Client ID: AE-106 Date Received: 02/17/10

Sample Location: HULL, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	93		70-130

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID:	L1002382-01	Date Collected:	02/17/10 14:00
Client ID:	AE-106	Date Received:	02/17/10
Sample Location:	HULL, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	02/19/10 08:30
Analytical Date:	02/19/10 11:27		
Analyst:	JB		

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

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 02/18/10 09:20
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG401219-3				
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: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 02/18/10 09:20
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG401219-3				
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	10
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: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 02/18/10 09:20
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG401219-3				
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	30
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	105		70-130

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 02/19/10 10:49
Analyst: JB

Extraction Date: 02/19/10 08:30

Parameter	Result	Qualifier	Units	RDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG401344-1				
1,2-Dibromoethane	ND		ug/l	0.010

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

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: WG401219-1 WG401219-2								
Chlorobenzene	94		100		75-130	6		20
Benzene	99		105		76-127	6		20
Toluene	100		106		76-125	6		20
1,1-Dichloroethene	96		102		61-145	6		20
Trichloroethene	93		95		71-120	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		102		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	101		104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG401344-2								
1,2-Dibromoethane	106		-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

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: WG401344-3 QC Sample: L1002382-01 Client ID: AE-106												
1,2-Dibromoethane	ND	0.253	0.276	109		-	-		70-130	-		20

SEMIVOLATILES

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID:	L1002382-01	Date Collected:	02/17/10 14:00
Client ID:	AE-106	Date Received:	02/17/10
Sample Location:	HULL, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	02/18/10 06:16
Analytical Date:	02/18/10 18:40		
Analyst:	RL		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab					
Acenaphthene	4.6		ug/l	2.0	10
2-Chloronaphthalene	ND		ug/l	2.0	10
Fluoranthene	ND		ug/l	2.0	10
Hexachlorobutadiene	ND		ug/l	5.0	10
Naphthalene	110		ug/l	2.0	10
Benzo(a)anthracene	ND		ug/l	2.0	10
Benzo(a)pyrene	ND		ug/l	2.0	10
Benzo(b)fluoranthene	ND		ug/l	2.0	10
Benzo(k)fluoranthene	ND		ug/l	2.0	10
Chrysene	ND		ug/l	2.0	10
Acenaphthylene	ND		ug/l	2.0	10
Anthracene	ND		ug/l	2.0	10
Benzo(ghi)perylene	ND		ug/l	2.0	10
Fluorene	7.3		ug/l	2.0	10
Phenanthrene	9.9		ug/l	2.0	10
Dibenzo(a,h)anthracene	ND		ug/l	2.0	10
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	10
Pyrene	ND		ug/l	2.0	10
1-Methylnaphthalene	94		ug/l	2.0	10
2-Methylnaphthalene	150		ug/l	2.0	10
Pentachlorophenol	ND		ug/l	8.0	10
Hexachlorobenzene	ND		ug/l	8.0	10
Hexachloroethane	ND		ug/l	8.0	10

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-01 Date Collected: 02/17/10 14:00

Client ID: AE-106 Date Received: 02/17/10

Sample Location: HULL, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	120		10-120
4-Terphenyl-d14	114		33-120

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID:	L1002382-01	Date Collected:	02/17/10 14:00
Client ID:	AE-106	Date Received:	02/17/10
Sample Location:	HULL, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	02/18/10 06:11
Analytical Date:	02/18/10 20:52		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab					
Benzidine	ND		ug/l	50	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1
Bis(2-chloroethyl)ether	ND		ug/l	5.0	1
1,2-Dichlorobenzene	ND		ug/l	5.0	1
1,3-Dichlorobenzene	ND		ug/l	5.0	1
1,4-Dichlorobenzene	ND		ug/l	5.0	1
3,3'-Dichlorobenzidine	ND		ug/l	50	1
2,4-Dinitrotoluene	ND		ug/l	6.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1
Azobenzene	ND		ug/l	5.0	1
4-Chlorophenyl phenyl ether	ND		ug/l	5.0	1
4-Bromophenyl phenyl ether	ND		ug/l	5.0	1
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	1
Hexachlorocyclopentadiene	ND		ug/l	30	1
Isophorone	ND		ug/l	5.0	1
Nitrobenzene	ND		ug/l	5.0	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	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	20	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	7.0	1
Dibenzofuran	ND		ug/l	5.0	1

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-01 Date Collected: 02/17/10 14:00

Client ID: AE-106 Date Received: 02/17/10

Sample Location: HULL, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab					
n-Nitrosodimethylamine	ND		ug/l	50	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	1
P-Chloro-M-Cresol	ND		ug/l	5.0	1
2-Chlorophenol	ND		ug/l	6.0	1
2,4-Dichlorophenol	ND		ug/l	10	1
2,4-Dimethylphenol	ND		ug/l	10	1
2-Nitrophenol	ND		ug/l	20	1
4-Nitrophenol	ND		ug/l	10	1
2,4-Dinitrophenol	ND		ug/l	30	1
4,6-Dinitro-o-cresol	ND		ug/l	20	1
Phenol	ND		ug/l	7.0	1
2-Methylphenol	ND		ug/l	6.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	1
Benzoic Acid	ND		ug/l	50	1
Benzyl Alcohol	ND		ug/l	10	1
Carbazole	11		ug/l	5.0	1
Pyridine	ND		ug/l	50	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	84		33-120

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 02/18/10 15:31
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/18/10 06:11

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG401128-1				
Benzidine	ND		ug/l	50
1,2,4-Trichlorobenzene	ND		ug/l	5.0
Bis(2-chloroethyl)ether	ND		ug/l	5.0
1,2-Dichlorobenzene	ND		ug/l	5.0
1,3-Dichlorobenzene	ND		ug/l	5.0
1,4-Dichlorobenzene	ND		ug/l	5.0
3,3'-Dichlorobenzidine	ND		ug/l	50
2,4-Dinitrotoluene	ND		ug/l	6.0
2,6-Dinitrotoluene	ND		ug/l	5.0
Azobenzene	ND		ug/l	5.0
4-Chlorophenyl phenyl ether	ND		ug/l	5.0
4-Bromophenyl phenyl ether	ND		ug/l	5.0
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0
Bis(2-chloroethoxy)methane	ND		ug/l	5.0
Hexachlorocyclopentadiene	ND		ug/l	30
Isophorone	ND		ug/l	5.0
Nitrobenzene	ND		ug/l	5.0
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0
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
Aniline	ND		ug/l	20
4-Chloroaniline	ND		ug/l	5.0
2-Nitroaniline	ND		ug/l	5.0
3-Nitroaniline	ND		ug/l	5.0
4-Nitroaniline	ND		ug/l	7.0
Dibenzofuran	ND		ug/l	5.0
n-Nitrosodimethylamine	ND		ug/l	50

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 02/18/10 15:31
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/18/10 06:11

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG401128-1				
2,4,6-Trichlorophenol	ND		ug/l	5.0
P-Chloro-M-Cresol	ND		ug/l	5.0
2-Chlorophenol	ND		ug/l	6.0
2,4-Dichlorophenol	ND		ug/l	10
2,4-Dimethylphenol	ND		ug/l	10
2-Nitrophenol	ND		ug/l	20
4-Nitrophenol	ND		ug/l	10
2,4-Dinitrophenol	ND		ug/l	30
4,6-Dinitro-o-cresol	ND		ug/l	20
Phenol	ND		ug/l	7.0
2-Methylphenol	ND		ug/l	6.0
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0
2,4,5-Trichlorophenol	ND		ug/l	5.0
Benzoic Acid	ND		ug/l	50
Benzyl Alcohol	ND		ug/l	10
Carbazole	ND		ug/l	5.0
Pyridine	ND		ug/l	50

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	75		33-120

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 02/18/10 17:06
Analyst: RL

Extraction Method: EPA 3510C
Extraction Date: 02/18/10 06:16

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG401129-1				
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: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 02/18/10 17:06
Analyst: RL

Extraction Method: EPA 3510C
Extraction Date: 02/18/10 06:16

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG401129-1				

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	82		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

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: WG401128-2 WG401128-3								
1,2,4-Trichlorobenzene	56		61		39-98	9		30
1,2-Dichlorobenzene	56		60		40-140	7		30
1,4-Dichlorobenzene	55		58		36-97	5		30
2,4-Dinitrotoluene	94		84		24-96	11		30
2,6-Dinitrotoluene	86		85		40-140	1		30
4-Chlorophenyl phenyl ether	81		79		40-140	3		30
n-Nitrosodi-n-propylamine	67		70		41-116	4		30
Butyl benzyl phthalate	97		83		40-140	16		30
P-Chloro-M-Cresol	81		84		23-97	4		30
2-Chlorophenol	60		69		27-123	14		30
2-Nitrophenol	68		72		30-130	6		30
4-Nitrophenol	52		46		10-80	12		30
2,4-Dinitrophenol	55		51		20-130	8		30
Phenol	30		34		12-110	13		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

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: WG401128-2 WG401128-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	40		40		21-120
Phenol-d6	27		31		10-120
Nitrobenzene-d5	66		70		23-120
2-Fluorobiphenyl	72		75		15-120
2,4,6-Tribromophenol	81		77		10-120
4-Terphenyl-d14	88		79		33-120

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG401129-2 WG401129-3

Acenaphthene	65		68		40-140	5		40
2-Chloronaphthalene	82		80		40-140	2		40
Fluoranthene	102		102		40-140	0		40
Anthracene	86		86		40-140	0		40
Pyrene	100		100		40-140	0		40
Pentachlorophenol	98		101		9-103	3		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

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: WG401129-2 WG401129-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		48		21-120
Phenol-d6	29		29		10-120
Nitrobenzene-d5	75		75		23-120
2-Fluorobiphenyl	74		75		15-120
2,4,6-Tribromophenol	93		84		10-120
4-Terphenyl-d14	99		94		33-120

PCBS

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID:	L1002382-01	Date Collected:	02/17/10 14:00
Client ID:	AE-106	Date Received:	02/17/10
Sample Location:	HULL, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	02/18/10 06:19
Analytical Date:	02/18/10 15:03	Cleanup Method1:	EPA 3665A
Analyst:	JB	Cleanup Date1:	02/18/10

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab					
Aroclor 1016	ND		ug/l	0.278	1
Aroclor 1221	ND		ug/l	0.278	1
Aroclor 1232	ND		ug/l	0.278	1
Aroclor 1242	ND		ug/l	0.278	1
Aroclor 1248	ND		ug/l	0.278	1
Aroclor 1254	ND		ug/l	0.278	1
Aroclor 1260	ND		ug/l	0.278	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	97		30-150	A

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 02/18/10 14:11
Analyst: JB

Extraction Method: EPA 608
Extraction Date: 02/18/10 06:19
Cleanup Method1: EPA 3665A
Cleanup Date1: 02/18/10

Parameter	Result	Qualifier	Units	RDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG401130-1				
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	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	84		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

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: WG401130-3 QC Sample: L1002382-01 Client ID: AE-106												
Aroclor 1016	ND	2.22	2.50	113		-	-		40-126	-		30
Aroclor 1260	ND	2.22	2.64	119		-	-		40-127	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	*Column*
2,4,5,6-Tetrachloro-m-xylene	84				30-150	A
Decachlorobiphenyl	103				30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG401130-2								
Aroclor 1016	88		-		40-126	-		30
Aroclor 1260	100		-		40-127	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65				30-150	A
Decachlorobiphenyl	86				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401130-4 QC Sample: L1002382-01 Client ID: AE-106						
Aroclor 1016	ND	ND	ug/l	NC		30
Aroclor 1221	ND	ND	ug/l	NC		30
Aroclor 1232	ND	ND	ug/l	NC		30
Aroclor 1242	ND	ND	ug/l	NC		30
Aroclor 1248	ND	ND	ug/l	NC		30
Aroclor 1254	ND	ND	ug/l	NC		30
Aroclor 1260	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		69		30-150	A
Decachlorobiphenyl	97		92		30-150	A

METALS

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-01 Date Collected: 02/17/10 14:00

Client ID: AE-106 Date Received: 02/17/10

Sample Location: HULL, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab										
Antimony, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Arsenic, Total	0.0018		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Chromium, Total	0.003		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Copper, Total	0.00190		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Iron, Total	3.4		mg/l	0.05	1	02/18/10 10:00	02/19/10 10:01	EPA 3005A	19,200.7	AI
Lead, Total	0.0026		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	1	02/18/10 11:45	02/18/10 15:16	EPA 245.1	3,245.1	EZ
Nickel, Total	0.0016		mg/l	0.0005	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Selenium, Total	ND		mg/l	0.001	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0004	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM
Zinc, Total	0.0118		mg/l	0.0050	1	02/18/10 10:50	02/19/10 15:03	EPA 3005A	1,6020	BM

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG401203-1									
Mercury, Total	ND		mg/l	0.0002	1	02/18/10 11:45	02/18/10 15:11	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG401229-1									
Antimony, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Arsenic, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Chromium, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Copper, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Lead, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Nickel, Total	ND		mg/l	0.0005	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Selenium, Total	ND		mg/l	0.001	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Silver, Total	ND		mg/l	0.0004	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM
Zinc, Total	ND		mg/l	0.0050	1	02/18/10 10:50	02/19/10 14:51	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG401324-1									
Iron, Total	ND		mg/l	0.05	1	02/18/10 10:00	02/19/10 09:42	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG401203-2								
Mercury, Total	101		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG401229-2								
Antimony, Total	96		-		80-120	-		
Arsenic, Total	98		-		80-120	-		
Cadmium, Total	105		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Copper, Total	97		-		80-120	-		
Lead, Total	101		-		80-120	-		
Nickel, Total	96		-		80-120	-		
Selenium, Total	98		-		80-120	-		
Silver, Total	105		-		80-120	-		
Zinc, Total	100		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG401324-2								
Iron, Total	98		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

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: WG401203-4					QC Sample: L1002420-01			Client ID: MS Sample			
Mercury, Total	ND	0.001	0.0011	108		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01	QC Batch ID: WG401229-4					QC Sample: L1002382-01			Client ID: AE-106			
Antimony, Total	ND	0.5	0.5006	100		-	-		80-120	-		20
Arsenic, Total	0.0018	0.12	0.1287	106		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0558	109		-	-		80-120	-		20
Chromium, Total	0.003	0.2	0.2042	100		-	-		80-120	-		20
Copper, Total	0.00190	0.25	0.2620	104		-	-		80-120	-		20
Lead, Total	0.0026	0.51	0.5351	104		-	-		80-120	-		20
Nickel, Total	0.0016	0.5	0.5160	103		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.097	81		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0527	105		-	-		80-120	-		20
Zinc, Total	0.0118	0.5	0.5397	106		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01	QC Batch ID: WG401324-4					QC Sample: L1001566-54			Client ID: MS Sample			
Iron, Total	ND	1	1.0	100		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401203-3 QC Sample: L1002420-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401229-3 QC Sample: L1002382-01 Client ID: AE-106						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0018	0.0015	mg/l	15		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.003	0.0028	mg/l	8		20
Copper, Total	0.00190	0.0017	mg/l	12		20
Lead, Total	0.0026	0.0026	mg/l	2		20
Nickel, Total	0.0016	0.0015	mg/l	10		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0118	0.0179	mg/l	**41**		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401324-3 QC Sample: L1001566-54 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-01
Client ID: AE-106
Sample Location: HULL, MA
Matrix: Water

Date Collected: 02/17/10 14:00
Date Received: 02/17/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Chlorine, Total Residual	ND		mg/l	0.02	1	-	02/17/10 20:40	30,4500CL-D	DD
Phenolics, Total	0.09		mg/l	0.03	1	-	02/18/10 16:38	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.050	5	02/17/10 22:00	02/17/10 22:00	30,3500CR-D	DD

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

SAMPLE RESULTS

Lab ID: L1002382-02
Client ID: VES-2
Sample Location: HULL, MA
Matrix: Water

Date Collected: 02/17/10 15:20
Date Received: 02/17/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
TPH	170		mg/l	6.40	1.6	02/18/10 10:45	02/19/10 11:00	74,1664A	JO

Project Name: 78 LYNN AVE. **Lab Number:** L1002382

Project Number: 15510 **Report Date:** 02/19/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG401097-2									
Chlorine, Total Residual	ND		mg/l	0.02	1	-	02/17/10 20:40	30,4500CL-D	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG401121-2									
Chromium, Hexavalent	ND		mg/l	0.010	1	02/17/10 22:00	02/17/10 22:00	30,3500CR-D	DD
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG401184-2									
TPH	ND		mg/l	4.00	1	02/18/10 10:45	02/19/10 11:00	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG401202-1									
Phenolics, Total	ND		mg/l	0.03	1	-	02/18/10 16:33	4,420.1	TH

Lab Control Sample Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510
Lab Number: L1002382
Report Date: 02/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG401097-1								
Chlorine, Total Residual	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG401121-1								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG401184-1								
TPH	80		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG401202-2								
Phenolics, Total	104		-		82-111	-		12

Matrix Spike Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

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: WG401121-3 QC Sample: L1002382-01 Client ID: AE-106												
Chromium, Hexavalent	ND	0.5	0.480	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG401184-3 QC Sample: L1001566-49 Client ID: MS Sample												
TPH	ND	20.6	ND	81		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401202-3 QC Sample: L1002382-01 Client ID: AE-106												
Phenolics, Total	0.09	0.8	0.86	96		-	-		77-124	-		12

Lab Duplicate Analysis
Batch Quality Control

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401097-3 QC Sample: L1002356-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401121-4 QC Sample: L1002382-01 Client ID: AE-106						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG401184-4 QC Sample: L1001566-50 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG401202-4 QC Sample: L1002382-01 Client ID: AE-106						
Phenolics, Total	0.09	0.08	mg/l	12		12

Project Name: 78 LYNN AVE.
Project Number: 15510

Lab Number: L1002382
Report Date: 02/19/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1002382-01A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	504(14)
L1002382-01B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	504(14)
L1002382-01C	Vial HCl preserved	A	N/A	2	Y	Absent	8260(14)
L1002382-01D	Vial HCl preserved	A	N/A	2	Y	Absent	8260(14)
L1002382-01E	Plastic 1000ml unpreserved	A	7	2	Y	Absent	SUB-TSS(7)
L1002382-01F	Plastic 1000ml unpreserved	A	7	2	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1002382-01G	Plastic 1000ml NaOH preserved	A	>12	2	Y	Absent	SUB-TCN(14)
L1002382-01H	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1002382-01I	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1002382-01J	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1002382-01K	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1002382-01L	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1002382-01M	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	PCB-608(7)
L1002382-01N	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	PCB-608(7)
L1002382-01Q	Amber 500ml H2SO4preserved	A	<2	2	Y	Absent	TPHENOL-420(28)
L1002382-01R	Amber 500ml H2SO4preserved	A	<2	2	Y	Absent	TPHENOL-420(28)
L1002382-02A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	TPH-1664(28)
L1002382-03A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	HOLD(14)

*Hold days indicated by values in parentheses

Project Name:	78 LYNN AVE.	**Lab Number:**	L1002382
Project Number:	15510	**Report Date:**	02/19/10

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.

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.

ND - Not detected at the reported detection limit for the sample.

NI - Not Ignitable.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

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 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.

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.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

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. 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 RDL. (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).

Report Format: Data Usability Report

Project Name:	78 LYNN AVE.	**Lab Number:**	L1002382
Project Number:	15510	**Report Date:**	02/19/10

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.

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.

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 Woods Hole Labs 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 Woods Hole Labs.

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 January 11, 2010 - 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: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium 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, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, 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), Reactivity. Organic Parameters: PCBs, 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, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 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.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

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)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 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), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; 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,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 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-B,C-Titr, 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
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, 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, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

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 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 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.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 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 NY-DOH 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, 376.2, 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.)

Utah Department of Health Certificate/Lab ID: AAMA. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: Chloride EPA 300.0)

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, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene. **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. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN OF CUSTODY

PAGE_____ OF _____

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

Date Rec'd in Lab: 2/17/10

ALPHA Job #: L1002382

Client Information

Client: Vertex Environmental
Address: 400 Libbey Pkwy Weymouth MA
Phone: 781-
Fax:
Email: jfox@vertexeng.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 78 Lynn Ave
Project Location: Hull, MA
Project #: 15510
Project Manager: Jessica Fox
ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved!) 2 Day
Date Due: 2/19/10 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: EPA Criteria: NPDES

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

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

Other Project Specific Requirements/Comments/Detection Limits:

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

ANALYSIS: NPDES RGP (EXCEPT TPH) | TPH 1664

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NPDES RGP (EXCEPT TPH)	TPH 1664	Sample Specific Comments	TOTAL # BOTTLES
02382. 1	AE-106	2/17/10	14:00	GW	JF	X			16
2	VES-2	2/17/10	15:20	GW	JF		X		1

Container Type	Misc.	A
Preservative	Misc.	B

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	2/17/10 1611		2/17/10 1611
	2/17/10 1805		2/17/10 1825

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

FORM NO: 01-01 (rev. 18-Jan-2010)

Environmental Chemistry
Site Assessment
Quality Assurance Services

Analytical Balance CORPORATION

Environmental Services
Site Sampling
Data Auditing

CERTIFICATE OF ANALYSIS

Matt Beaupre
Alpha Analytical
8 Walkup Dr.
Westborough, MA 01581

COLLECTED BY: Customer
TIME: 14:00
LOCATION: L1002382-01

REPORTED: 02/19/2010
ORDER #: G1023748
SAMPLE DATE: 2/17/2010
DATE RECEIVED: 2/18/2010
SAMPLE ID:
DESCRIPTION: WATER

RESULTS OF ANALYSIS

Parameter	Analytical Method	Date Analyzed	Units	Det. Limit*	Result
Test Parameters				LAB-ID#: 1023748-01	
Cyanide 4500-CN-C/E	SM 4500CN-E	02/18/2010	mg/L	0.01	**<0.01**
Solids, Suspended	SM 2540 D	02/18/2010	mg/L	4	**27.5**

NA = Not Applicable
ND = Not Detected
'<' = Less Than
'*' = Detection Limit

Approved By: _____ 2/18/10
Lab Manager / Date

Batch ID: 10/02/18-JAG-1

QA/QC Work Sheet

Report Date: 02/19/2010

QA/QC:

	LAB-ID #	EPA Qualf	Sample Surr. Conc.	Spike Conc.	Test Result	% Rct Recovery	RPD	Run #
CONTROL								
Solids, Suspended	0050891-02		0	145	138	95.2%	0.%	1
DUPLICATE								
Solids, Suspended	1023642-01		29.5	0	30	0.%	1.7%	1

2/19/10

Batch ID: 10/02/16-JPM-3

QA/QC Work Sheet

Report Date: 02/19/2010

QA/QC:

	LAB-ID #	EPA Qualf	Sample Surr. Conc.	Spike Conc.	Test Result	% Pct Recovery	RPD	Run #
CONTROL								
Cyanide 4500-CN-C/E	0050863-02		0	0.295	0.268	90.8%	0.%	1
DUPLICATE								
Cyanide 4500-CN-C/E	1023587-01	U	0	0	0	0.%	0.%	1
MS								
Cyanide 4500-CN-C/E	1023587-02		0	1	1.12	112.%	0.%	1

2/19/10

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 4, 2010

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 the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (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.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type 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 at 603-223-2541 if we can be of further assistance.

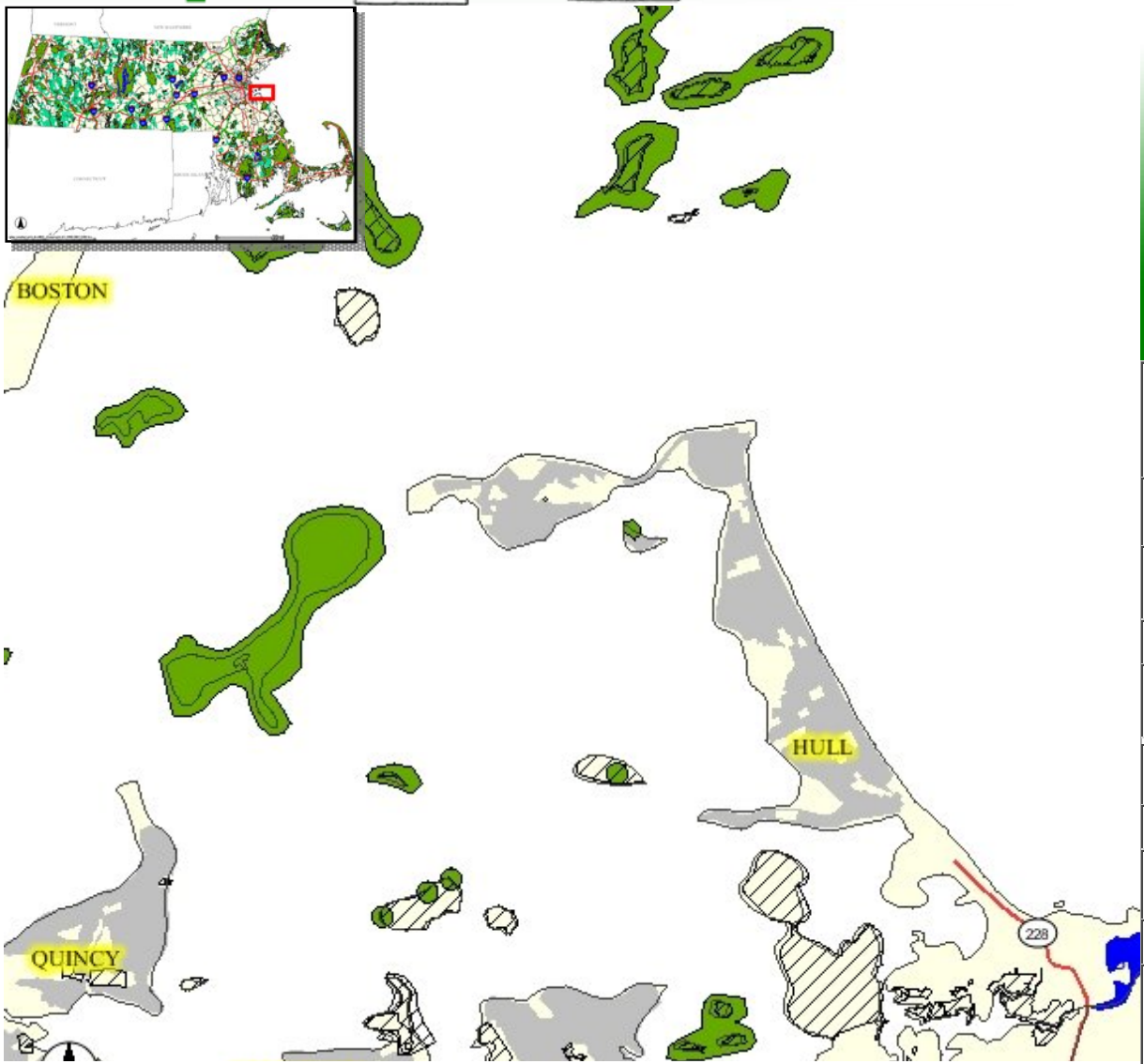
Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Natural Heritage & Endangered Species Program BioMap

- NHESP's BioMap Web Page
- Dept. of Fisheries, Wildlife & Environmental Law Enforcement Home Page

Living Waters Viewer



Produced by the NHESP GIS Program with the Assistance of MassGIS and the DFWELE GIS Program.

MASS GIS

Choose a Town GO

Tools to Use with the Map

Click on an icon below, then perform action with mouse on map. Red square indicates active tool.
Click the map or draw a box to zoom in
Click the map or draw a box to zoom out
Drag the map to move it
Get an ID value for BioMap Core Habitat
Next 4 icons: action happens when icon is clicked.
Zooms all the way out
Hide/show the overview map
Zooms to previous extent
Use to print the map. (Using the File manu/Print Frame will not work

Heritage Home

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.

Hadley | Halifax | Hamilton | Hampden | Hancock | Hanover | Hanson | Hardwick | Harvard | Harwich | Hatfield | Haverhill | Hawley | Heath | Hingham | Hinsdale | Holbrook | Holden | Holland | Holliston | Holyoke | Hopedale | Hopkinton | Hubbardston | Hudson | | Hull | Huntington

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
HADLEY	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		2000
HADLEY	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
HADLEY	Bird	Bartramia longicauda	Upland Sandpiper	E		1984
HADLEY	Bird	Cistothorus platensis	Sedge Wren	E		1989
HADLEY	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2009
HADLEY	Bird	Pooecetes gramineus	Vesper Sparrow	T		2000

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
HULL	Bird	Sterna hirundo	Common Tern	SC		2007
HULL	Bird	Sternula antillarum	Least Tern	SC		2007
HULL	Bird	Tyto alba	Barn Owl	SC		1971
HULL	Vascular Plant	Rumex pallidus	Seabeach Dock	T		2004
HULL	Vascular Plant	Triosteum perfoliatum	Broad Tinker's-weed	E		1890

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
HUNTINGTON	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1999
HUNTINGTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2008
HUNTINGTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1923
HUNTINGTON	Bird	Oporornis philadelphia	Mourning Warbler	SC		1997
HUNTINGTON	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		1970s
HUNTINGTON	Butterfly/Moth	Papaipema sp. 2 nr. pterisii	Ostrich Fern Borer Moth	SC		2002
HUNTINGTON	Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		2003
HUNTINGTON	Dragonfly/Damselfly	Ophiogomphus carolus	Riffle Snaketail	T		2003
HUNTINGTON	Dragonfly/Damselfly	Somatochlora elongata	Ski-tipped Emerald	SC		1997
HUNTINGTON	Dragonfly/Damselfly	Stylurus scudderi	Zebra Clubtail	SC		2005
HUNTINGTON	Dragonfly/Damselfly	Stylurus spiniceps	Arrow Clubtail	T		2005
HUNTINGTON	Fish	Couesius plumbeus	Lake Chub	E		1990
HUNTINGTON	Mammal	Sorex palustris	Water Shrew	SC		1997
HUNTINGTON	Mussel	Strophitus undulatus	Creeper	SC		1998
HUNTINGTON	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
HUNTINGTON	Vascular Plant	Adlumia fungosa	Climbing Fumitory	SC		2007
HUNTINGTON	Vascular Plant	Carex alopecoidea	Foxtail Sedge	T		1997
HUNTINGTON	Vascular Plant	Carex hitchcockiana	Hitchcock's Sedge	SC		1998
HUNTINGTON	Vascular Plant	Mimulus moschatus	Muskflower	E		2003
HUNTINGTON	Vascular Plant	Podostemum ceratophyllum	Threadfoot	SC		1987
HUNTINGTON	Vascular Plant	Senna hebecarpa	Wild Senna	E		2001
HUNTINGTON	Vascular Plant	Waldsteinia fragarioides	Barren Strawberry	SC		1908

Index by State and City

National Register Information System 03/08/2010 13:01:32

No filter

Include filter in navigation ☐

Row	STATE	COUNTY	RESOURCE NAME	ADDRESS	CITY	LISTED	MULTIPLE
1	MA	Plymouth	**Graves Light Station**	N of Hull in the Massachusetts Bay	Hull	1987-09-28	Lighthouses of Massachusetts TR
2	MA	Plymouth	**Hull Shore Drive, Nantasket Avenue, Metropolitan Park System of Greater Boston MPS**	Hull Shore Dr., Nantasket Ave.	Hull	2004-01-21	Metropolitan Park System of Greater Boston MPS
3	MA	Plymouth	**Paragon Park Carousel**	1 Wharf Ave.	Hull	1999-09-14	
4	MA	Plymouth	**Point Allerton Lifesaving Station**	Nantasket Ave.	Hull	1981-06-11	
5	MA	Plymouth	**Telegraph Hill**	Address Restricted	Hull	1976-07-12	

Page 1

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B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

or electronically mailed to NPDES.Generalpermits@epa.gov

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.