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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

NOV 05 2013

Dan Lebiedz
Project Executive
Lee Kennedy Company, Inc.
122 Quincy shore Drive
Quincy, MA 02171

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Seaport Square - Parcel A, site located at 70 Sleeper Street, South Boston, MA 02210, Suffolk County; Authorization # MAG910600

Dear Mr. Lebiedz:

Based on the review of a Notice of Intent (NOI) submitted by Sandhya N. Potana from Haley & Aldrich, on behalf of FPC Hotel LLC, for the site 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 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 checklist 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 the enclosed checklist includes parameters you have marked "Believed Present."

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. With the absence of dilution of freshwater into tidal water, EPA determined that the Dilution Factor Range (DFR) for any parameter discharge at this site is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limit for iron of 1,000 ug/L, is required to achieve permit compliance at your site.

Finally, please note the checklist 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. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on December 31, 2014. 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,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul Canavan, BWSC
Sandhaya N. Potana, Haley & Aldrich, Inc.

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910600**
Authorization Issued:	October, 2013
Facility/Site Name:	Seaport Square - Parcel A
Facility/Site Address:	70 Sleeper Street, South Boston, MA 02210, Suffolk County
	Email address of owner: dleatherwood.com – David Letherwood
Legal Name of Operator:	Lee Kennedy Co.
Operator contact name, title, and Address:	122 Quincy Shore Drive, Quincy, MA 02171
	Email: dlebiedz@leekennedy.com
Estimated date of Completion:	December 31, 2014
Category and Sub-Category:	Contaminated Construction Dewatering. Subcategory A. General Urban Fill Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Fort Point Channel

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 that case it will be a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	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/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/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

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	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) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 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/ ML 5ug/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/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/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 100 ug/L

	Metal Parameters	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)]	Saltwater Limits	Minimum level=ML	
	39. Antimony	5.6		ML	10
	40. Arsenic **		36	ML	20
	41. Cadmium **		8.9	ML	10
	42. Chromium III (trivalent) **		100	ML	15
	43. Chromium VI (hexavalent) **		50.3	ML	10
	44. Copper **		3.7	ML	15
	45. Lead **		8.5	ML	20
	46. Mercury **		1.1	ML	02
	47. Nickel **		8.2	ML	20
	48. Selenium **		71	ML	20
	49. Silver		2.2	ML	10
	50. Zinc **		85.6	ML	15
√	51. Iron	1,000		ML	20

	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

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

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com

24 October 2013
File No. 34099-120

US Environmental Protection Agency – Region 1
Industrial NPDES Permits (CIP)
5 Post Office Square
Mail Code OEP06-4
Boston, Massachusetts, 02109-3912

Attention: Ms. Shelly Puleo

Subject: Notice of Intent (NOI) for NPDES Dewatering General Permit
Temporary Construction Dewatering
Seaport Square Parcel A
70 Sleeper Street
Boston, Massachusetts
RTN 3-28572

Dear Ms. Puleo:

On behalf of our client, FPC Hotel LLC, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary construction site dewatering under the RGP.

The site is located at 70 Sleeper Street in South Boston, Massachusetts and currently consists of an asphalt-paved parking lot, approximately 17,000 square feet in size. Figure 1 depicts project locus. As shown on Figure 2, the site is bordered by Seaport Boulevard to the south, Sleeper Street to the east, Northern Avenue to the north, beyond which is the John Joseph Moakley US Courthouse Building, and a restaurant building (Barking Crab) located on a wooden pier to the west, beyond which is the Fort Point Channel, as shown on Figure 2, Site and Subsurface Exploration Location Plan.

SITE HISTORY

The site is located in the former South Boston tidal flats and was filled in 1870s in conjunction with the construction of Fan Pier to provide waterfront railroad access. Information from the book *Gaining Ground: A History of Landmaking in Boston* and Sanborn Maps of the site area from the period 1899 through 1990 were reviewed to evaluate likely past historical and more recent uses of the site.

In *Gaining Ground*, the property is noted as being part of the "25-acre lot" area of flats, which was located at the intersection of Fort Point channel and the harbor. This area was purchased by the Boston, Hartford & Erie railroad company from the Boston Wharf Company in 1869. However, due to the ensuing bankruptcy of BH&E, the Boston Wharf Company foreclosed on this parcel and regained

control of the land in 1871. In an agreement signed in conjunction with the Boston Wharf Company and others in 1873, the Board of Harbor Commissioners agreed to build seawalls around and fill the 25-acre lot with dredge material from the main channel and three feet of gravel at the ground surface. Filling of the area began in 1873 and was completed in 1878. According to *Gaining Ground*, the site was filled with clay dredged from the harbor and covered by gravel from a site in Readville, Massachusetts. In 1878 the land commissioners of Massachusetts rented the 25-acre lot to the New York & New England Railroad, and then the State sold the parcel outright to the railroad company in 1880.

The Sanborn Map from 1899 indicates that the site continued to exist as part of the New York & New England railroad terminal grounds. The Sanborn Map from 1923 shows that Sleeper Street had been created, and that the rail yards were owned by the New York, New Haven, and Hartford (NYNH&H) railroad company. By 1950 a "freight house" had been constructed at the western end of the NYNH&H rail yard, occupying a majority of the site, and remained in place at least until 1964 according to Sanborn Maps of those dates. The Sanborn Map from 1990 indicates that at some point since 1964, the rail yard and freight warehouse had been removed. The site was used as a surface parking lot until recently. Concrete curbs observed to be present at the site may be remnants from when the site was occupied by the warehouse building or from the reconstruction of Northern Avenue during the 1990s.

CURRENT SITE CONDITIONS

The site currently consists of an asphalt-paved parking lot, approximately 17,000 square feet in size. The site is relatively level, with ground surface elevations ranging from El. 18.5 at the northern property limit to about EL. 16.5 Boston City Base (BCB) at the southern property limit. Grades at the southeast corner of the site are elevated slightly at about EL. 20 with a paved berm at the perimeter of the site to match adjacent sidewalk grades. No structures currently occupy the site with the exception of a parking attendant's booth and a sheltered automated payment kiosk.

PROPOSED CONSTRUCTION

The proposed construction will consist of an approximately 16,000 square foot, 6-story hotel. Current design includes ground floor level at approximately EL. 18. One level of below-grade space below a portion of the proposed building footprint is planned, with the lowest level slab finishing at a depth of 11 feet below ground surface (EL. 7).

REGULATORY BACKGROUND

The subject site is an MCP Disposal Site associated with RTN 3-28572. A Class B-1 Response Action Outcome (RAO) statement was submitted to MassDEP for the site in May 2010. A Class B-1 RAO is applicable where remedial actions have not been conducted at the site because a level of 'No Significant Risk' exists and no Activity and Use Limitation is necessary to ensure the existence or maintenance of a level of 'No Significant Risk'. Accordingly, soil management during the proposed construction at the subject site will be conducted as a Post-RAO response action under the MCP at 310 CMR 40.1067(3),

and except for off-site soil disposal documentation (MSRs and BOLs), MCP submittals (e.g. RAM Plan) are not required.

GROUNDWATER SAMPLING AND ANALYSIS

In support of the NOI, Haley & Aldrich collected one unfiltered groundwater sample and one field filtered groundwater sample from observation well HA-A4(OW) on 14 and 15 August 2013. (The samples were collected on consecutive days due to lack of sufficient recharge). The collected groundwater samples were submitted to Alpha Analytical, Inc. of Westborough, Massachusetts (Alpha Analytical), a DEP certified laboratory for analysis for NPDES permit parameters including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total and dissolved metals, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), Total Suspended Solids (TSS), chloride, total cyanide, total phenolics, and total residual chlorine. The analytical results for the groundwater samples were either not detected above the laboratory detection limit or were below the applicable MCP RCGW-2 Reportable Concentration. The results of water quality testing conducted for this NOI are summarized in Table I. The location of the observation well is shown on Figure 2.

MANAGEMENT OF DEWATERING EFFLUENT

Prior to discharge, collected water will be routed through a sedimentation tank with bag filters, to remove suspended solids and un-dissolved chemical constituents. Supplemental pretreatment is anticipated to be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3. Supplemental pretreatment is anticipated to remove iron from the water. Construction dewatering under this RGP NOI will include piping and discharging to Boston Water and Sewer Commission storm drains near the site. The storm drains storm drains travel to the west of the site, ultimately discharging into Fort Point Channel. The proposed discharge route is shown on Figure 3.

During construction, it will be necessary to perform temporary dewatering to control surface water runoff from precipitation, groundwater seepage and construction-generated water to enable construction in-the-dry. Construction and construction dewatering activities are currently anticipated to begin as early as November 2013. On average, we estimate effluent discharge rates of about 40 to 50 gallons per minute (gpm) or less, with occasional peak flows of approximately 100 gpm during significant precipitation events. Temporary dewatering will be conducted from sumps located in excavations.

DISCHARGE START DATE AND LENGTH OF DISCHARGE

Site work and associated construction dewatering is currently anticipated to begin in November 2013 and is estimated to take up to 12 months to complete. Dewatering activities during below-grade construction are anticipated to be periodic and intermittent.

DILUTION FACTOR APPLICATION FOR METALS

A Dilution Factor (DF) was calculated for the detected levels of total metals greater than the applicable effluent limits. The DF is applicable to iron, and the calculated DF was used to find the appropriate Dilution Range concentrations for these metals. The DF was calculated using the following equation:

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

where Qd is the maximum discharge flow rate, assumed to be 100 gallons per minute (GPM) or approximately 0.223 cubic feet per second (cfs), and Qs is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years. Testing of groundwater at the site indicated that compounds were either not detected above the laboratory detection limit and/or were below the applicable MCP RCGW-2 Criteria. Based on our conversation with EPA, the Dilution Factor for discharge of metals to Fort Point Channel is in the 1 to 5 range.

APPENDICES

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The site owner is FPC Hotel LLC. The site operator is Lee Kennedy Co. Haley & Aldrich will monitor the Contractor's dewatering activities on behalf of FPC Hotel LLC. In accordance with the requirements for this NOI submission, Lee Kennedy Co as the operator is listed as permittee for this NPDES RGP, and therefore has signed the NOI form.

A Best Management Practices Plan (BMPP), which outlines the proposed discharge operations covered under the RGP, is included in Appendix B. Appendices C and D include Endangered Species Act and National Register of Historic Places Documentation, respectively. Appendix E provides the BWSC Permit Application to be submitted separately to the Boston Water and Sewer Commission. A copy of the groundwater testing laboratory data report for samples obtained by Haley & Aldrich is provided in Appendix F.

CLOSING

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

Sincerely yours,
HALEY & ALDRICH, INC.

P. Sandhya

Sandhya N. Potana
Assistant Staff Manager

Elliot I. Steinberg

Elliot I. Steinberg, P.E, LSP
Brownfields Program Manager | Vice President

Attachments:
Table I – Summary of Groundwater Quality Data

Figure 1 – Site Locus
Figure 2 – Site and Subsurface Exploration Location Plan
Figure 3 – Proposed Dewatering Effluent Discharge Route
Figure 4 – Proposed Treatment System Schematic
Appendix A – Notice of Intent (NOI) for Remediation General Permit (RGP)
Appendix B – Best Management Practices Plan (BMPP)
Appendix C – Endangered Species Act Documentation
Appendix D – National Register of Historic Places and Massachusetts Historical Commission Documentation
Appendix E – Copy of BWSC Permit Application
Appendix F – Laboratory Data Reports

c: FPC Hotel LLC; Attn: David Leatherwood; Yanni Tsipis

G:\34099\Parcel A\120- Final Design\NPDES RGP Permit\2013-1022-HAI- Parcel A NPDES RGP NOI.doc

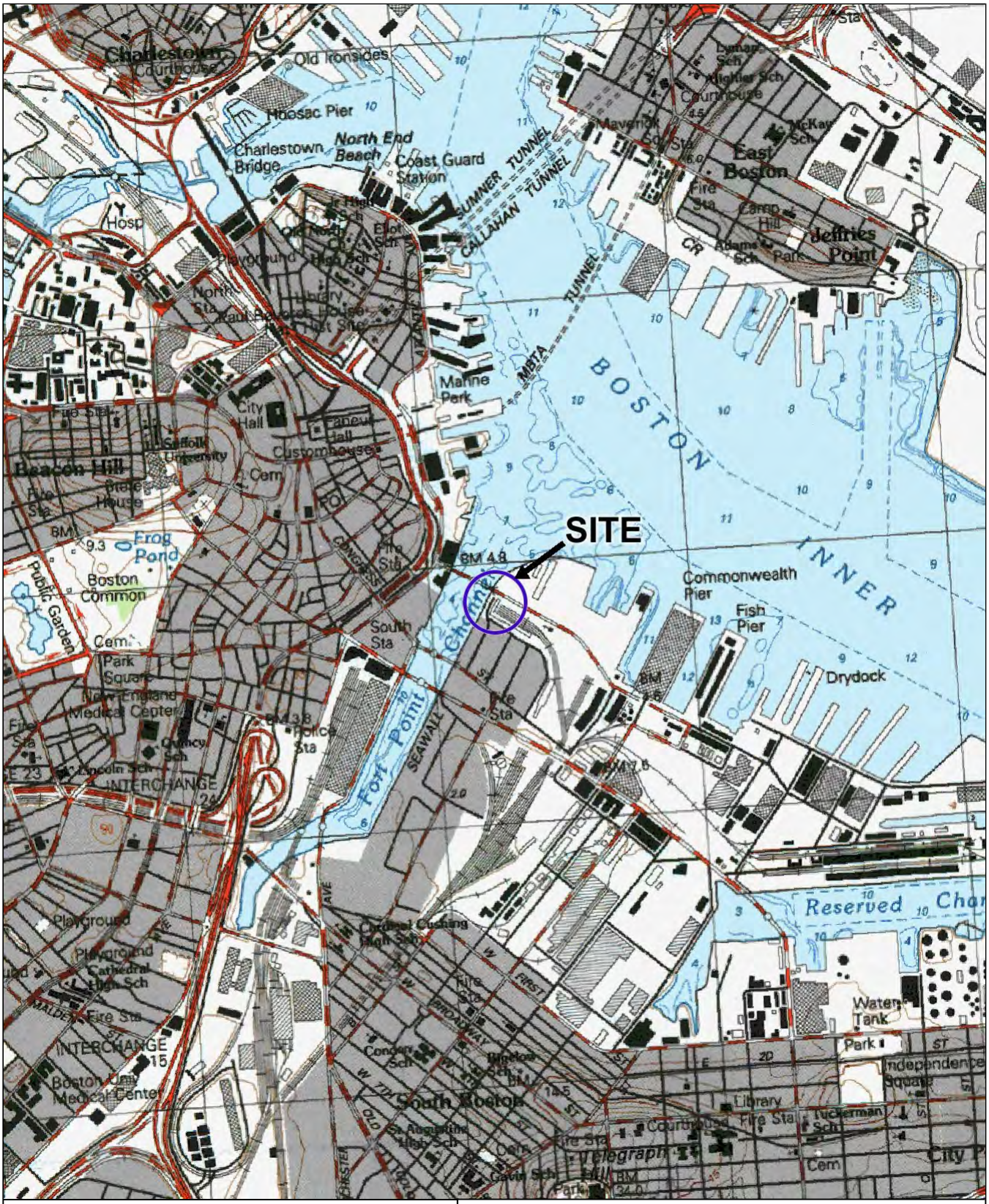
Table I

Summary of Groundwater Quality Data
Seaport Square - Parcel A
70 Sleeper Street
Boston, MA
File No. 34099-120

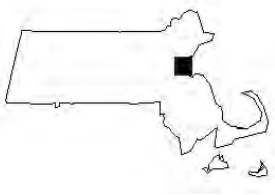
LOCATION SAMPLING DATE LAB SAMPLE ID	CAS NUMBER	MCP RCGW-2 Reportable Concentration (ug/l)	HA-A4 (OW) 8/14/2013 L1315768-01, R1	HA-A4 (OW) 8/15/2013 L1315924-01
VOCs by GC/MS (ug/l)				
Acetone	67-64-1	50000	27	-
Total VOCs	NA	NA	27	-
VOCs by GC/MS-SIM (ug/l)				
1,4-Dioxane	123-91-1	6000	ND(1.5)	-
SVOCs by GC/MS (ug/l)				
Total SVOCs	NA	ND	-	ND
SVOCs by GC/MS-SIM (ug/l)				
Total SVOCs	NA	NA	-	ND
Total Metals (ug/l)				
Antimony, Total	7440-36-0	8000	-	ND(5)
Arsenic, Total	7440-38-2	900	-	10.77
Cadmium, Total	7440-43-9	4	-	ND(1)
Chromium, Total	7440-47-3	300	-	ND(5)
Copper, Total	7440-50-8	100000	-	ND(5)
Iron, Total	7439-89-6	-	-	8500
Lead, Total	7439-92-1	10	-	ND(2.5)
Mercury, Total	7439-97-6	20	-	ND(0.1)
Nickel, Total	7440-02-0	200	-	9.8
Selenium, Total	7782-49-2	100	-	ND(25)
Silver, Total	7440-22-4	7	-	ND(2)
Zinc, Total	7440-66-6	900	-	ND(50)
			-	
Dissolved Metals (ug/l)				
Antimony, Dissolved	7440-36-0	8000	-	ND(5)
Arsenic, Dissolved	7440-38-2	900	-	ND(5)
Cadmium, Dissolved	7440-43-9	4	-	ND(1)
Chromium, Dissolved	7440-47-3	300	-	ND(5)
Copper, Dissolved	7440-50-8	100000	-	ND(5)
Iron, Dissolved	7439-89-6	-	-	2200
Lead, Dissolved	7439-92-1	10	-	ND(2.5)
Mercury, Dissolved	7439-97-6	20	-	ND(0.1)
Nickel, Dissolved	7440-02-0	200	-	ND(2.5)
Selenium, Dissolved	7782-49-2	100	-	ND(25)
Silver, Dissolved	7440-22-4	7	-	ND(2)
Zinc, Dissolved	7440-66-6	900	-	ND(50)
PCBs (ug/l)				
Aroclor 1016	12674-11-2	5	-	ND(0.125)
Aroclor 1221	11104-28-2	5	-	ND(0.125)
Aroclor 1232	11141-16-5	5	-	ND(0.125)
Aroclor 1242	53469-21-9	5	-	ND(0.125)
Aroclor 1248	12672-29-6	5	-	ND(0.125)
Aroclor 1254	11097-69-1	5	-	ND(0.125)
Aroclor 1260	11096-82-5	5	-	ND(0.1)
Total PCBs	NA	NA	-	ND
General Chemistry (ug/l)				
Solids, Total Suspended	NONE	-	-	110000
Cyanide, Total	57-12-5	30	ND(2.5)	-
Chlorine, Total Residual	NONE	-	ND(10)	-
TPH	NONE	5000	-	ND(2000)
Phenolics, Total	NONE	-	ND(15)	-
Chromium, Hexavalent	18540-29-9	300	ND(5)	-
Chloride	16887-00-6	-	2110000	-
Pesticides (ug/l)				
1,2-Dibromoethane	106-93-4	2	ND(0.005)	-

NOTES:

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



SITE COORDINATES:42°21'13"N 71°2'54"W



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

HALEY & ALDRICH

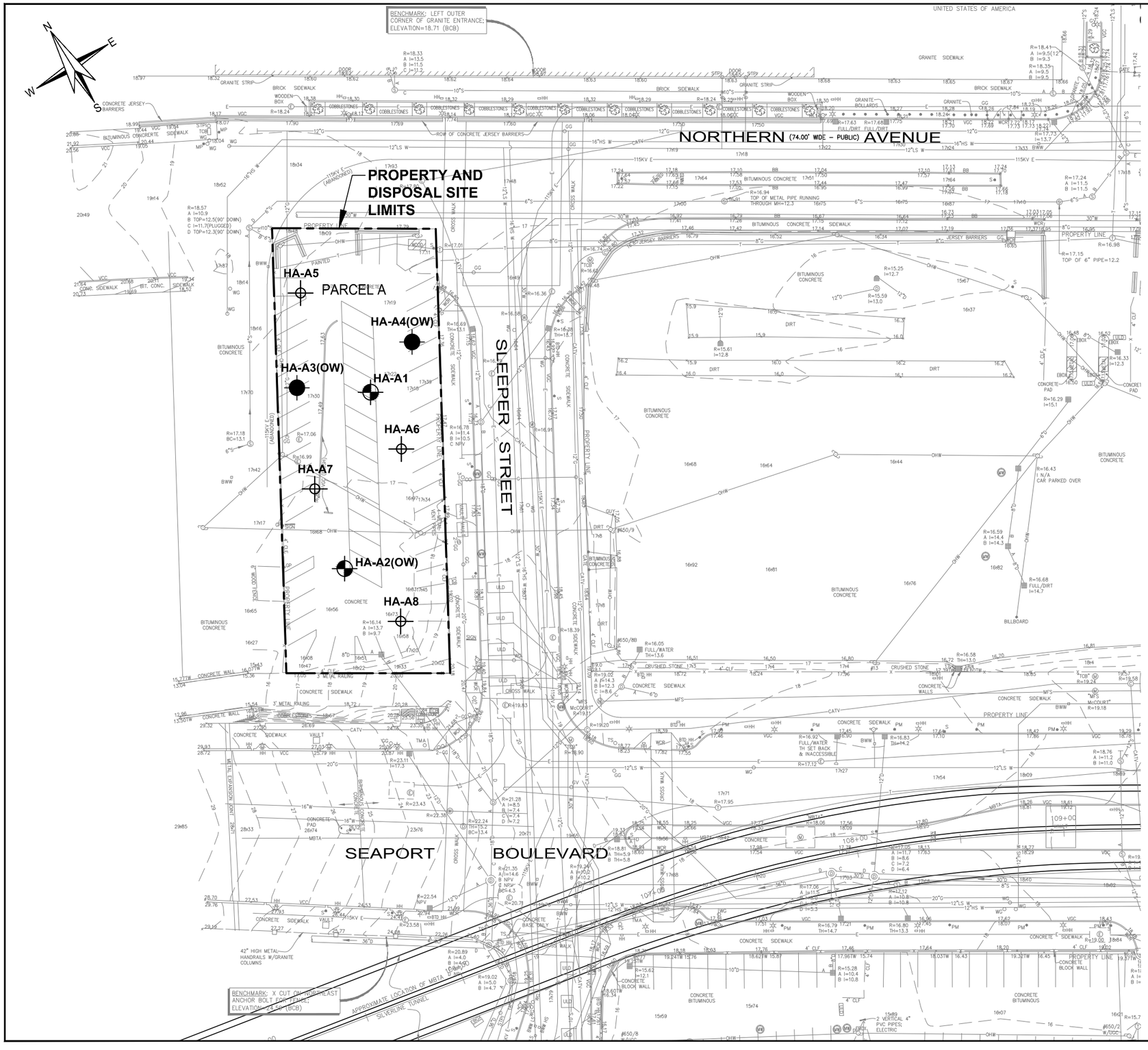
SEAPORT SQUARE - PARCEL A
70 SLEEPER STREET
SOUTH BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
SEPTEMBER 2013

FIGURE 1

34099-140 1.PDF



LEGEND:

HA-A5 — DESIGNATION AND APPROXIMATE LOCATION OF GEOPROBE EXPLORATION COMPLETED BY GEOPROBE EARTH EXPLORATIONS ON 13 SEPTEMBER 2013

HA-A3(OW) — DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING COMPLETED BY NEW HAMPSHIRE BORING ON 18 MARCH 2010

HA-A1 — DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING COMPLETED BY GEOLOGIC-EARTH EXPLORATION BETWEEN 11 AND 15 AUGUST 2008

(OW) — INDICATES GROUNDWATER OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE

NOTES:

1. BASE PLAN FROM ELECTRONIC FILE "6504_TOPO1_100307_04.dwg" PREPARED BY NITSCH ENGINEERING AND PROVIDED BY GALE INTERNATIONAL ON 20 JUNE 2008.
2. ELEVATIONS ARE IN FEET AND REFER TO BOSTON CITY BASE DATUM (BCB).
3. LOCATIONS OF TEST BORINGS WERE DETERMINED IN THE FIELD BY TAPING MEASUREMENTS FROM EXISTING SITE FEATURES AND SHOULD BE CONSIDERED APPROXIMATE.

0 50 100
SCALE IN FEET

HALEY & ALDRICH

SEAPORT SQUARE - PARCEL A
SOUTH BOSTON, MASSACHUSETTS

SITE AND SUBSURFACE EXPLORATION LOCATION PLAN

SCALE: AS SHOWN
SEPTEMBER 2013

FIGURE 2

J:\GRAPHICS\34099\34099-120-B084.DWG

GSO	GAS SHUT-OFF
WSO	WATER SHUT-OFF
GG	GAS GATE
WG	WATER GATE
	FIRE HYDRANT
DS	DOWN SPOUT
	UTILITY POLE
	LIGHT POLE
BTD HH	BOSTON TRAFFIC DEPARTMENT HAND HOLE
TC	TRASH CAN
FACB	FIRE ALARM CALL BOX
MP	METAL POST
PM	PARKING METER
S	SIGN POST
12"	DECIDUOUS TREE WITH TRUNK DIAMETER
12"	CONIFEROUS TREE WITH TRUNK DIAMETER
16x73	SPOT ELEVATION
ULD	LOOP DETECTOR
TCB	TRAFFIC CONTROL BOX
PED	PEDESTRIAN SIGNAL
TS	TRAFFIC SIGNAL
TMA	TRAFFIC SIGNAL-MAST ARM
CLF	CHAIN LINK FENCE
BB	BITUMINOUS BERM
VGC	VERTICAL GRANITE CURB
VCC	VERTICAL CONCRETE CURB
WCR	WHEELCHAIR RAMP
LST	LANDSCAPE TIMBER
CI=	CURB INLET ELEVATION EQUALS
RIM=	RIM ELEVATION EQUALS
INV=	INVERT ELEVATION EQUALS
TH=	TOP OF HOOD ELEVATION EQUALS
NPV	NO PIPES VISIBLE
TOP=	TOP OF PIPE ELEVATION EQUALS
BC=	BOTTOM OF CHAMBER ELEVATION EQUALS
TW	TOP OF WALL ELEVATION
MW	MONITORING WELL
MBTA	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
CATV	UNDERGROUND CABLE TELEVISION LINE
D	UNDERGROUND DRAIN LINE
E	UNDERGROUND ELECTRIC LINE
G	UNDERGROUND GAS LINE
MBTA	UNDERGROUND POWER LINE
MFS	UNDERGROUND FIBER OPTIC COMMUNICATIONS LINE
S	UNDERGROUND SEWER LINE
T	UNDERGROUND TELEPHONE LINE
W	UNDERGROUND WATER LINE
OHW	OVERHEAD WIRE

NOTES

1.) THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCH ENGINEERING. IT IS ISSUED TO GALE INTERNATIONAL FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCH ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH GALE INTERNATIONAL FOR BOSTON SEAPORT SQUARE. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCH ENGINEERING.

2.) HORIZONTAL COORDINATES REFER TO NORTH AMERICAN DATUM OF 1983 (NAD 83).

3.) ELEVATIONS REFER TO BOSTON CITY BASE (BCB).

4.) THE INFORMATION CONTAINED ON THE DISK OR ELECTRONIC DRAWING FILE ACCOMPANYING THIS PLAN MUST BE COMPARED TO THE SEALED AND SIGNED HARD COPY OF THE PLAN TO ENSURE THE ACCURACY OF ALL INFORMATION AND TO ENSURE NO CHANGES, ALTERATIONS, OR MODIFICATIONS HAVE BEEN MADE. RELIANCE SHALL NOT BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT ISSUED AT THE TIME OF THE SURVEY. DUE TO THE CRITICAL NATURE OF SURVEYING, DATA ACQUISITION, AND AUTOCAD PLAN DEVELOPMENT, IF CRITICAL DIMENSIONAL INFORMATION IS NEEDED AND IS NOT SPECIFICALLY SHOWN ON THE ELECTRONIC DRAWING FILE, PLEASE CONTACT NITSCH ENGINEERING.

5.) PROPERTY LINES SHOWN HEREON WERE TAKEN FROM PLANS PROVIDED BY GALE INTERNATIONAL AND THEY ARE NOT BASED ON ACTUAL FIELD SURVEY.

6.) THE LOCATION OF THE MBTA SILVERLINE TUNNEL SHOWN HEREON IS BASED ON THE RECORD MBTA EASEMENTS RECORDED IN BOOK 22786, PAGE 120 AND AS PLAN NO. 733 OF 2006 AND IS APPROXIMATE ONLY.

7.) UTILITIES SHOWN WITHIN SEAPORT BOULEVARD ARE BASED ON CONSTRUCTION AND NOT AS-BUILTS. THE LOCATIONS ARE APPROXIMATE ONLY.

UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANY'S, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.

2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.

3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.

4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.

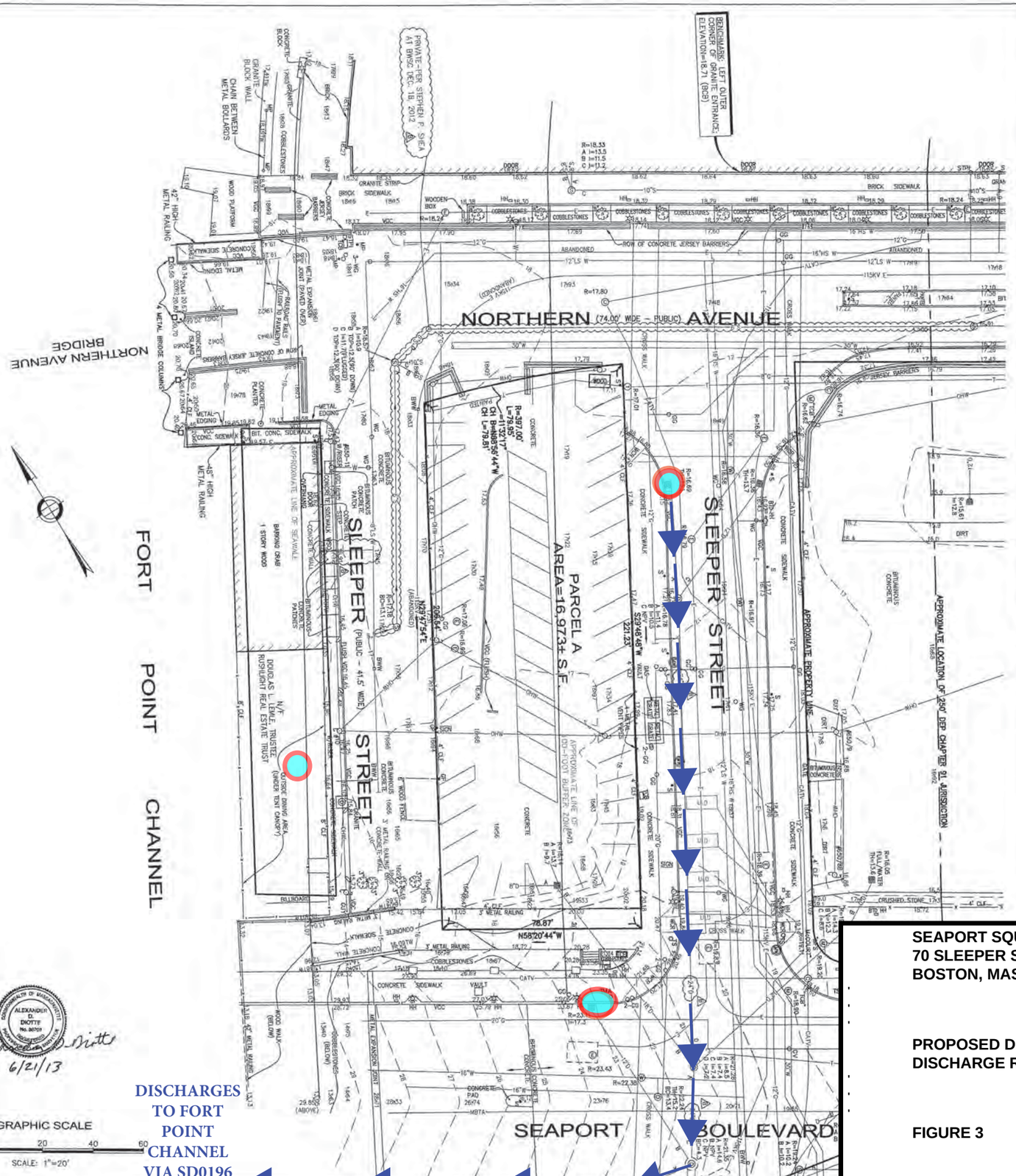
5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILING UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED, AND ACTUAL LOCATIONS.

6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS. THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.

7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.

COMMONWEALTH OF MASSACHUSETTS
ALEXANDER D. DIOTTE
No. 36709
REGISTERED PROFESSIONAL ENGINEER

6/21/13



GRAPHIC SCALE
20 10 0 20 40 60
SCALE: 1"=20'

PARCEL A SEAPORT SQUARE

66 SLEEPER STREET
BOSTON MA, 02210

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311 SUMMER STREET BOSTON, MA © 617.234.3100

ISSUANCES

No.	Description	Date
	100% DD	04/17/2013
	PERMIT SET	06/24/2013

SEAPORT SQUARE - PARCEL A
70 SLEEPER STREET
BOSTON, MASSACHUSETTS

PROPOSED DEWATERING DISCHARGE ROUTE

FIGURE 3

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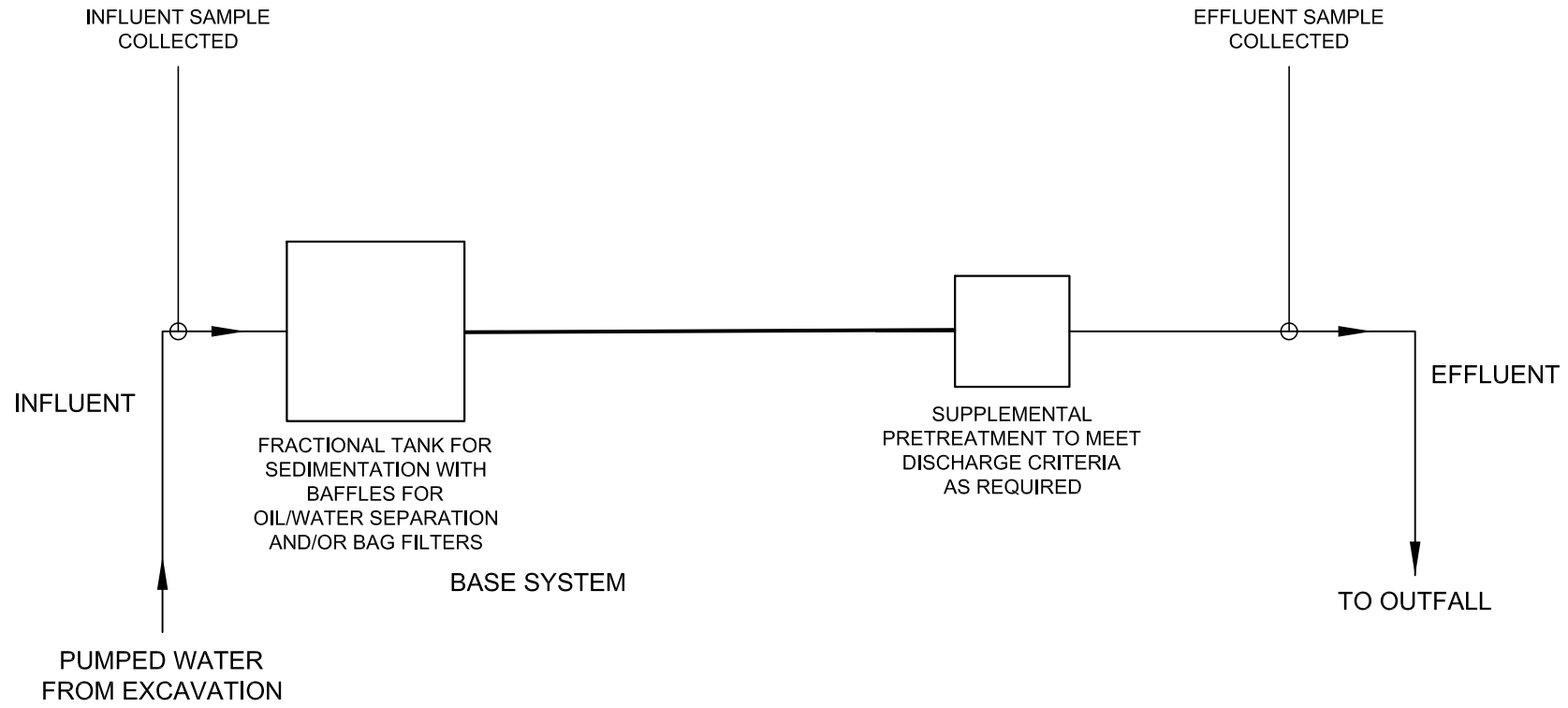


LEGEND:

DIRECTION OF FLOW

NOTE:

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

HALEY & ALDRICH

SEAPORT SQAURE - PARCEL A
70 SLEEPER STREET
SOUTH BOSTON, MASSACHUSETTS

PROPOSED TREATMENT SYSTEM SCHEMATIC

SCALE: NONE
OCTOBER 2013

FIGURE 3

Appendix A
Notice of Intent (NOI) for Remediation General Permit (RGP)

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**: Seaport Square - Parcel A		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 42.353600 latitude: -71.048386	Facility SIC code(s): NA	Street: 70 Sleeper Street		
b) Name of **facility/site owner:** FPC Hotel LLC		Town: South Boston		
Email address of facility/site owner: David Leatherwood		State: MA	Zip: 02210	County: Suffolk
Telephone no. of facility/site **owner**: 603-643-2206				
Fax no. of facility/site **owner**: 603-643-2209		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ⊙ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 10 Morgan Drive, Suite 1A				
Town: Lebanon	State: NH	Zip: 03766	County: Grafton	
c) Legal name of **operator**: Lee Kennedy Co.	**Operator** telephone no: 617-825-6930			
	Operator fax no.: 617-265-0815	**Operator** email: dlebiedz@leekennedy.com		
Operator contact name and title: Dan Lebiedz				
Address of **operator** (if different from owner):	Street: 122 Quincy Shore Drive			
Town: Quincy	State: MA	Zip: 02171	County: Norfolk	

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

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

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

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

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

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

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

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

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

Temporary Construction Dewatering

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: 0.223 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units): 0.1 Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 42.35280 long. -71.048656 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): NA

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

c) Expected dates of discharge (mm/dd/yy): start: November 1, 2013 end: Dec 31, 2014

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See Figures 3 & 4

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	Grab	32,2540D	5000	110000		110000	
2. Total Residual Chlorine (TRC)		☒	☐	1	Grab	30,4500CL-D	20	ND		ND	
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	Grab	74,1664A	4000	ND		ND	
4. Cyanide (CN)	57125	☒	☐	1	Grab	30,4500CN-CE	5	ND		ND	
5. Benzene (B)	71432	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
6. Toluene (T)	108883	☒	☐	1	Grab	1,8260B	0.75	ND		ND	
7. Ethylbenzene (E)	100414	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Grab	1,8260B	1.0	ND		ND	
9. Total BTEX [2]	n/a	☒	☐	1	Grab	NA	NA	ND		ND	
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	Grab	1,8260B	2.0	ND		ND	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	Grab	1,8260B	1.0	ND		ND	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Grab	1,8260B	2.0	ND		ND	

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Grab	1,8260B	2	ND		ND	
14. Naphthalene	91203	☒	☐	1	Grab	1,8260B	2.5	ND		ND	
15. Carbon Tetrachloride	56235	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	Grab	97,8270D	2	ND		ND	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	Grab	97,8270D	2	ND		ND	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	Grab	97,8270D	2	ND		ND	
18a. Total dichlorobenzene		☒	☐	1	Grab	97,8270D	NA	ND		ND	
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	Grab	1,8260B	0.75	ND		ND	
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
23. Methylene Chloride	75092	☒	☐	1	Grab	1,8260B	3	ND		ND	
24. Tetrachloroethene (PCE)	127184	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	Grab	1,8260B	0.5	ND		ND	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	Grab	1,8260B	0.75	ND		ND	
27. Trichloroethene (TCE)	79016	☒	☐	1	Grab	1,8260B	0.5	ND		ND	

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	Grab	1,8260B	1	ND		ND	
29. Acetone	67641	☐	☒	1	Grab	1,8260B	5	27		27	
30. 1,4 Dioxane	123911	☒	☐	1	Grab	1,8260B(M)	3	ND		ND	
31. Total Phenols	108952	☒	☐	1	Grab	1,8270C	NA	ND		ND	
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Grab	1,8270C-SIM	0.8	ND		ND	
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	Grab	1,8270C	NA	ND		ND	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	Grab	1,8270C	3.0	ND		ND	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	NA	NA	ND		ND	
a. Benzo(a) Anthracene	56553	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
b. Benzo(a) Pyrene	50328	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
c. Benzo(b)Fluoranthene	205992	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
d. Benzo(k)Fluoranthene	207089	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
e. Chrysene	21801	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	NA	NA	ND		ND	

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
i. Acenaphthylene	208968	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
j. Anthracene	120127	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
k. Benzo(ghi) Perylene	191242	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
l. Fluoranthene	206440	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
m. Fluorene	86737	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
n. Naphthalene	91203	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
o. Phenanthrene	85018	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
p. Pyrene	129000	☒	☐	1	Grab	1,8270C-SIM	0.2	ND		ND	
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	Grab	5,608	0.250	ND		ND	
38. Chloride	16887006	☐	☒	1	Grab	44,300.0	25000	2110000		2110000	
39. Antimony	7440360	☒	☐	1	Grab	1,6020	0.5	ND		ND	
40. Arsenic	7440382	☒	☐	1	Grab	1,6020	0.5	ND		ND	
41. Cadmium	7440439	☒	☐	1	Grab	1,6020	0.2	ND		ND	
42. Chromium III (trivalent)	16065831	☒	☐	1	Grab	1,6020	1	ND		ND	
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Grab	30,3500CR-D	10	ND		ND	
44. Copper	7440508	☒	☐	1	Grab	1,6020	1	ND		ND	
45. Lead	7439921	☒	☐	1	Grab	3,245.1	0.5	ND		ND	
46. Mercury	7439976	☒	☐	1	Grab	1,6020	0.2	ND		ND	
47. Nickel	7440020	☒	☐	1	Grab	1,6020	0.5	ND		ND	
48. Selenium	7782492	☒	☐	1	Grab	1,6020	5	ND		ND	
49. Silver	7440224	☒	☐	1	Grab	1,6020	0.4	ND		ND	
50. Zinc	7440666	☒	☐	1	Grab	1,6020	10	ND		ND	
51. Iron	7439896	☐	☒	1	Grab	19,200.7	50	2200		2200	
Other (describe):		☐	☐								

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: iron DF: 0-5 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:

See attached Figure 4

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):	Ion Exchange, Oil/Water Separator, or GAC Filter, if required		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 50 gpm Maximum flow rate of treatment system 100 gpm
Design flow rate of treatment system 100 gpm

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

NA

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

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

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Effluent will be discharged to storm drains which discharge to Fort Point Channel.

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 Please see attachment 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)?
Fecal Coliform; PCBs in fish tissue

Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)?

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.

See attachments

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:	Seaport Square - Parcel A; OPERATOR - Lee Kennedy Co.
Operator signature:	
Printed Name &Title:	Dan Lebiedz PROJECT EXECUTIVE
Date:	

Appendix B
Best Management Practices Plan (BMPP)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDIATION GENERAL PERMIT
SEAPORT SQUARE – PARCEL A
70 SLEEPER STREET
BOSTON, MASSACHUSETTS

Best Management Practices Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering planned to occur at the 70 Sleeper Street project site located in South Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Prior to discharge, collected water will be routed through sedimentation tank and bag filters (if needed), to remove suspended solids and un-dissolved chemical constituents. Construction dewatering under this RGP NOI will include piping and discharging to storm drains located within and near the site. The storm drains travel to the west of the site, ultimately discharging into Fort Point Channel. Dewatering effluent treatment may consist of bag filters, granular activated carbon (GAC), ion exchange, or precipitation, as required.

Discharge Monitoring and Compliance

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

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

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

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

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the sedimentation tanks, filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

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

Miscellaneous Items

The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse effects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Fort Point Channel. Dewatering effluent will be pumped to a sedimentation tank, at a minimum, prior to discharge to the storm drains.

Management of Treatment System Materials

Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment from the sedimentation tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. If used, granular activated carbon and/or ion exchange resin may be recycled and/or removed from the site to an appropriate receiving facility. Bag filters, if used, will be disposed of as necessary.

Appendix C
Endangered Species Act Documentation

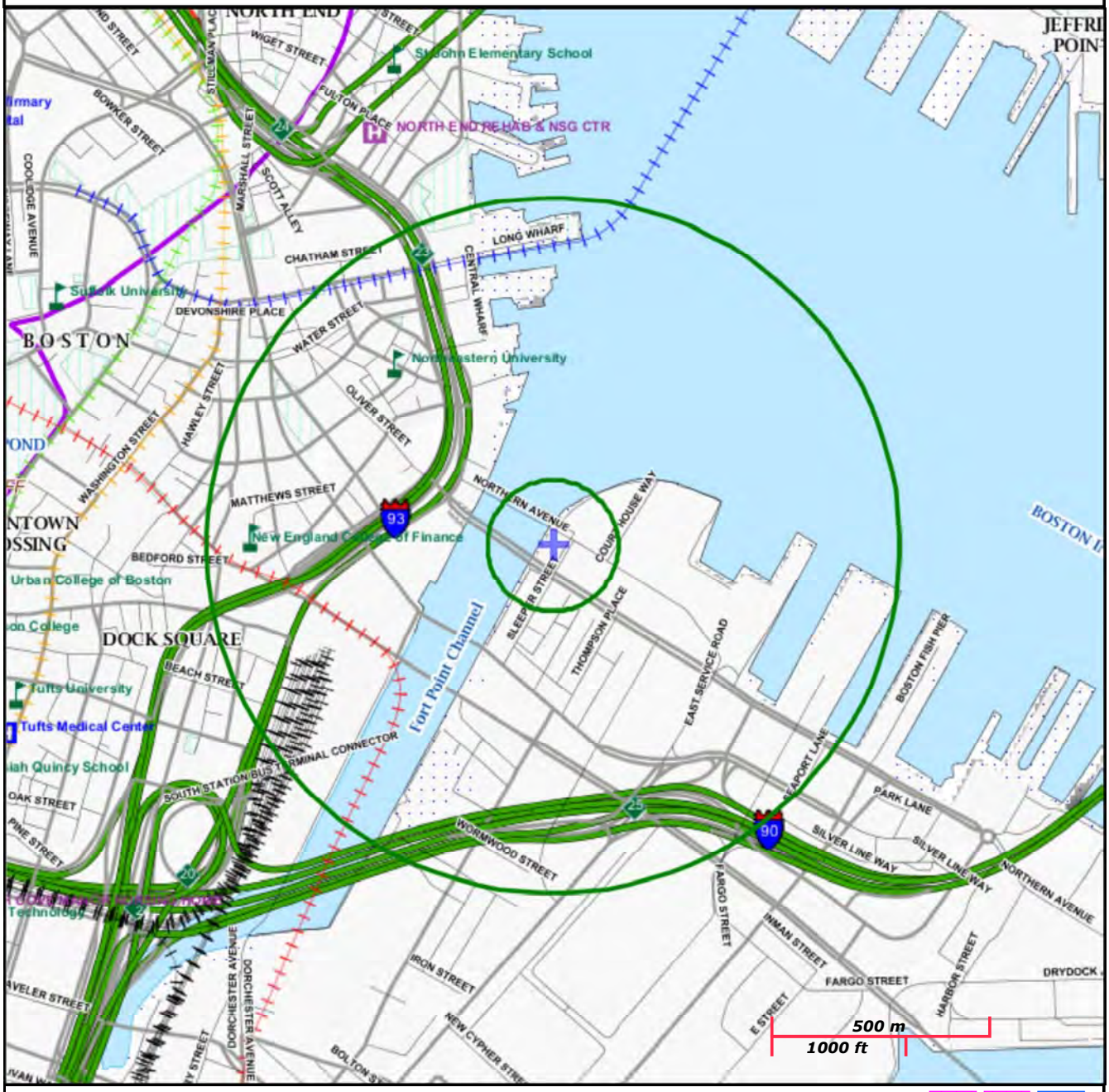
MassDEP - Bureau of Waste Site Cleanup

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

Site Information:
SEAPORT SQUARE - PARCEL A
70 SLEEPER STREET BOSTON, MA
3-000028572
NAD83 UTM Meters:
5214116mN , -7909072mE (Zone: 18)
September 18, 2013

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately repsponsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

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

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

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

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

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

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

Ellisville Harbor
(600 acres, 1980) Plymouth

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

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

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

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

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

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

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

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

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

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

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

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

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

Pocasset River
(160 acres, 1980) Bourne

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

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

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

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

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

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

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

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

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

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

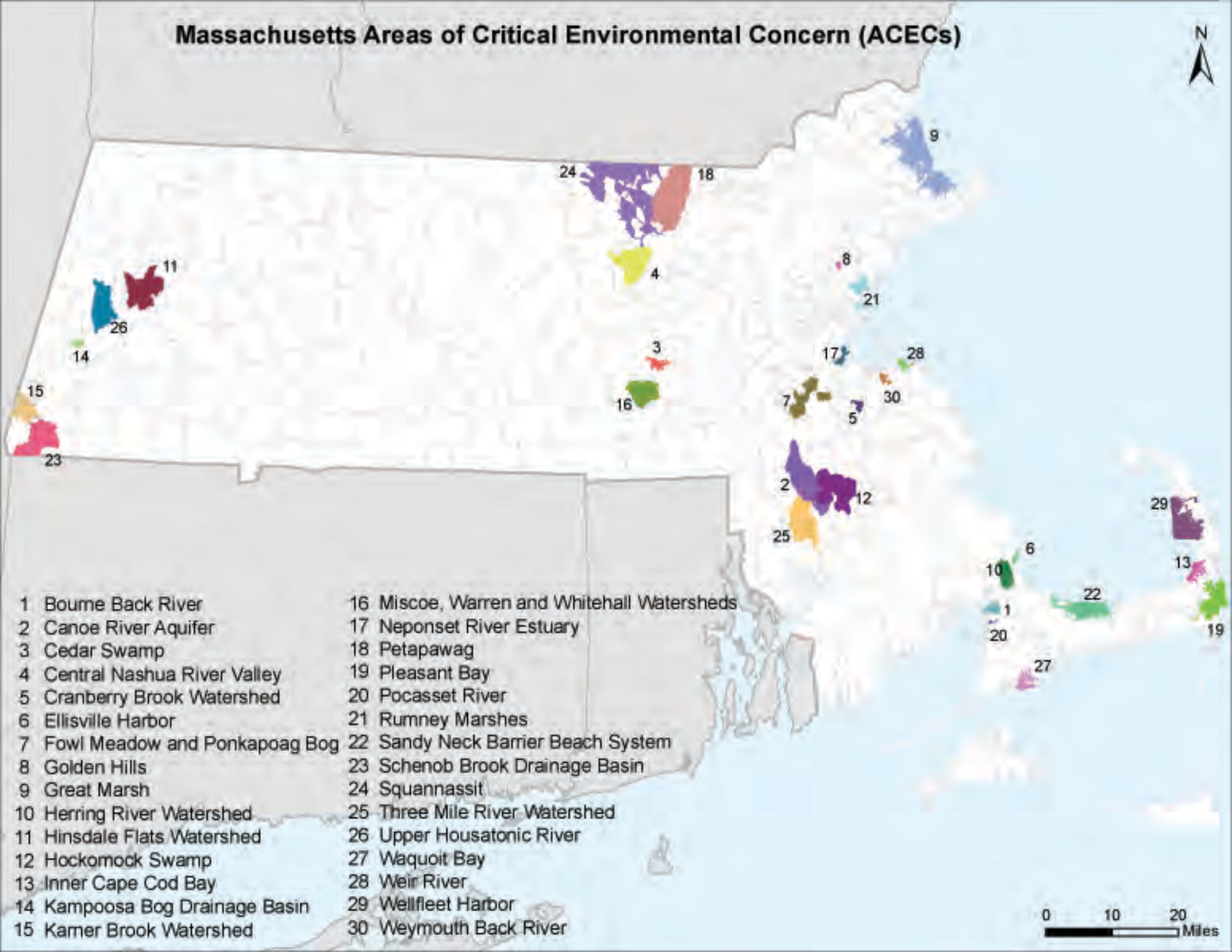
ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether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

Towns with ACECs within their Boundaries — November 2010

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

.

Massachusetts Areas of Critical Environmental Concern (ACECs)



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

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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

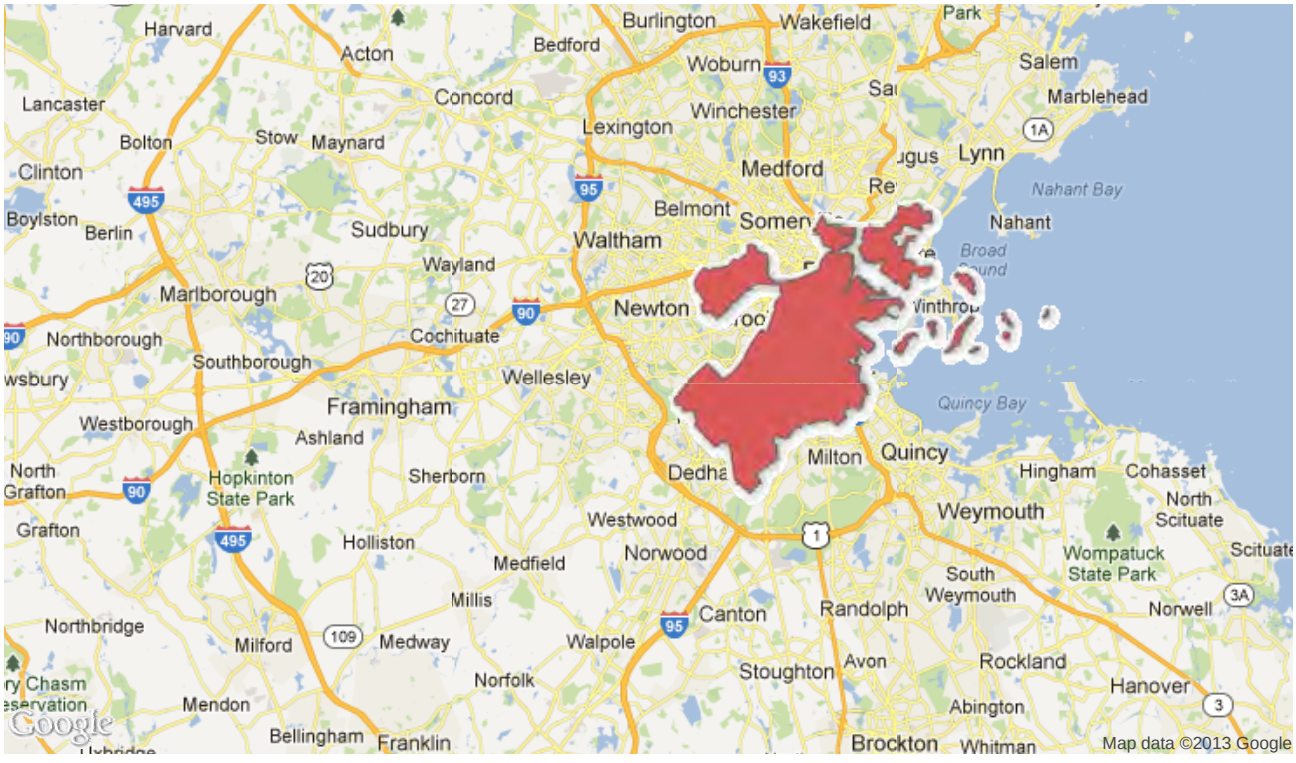
Revised 10/7/2011

Rare Species by Town

The Natural Heritage & Endangered Species Program maintains a list of all documented MESA-listed species observations in the Commonwealth. Please select a town if you would like to see a table showing which listed species have been observed in that town. The selected town will also be highlighted on the map. Alternatively you can specify either the Common Name or Scientific Name of a species to see it's distribution on the map and table showing the towns it has been observed in. Clicking on a column header in the table will sort the column. Clicking again on the same column heading will reverse the sort order.

The Town List and Species Viewer will be updated at regular intervals as new data is accepted and entered into the NHESP database.

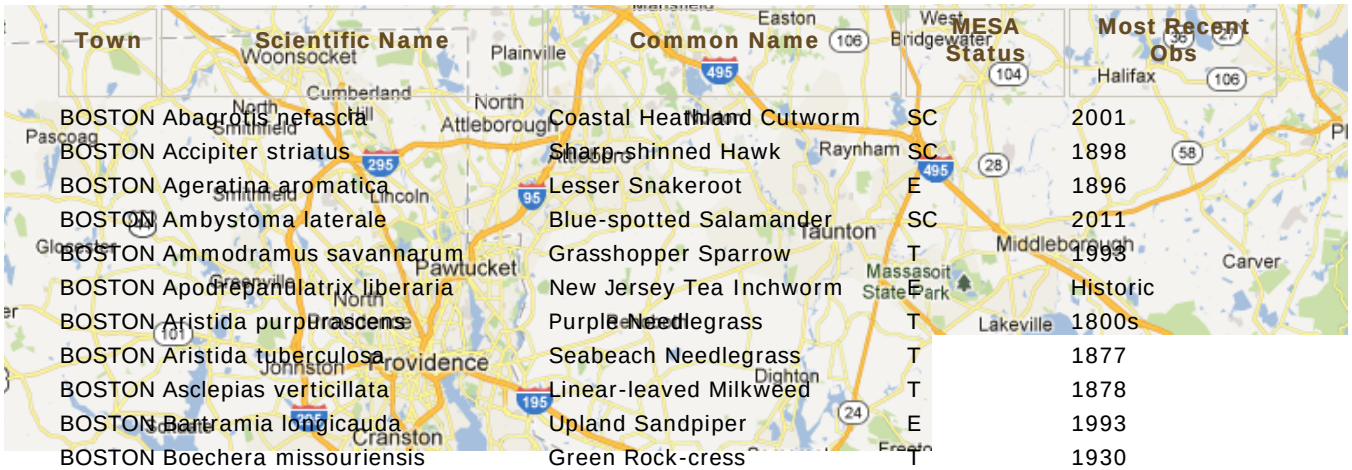
Town: BOSTON or Species (Common Name): or Species (Scientific Name):



Download data as xls or csv file.

Showing 1 to 46 of 46 entries Search:

First Previous 1 Next Last



Town	Scientific Name	Common Name	MESA Status	Most Recent Obs
BOSTON	Abagrotis nefascia	Coastal Heathland Cutworm	SC	2001
BOSTON	Accipiter striatus	Sharp-shinned Hawk	SC	1898
BOSTON	Ageratina aromatica	Lesser Snakeroot	E	1896
BOSTON	Ambystoma laterale	Blue-spotted Salamander	SC	2011
BOSTON	Ammodramus savannarum	Grasshopper Sparrow	T	1993
BOSTON	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E	Historic
BOSTON	Aristida purpurascens	Purple Needlegrass	T	1800s
BOSTON	Aristida tuberculosa	Seabeach Needlegrass	T	1877
BOSTON	Asclepias verticillata	Linear-leaved Milkweed	T	1878
BOSTON	Bartramia longicauda	Upland Sandpiper	E	1993
BOSTON	Boechera missouriensis	Green Rock-cress	T	1930
BOSTON	Carex striata	Walter's Sedge	E	Historic
BOSTON	Charadrius melodus	Piping Plover	T	2011
BOSTON	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC	1910
BOSTON	Cicindela purpurea	Cow Path Tiger Beetle	SC	1928
BOSTON	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	T	1927
BOSTON	Desmodium cuspidatum	Large-bracted Tick-trefoil	T	1896
BOSTON	Eriophorum gracile	Slender Cottongrass	T	1885
BOSTON	Falco peregrinus	Peregrine Falcon	E	2010
BOSTON	Gasterosteus aculeatus	Threespine Stickleback	T	2000
BOSTON	Gavia immer	Common Loon	SC	1824
BOSTON	Houstonia longifolia	Long-leaved Bluet	E	1918
BOSTON	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1933
BOSTON	Ligumia nasuta	Eastern Pondmussel	SC	1841
BOSTON	Linum medium var. texanum	Rigid Flax	T	1909
BOSTON	Lycopus rubellus	Gypsywort	E	1896
BOSTON	Metarranthis apiciaria	Barrens Metarranthis	E	1934
BOSTON	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E	Historic
BOSTON	Ophioglossum pusillum	Adder's-tongue Fern	T	1884
BOSTON	Platanthera flava var. herbiola	Pale Green Orchis	T	1908
BOSTON	Pooecetes gramineus	Vesper Sparrow	T	1985
BOSTON	Pyrrhia aurantiago	Orange Sallow Moth	SC	1988
BOSTON	Ranunculus micranthus	Tiny-flowered Buttercup	E	1891
BOSTON	Rumex pallidus	Seabeach Dock	T	1984
BOSTON	Sanicula odorata	Long-styled Sanicle	T	Historic
BOSTON	Scaphiopus holbrookii	Eastern Spadefoot	T	1932
BOSTON	Scirpus longii	Long's Bulrush	T	1907
BOSTON	Setaria parviflora	Bristly Foxtail	SC	2001
BOSTON	Somatochlora linearis	Mocha Emerald	SC	2009
BOSTON	Sterna hirundo	Common Tern	SC	2010
BOSTON	Sternula antillarum	Least Tern	SC	2010
BOSTON	Suaeda calceoliformis	American Sea-blite	SC	1909
BOSTON	Terrapene carolina	Eastern Box Turtle	SC	1939
BOSTON	Tyto alba	Barn Owl	SC	1989
BOSTON	Vermivora chrysoptera	Golden-winged Warbler	E	Historic
BOSTON	Viola brittoniana	Britton's Violet	T	1909

Show 100 entries

Hide Additional Info

Status

- 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.

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

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

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 7, 2013

To Whom It May Concern:

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

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

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

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

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Appendix D
National Register of Historic Places and
Massachusetts Historical Commission Documentation

Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Cultural Resource Information System

MACRIS

Scanned forms and photos now available for selected towns!

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

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

Click here to begin your search of the MACRIS database.

Massachusetts Cultural Resource Information Syste
MACRIS

Results

Get Results in Report Format
PDF Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): Boston
Place: South Boston
Street Name: Sleeper
Resource Type(s): Area, Building, Object, Structure, Burial Ground

For more information about this page and how to use it, click here

Inv. No.	Property Name	Street	Town	Year		
BOS.5561	Boston Wharf Company Building	15-21 Sleeper St	Boston	1911		
BOS.5562	Boston Wharf Company Building	29-31 Sleeper St	Boston	1915		
BOS.5563	Boston Wharf Company Building	35-37 Sleeper St	Boston	1911		
BOS.5564	United Shoe Machine Corporation	51 Sleeper St	Boston	1929		

4 Properties Found

New Search | New Search – Same Town(s) | Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
MACRIS

For more information about this page and how to use it, click here.

Inventory No:	BOS.5561
Historic Name:	Boston Wharf Company Building
Common Name:	
Address:	15-21 Sleeper St
City/Town:	Boston
Village/Neighborhood:	Fort Point Channel; South Boston
Local No:	602669005-68
Year Constructed:	1911
Architect(s):	
Architectural Style(s):	Classical Revival
Use(s):	Other Industrial; Undetermined
Significance:	Architecture; Industry
Area(s):	BOS.CX: Fort Point Channel District NR BOS.WZ: Fort Point Channel Historic District BOS.ZG: Fort Point Channel Landmark District <="">
Designation(s):	Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

New Search Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
MACRIS

Inventory No:	BOS.5562
Historic Name:	Boston Wharf Company Building
Common Name:	
Address:	29-31 Sleeper St
City/Town:	Boston
Village/Neighborhood:	Fort Point Channel; South Boston
Local No:	602669005
Year Constructed:	1915
Architect(s):	
Architectural Style(s):	Classical Revival
Use(s):	Undetermined; Warehouse
Significance:	Architecture; Industry
Area(s):	BOS.CX: Fort Point Channel District NR BOS.WZ: Fort Point Channel Historic District BOS.ZG: Fort Point Channel Landmark District <="">
Designation(s):	Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

New Search Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
MACRIS

Inventory No:	BOS.5563
Historic Name:	Boston Wharf Company Building
Common Name:	
Address:	35-37 Sleeper St
City/Town:	Boston
Village/Neighborhood:	Fort Point Channel; South Boston
Local No:	602669092-206
Year Constructed:	1911
Architect(s):	
Architectural Style(s):	Classical Revival
Use(s):	Undetermined; Warehouse
Significance:	Architecture; Industry
Area(s):	BOS.CX: Fort Point Channel District NR BOS.WZ: Fort Point Channel Historic District BOS.ZG: Fort Point Channel Landmark District <="">
Designation(s):	Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

New Search Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
MACRIS

For more information about this page and how to use it, click here.

Inventory No:	BOS.5564
Historic Name:	United Shoe Machine Corporation
Common Name:	Boston Wharf Company Building
Address:	51 Sleeper St
City/Town:	Boston
Village/Neighborhood:	Fort Point Channel; South Boston
Local No:	602670000
Year Constructed:	1929
Architect(s):	
Architectural Style(s):	Altered beyond recognition
Use(s):	Other Industrial; Undetermined
Significance:	Architecture; Industry
Area(s):	BOS.CX: Fort Point Channel District NR BOS.WZ: Fort Point Channel Historic District BOS.ZG: Fort Point Channel Landmark District <="">
Designation(s):	Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

New Search Previous

MHC Home | MACRIS Home

nps.gov

National Park Service
U.S. Department of the Interior

National Register of Historic Places

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Nature & Science
Education & Interpretation

TITLE LIST DISPLAY

From: NPS Digital Library
Term(s) Searched: Massachusetts and Suffolk and South Boston
Records Displayed: 1 to 1 of 1

Go back to: Revise Search

Sort By: **Title** | Relevancy | Modified

- US Post Office Garage *[Image]* 7%

Prev | 1 | Next

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U.S. Department of the Interior

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FULL RECORD DISPLAY

Current Record: 1 of 1 in NPS Digital Library

Go back to: Title List | Revise Search

Choose format:
JPG | DjVu

For advanced viewing install **DjVu browser plugin**.

1. Choose the option for Autoinstallation
2. takes about 20 seconds
3. About DjVu and plugin help

Begin DjVu install

Choose format:
JPG | DjVu

For advanced viewing install **DjVu browser plugin**.

1. Choose the option for Autoinstallation
2. takes about 20 seconds
3. About DjVu and plugin help

Begin DjVu install

US Post Office Garage [Image]

URL: http://pdfhost.focus.nps.gov/docs/NRHP/Text/86001378.pdf
Link will open in a new browser window

URL: http://pdfhost.focus.nps.gov/docs/NRHP/Photos/86001378.pdf
Link will open in a new browser window

Publisher: National Park Service

Published: 06/26/1986

Access: Public access

Restrictions: All Rights Reserved

Format/Size: Physical document with text, photos and map

Language: eng: English

Note: 135 A St.

Item No.: 86001378 *NRIS (National Register Information System)*

Subject: ARCHITECTURE/ENGINEERING

Subject: ARCHITECTURE

Subject: INTERNATIONAL STYLE

Subject: BUILDING

Subject: 1925-1949

Keywords: Underwood,Gilbert Stanley;Grade & Volpe,Inc.;1940;1941

Place: MASSACHUSETTS -- Suffolk County -- South Boston

Record Number: 403342

Record Owner: National Register of Historic Places

Appendix E
Copy of BWSC Permit Application

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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Lee Kennedy Co. Address: 122 Quincy Shore Drive, Quincy, MA 02171

Phone number: 617-825-6930 Fax number: 617-265-0815

Contact person name: Dan Lebiedz Title: Project Executive

Cell number: 617-825-6930 Email address: dlebiedz@leekennedy.com

Permit Request (check one): [X] New Application ☐ Permit Extension ☐ Other (Specify):_____

Owner's Information (if different from above):

Owner of property being dewatered: FPC Hotel LLC

Owner's mailing address: 10 Morgan Drive, Suite 1A, Lebanon, NH Phone number: 603-643-2206

Location of Discharge & Proposed Treatment System(s):

Street number and name: 70 Sleeper Street Neighborhood South Boston

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

Describe Proposed Pre-Treatment System(s): Sedimentation Tank and bag filters (if required)

BWSC Outfall No. SDO196 Receiving Waters Fort Point Channel

Temporary Discharges (Provide Anticipated Dates of Discharge): From _____ To_____

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

Permanent Discharges

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

---

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

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

BWSC Use Only: Date Received _____ Comments: _____

Appendix F
Laboratory Data Reports

ANALYTICAL REPORT

Lab Number:	L1315768
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Mark Balfe
Phone:	(617) 886-7304
Project Name:	SEAPORT SQUARE PARCEL A
Project Number:	34099-120
Report Date:	08/21/13

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

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

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315768
Report Date: 08/21/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1315768-01	HA-A4 (OW)	BOSTON	08/14/13 13:20

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315768
Project Number:	34099-120	**Report Date:**	08/21/13

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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

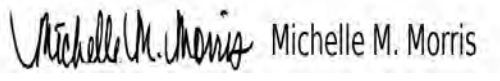
Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

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

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:  Michelle M. Morris

Title: Technical Director/Representative Date: 08/21/13

ORGANICS

VOLATILES

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

SAMPLE RESULTS

Lab ID: L1315768-01
Client ID: HA-A4 (OW)
Sample Location: BOSTON
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/13 14:56
Analyst: PD

Date Collected: 08/14/13 13:20
Date Received: 08/14/13
Field Prep: Not Specified

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

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

SAMPLE RESULTS

Lab ID: L1315768-01 Date Collected: 08/14/13 13:20

Client ID: HA-A4 (OW) Date Received: 08/14/13

Sample Location: BOSTON Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	27		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

SAMPLE RESULTS

Lab ID: L1315768-01 Date Collected: 08/14/13 13:20

Client ID: HA-A4 (OW) Date Received: 08/14/13

Sample Location: BOSTON Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

SAMPLE RESULTS

Lab ID:	L1315768-01	Date Collected:	08/14/13 13:20
Client ID:	HA-A4 (OW)	Date Received:	08/14/13
Sample Location:	BOSTON	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	08/21/13 09:27		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

SAMPLE RESULTS

Lab ID:	L1315768-01	Date Collected:	08/14/13 13:20
Client ID:	HA-A4 (OW)	Date Received:	08/14/13
Sample Location:	BOSTON	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	08/19/13 11:00
Analytical Date:	08/19/13 13:26		
Analyst:	SH		

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

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315768
Report Date: 08/21/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 08/19/13 11:33
Analyst: SH
Extraction Date: 08/19/13 11:00

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG629879-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/13 13:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG630283-3					
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: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/13 13:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG630283-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315768

Project Number: 34099-120 **Report Date:** 08/21/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/13 13:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG630283-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	95		70-130

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315768
Report Date: 08/21/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 08/21/13 06:15
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG630428-3					
1,4-Dioxane	ND		ug/l	3.0	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG629879-2								
1,2-Dibromoethane	125		-		70-130	-		20
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG630283-1 WG630283-2								
Methylene chloride	113		101		70-130	11		20
1,1-Dichloroethane	117		101		70-130	15		20
Chloroform	115		99		70-130	15		20
Carbon tetrachloride	119		104		63-132	13		20
1,2-Dichloropropane	114		101		70-130	12		20
Dibromochloromethane	100		99		63-130	1		20
1,1,2-Trichloroethane	96		98		70-130	2		20
Tetrachloroethene	115		101		70-130	13		20
Chlorobenzene	110		99		75-130	11		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

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: WG630283-1 WG630283-2								
Trichlorofluoromethane	109		94		62-150	15		20
1,2-Dichloroethane	91		87		70-130	4		20
1,1,1-Trichloroethane	116		99		67-130	16		20
Bromodichloromethane	104		93		67-130	11		20
trans-1,3-Dichloropropene	104		102		70-130	2		20
cis-1,3-Dichloropropene	109		98		70-130	11		20
1,1-Dichloropropene	120		103		70-130	15		20
Bromoform	88		99		54-136	12		20
1,1,2,2-Tetrachloroethane	82		96		67-130	16		20
Benzene	122		105		70-130	15		25
Toluene	118		104		70-130	13		25
Ethylbenzene	112		99		70-130	12		20
Chloromethane	95		87		64-130	9		20
Bromomethane	44		39		39-139	12		20
Vinyl chloride	98		86		55-140	13		20
Chloroethane	100		86		55-138	15		20
1,1-Dichloroethene	127		107		61-145	17		25
trans-1,2-Dichloroethene	126		107		70-130	16		20
Trichloroethene	120		100		70-130	18		25
1,2-Dichlorobenzene	97		99		70-130	2		20
1,3-Dichlorobenzene	103		100		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

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: WG630283-1 WG630283-2								
1,4-Dichlorobenzene	98		97		70-130	1		20
Methyl tert butyl ether	103		104		63-130	1		20
p/m-Xylene	112		99		70-130	12		20
o-Xylene	109		96		70-130	13		20
cis-1,2-Dichloroethene	122		103		70-130	17		20
Dibromomethane	97		95		70-130	2		20
1,4-Dichlorobutane	86		96		70-130	11		20
1,2,3-Trichloropropane	87		103		64-130	17		20
Styrene	108		96		70-130	12		20
Dichlorodifluoromethane	98		84		36-147	15		20
Acetone	112		102		58-148	9		20
Carbon disulfide	123		104		51-130	17		20
2-Butanone	118		123		63-138	4		20
Vinyl acetate	94		97		70-130	3		20
4-Methyl-2-pentanone	81		90		59-130	11		20
2-Hexanone	82		91		57-130	10		20
Ethyl methacrylate	91		96		70-130	5		20
Acrylonitrile	96		110		70-130	14		20
Bromochloromethane	117		106		70-130	10		20
Tetrahydrofuran	82		94		58-130	14		20
2,2-Dichloropropane	127		108		63-133	16		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

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: WG630283-1 WG630283-2								
1,2-Dibromoethane	94		97		70-130	3		20
1,3-Dichloropropane	97		99		70-130	2		20
1,1,1,2-Tetrachloroethane	108		100		64-130	8		20
Bromobenzene	98		94		70-130	4		20
n-Butylbenzene	102		98		53-136	4		20
sec-Butylbenzene	105		100		70-130	5		20
tert-Butylbenzene	104		99		70-130	5		20
o-Chlorotoluene	106		101		70-130	5		20
p-Chlorotoluene	101		96		70-130	5		20
1,2-Dibromo-3-chloropropane	85		92		41-144	8		20
Hexachlorobutadiene	111		107		63-130	4		20
Isopropylbenzene	104		97		70-130	7		20
p-Isopropyltoluene	107		102		70-130	5		20
Naphthalene	84		106		70-130	**23**	Q	20
n-Propylbenzene	102		95		69-130	7		20
1,2,3-Trichlorobenzene	91		105		70-130	14		20
1,2,4-Trichlorobenzene	96		104		70-130	8		20
1,3,5-Trimethylbenzene	105		100		64-130	5		20
1,2,4-Trimethylbenzene	104		100		70-130	4		20
trans-1,4-Dichloro-2-butene	**68**	Q	79		70-130	15		20
Ethyl ether	111		107		59-134	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

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: WG630283-1 WG630283-2								
Tert-Butyl Alcohol	81		98		70-130	19		20
Tertiary-Amyl Methyl Ether	100		100		66-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	81		85		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	107		97		70-130
Dibromofluoromethane	96		98		70-130

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG630428-1 WG630428-2								
1,4-Dioxane	118		102		70-130	15		25

Matrix Spike Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629879-3 QC Sample: L1315767-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.25	0.322	129		-	-		70-130	-		20

INORGANICS
&
MISCELLANEOUS

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315768
Report Date: 08/21/13

SAMPLE RESULTS

Lab ID: L1315768-01
Client ID: HA-A4 (OW)
Sample Location: BOSTON
Matrix: Water

Date Collected: 08/14/13 13:20
Date Received: 08/14/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	08/15/13 09:40	08/16/13 14:24	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	08/14/13 21:40	30,4500CL-D	DE
Phenolics, Total	ND		mg/l	0.03	--	1	08/15/13 09:45	08/15/13 13:20	4,420.1	TE
Chromium, Hexavalent	ND		mg/l	0.010	--	1	08/14/13 21:20	08/14/13 21:59	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	2110		mg/l	50.0	--	100	-	08/15/13 20:44	44,300.0	AU

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315768
Report Date: 08/21/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629052-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	08/14/13 21:20	08/14/13 21:58	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629053-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	08/14/13 21:40	30,4500CL-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629160-1										
Phenolics, Total	ND		mg/l	0.03	--	1	08/15/13 09:45	08/15/13 13:17	4,420.1	TE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629163-1										
Cyanide, Total	ND		mg/l	0.005	--	1	08/15/13 09:40	08/16/13 14:09	30,4500CN-CE	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG629635-1										
Chloride	ND		mg/l	0.500	--	1	-	08/15/13 19:08	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315768

Report Date: 08/21/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG629052-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG629053-2								
Chlorine, Total Residual	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG629160-2								
Phenolics, Total	120		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG629163-2								
Cyanide, Total	99		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG629635-2								
Chloride	103		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315768
Report Date: 08/21/13

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: WG629052-4 QC Sample: L1315768-01 Client ID: HA-A4 (OW)												
Chromium, Hexavalent	ND	0.1	0.100	100		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629160-4 QC Sample: L1315768-01 Client ID: HA-A4 (OW)												
Phenolics, Total	ND	0.4	0.50	125		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629163-3 QC Sample: L1315764-01 Client ID: MS Sample												
Cyanide, Total	0.006	0.2	0.197	95		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629635-3 QC Sample: L1315767-01 Client ID: MS Sample												
Chloride	961	200	1180	112		-	-		40-151	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315768
Report Date: 08/21/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629052-3 QC Sample: L1315768-01 Client ID: HA-A4 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629053-3 QC Sample: L1315768-01 Client ID: HA-A4 (OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629160-3 QC Sample: L1315767-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629163-4 QC Sample: L1315768-01 Client ID: HA-A4 (OW)						
Cyanide, Total	ND	ND	mg/l	NC		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629635-4 QC Sample: L1315767-01 Client ID: DUP Sample						
Chloride	961	963.	mg/l	0		18

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315768
Report Date: 08/21/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1315768-01A	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260(14)
L1315768-01B	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260(14)
L1315768-01C	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260(14)
L1315768-01D	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260-SIM(14)
L1315768-01E	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260-SIM(14)
L1315768-01F	Vial HCl preserved	A	N/A	3.7	Y	Absent	8260-SIM(14)
L1315768-01G	Vial Na2S2O3 preserved	A	N/A	3.7	Y	Absent	504(14)
L1315768-01H	Vial Na2S2O3 preserved	A	N/A	3.7	Y	Absent	504(14)
L1315768-01I	Plastic 250ml NaOH preserved	A	>12	3.7	Y	Absent	TCN-4500(14)
L1315768-01J	Plastic 500ml unpreserved	A	7	3.7	Y	Absent	CL-300(28),TRC-4500(1)
L1315768-01K	Plastic 500ml unpreserved	A	7	3.7	Y	Absent	HEXCR-3500(1)
L1315768-01L	Amber 1000ml H2SO4 preserved	A	<2	3.7	Y	Absent	TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315768
Project Number:	34099-120	**Report Date:**	08/21/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

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

I - The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315768
Project Number:	34099-120	**Report Date:**	08/21/13

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315768
Project Number:	34099-120	**Report Date:**	08/21/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

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

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

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

LIMITATION OF LIABILITIES

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

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

Certificate/Approval Program Summary

Last revised July 2, 2013 - 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, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

State of Illinois Certificate/Lab ID: 003155. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM2120B, 2320B, 2510B, 2540C, SM4500CN-CE, 4500F-C, 4500H-B, 4500NO3-F, 5310C, EPA 200.7, 200.8, 245.1, 300.0. Organic Parameters: EPA 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: SM2120B, 2310B, 2320B, 2340B, 2510B, 2540B, 2540C, 2540D, SM4500CL-E, 4500CN-E, 4500F-C, 4500H-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-E, 4500S-D, 4500SO3-B, 5210B, 5220D, 5310C, 5540C, EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1. Organic Parameters: EPA 608, 624, 625.)

Hazardous and Solid Waste (Inorganic Parameters: EPA 1010A, 1030, 1311, 1312, 6010C, 6020A, 7196A, 7470A, 7471B, 9012B, 9014, 9038, 9040C, 9045D, 9050A, 9065, 9251. Organic Parameters: 8011 (NPW only), 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8315A, 8330.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2120B, 2130B, 2320B, 2510C, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, 5310C, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 8315A, 9010C, SM2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-B, 4500P-E, 4500S2-D, 4500SO3-B, 5540C, 5210B, 5220D, 5310C, 9010B, 9030B, 9040C, 7470A, 7196A, 2340B, EPA 200.7, 6010C, 200.8, 6020A, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8011, 8081B, 8082A, 8330, 8151A, 8260C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9040B, 9045C, 6010C, 6020A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B, 9038, 9251. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260C, 8270D, 8330, 8151A, 8081B, 8082A, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035.)

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

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2064. ***NELAP Accredited.***
Drinking Water (Organic Parameters: **EPA 524.2:** Di-isopropyl ether (DIPE), Ethyl-t-butyl ether (ETBE), Tert-amyl methyl ether (TAME)).

Non-Potable Water (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene. **EPA 8015C(M):** TPH.)

Solid & Chemical Materials (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D,

9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.1, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2340B, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010C, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 8315A, 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260C, 8270D, 8270D-SIM, 625, 608, 8081B, 8151A, 8330, 8082A, EPA 3510C, 5030B, 8015C, 8011.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010C, 6020A, 7196A, 7471B, 8315A, 9012B, 9014, 9065, 9050A, 9038, 9251, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260C, 8270D, 8270D-SIM, 8015C, 8081B, 8151A, 8330, 8082A, 3540C, 3546, 3580A, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9012B, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

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

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

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

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

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

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.1, 2320B, 4500F-C, 4500NO3-F, 4500H+B, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 351.2, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 2340B, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500 SO3-B, 4500H-B, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C, 9010Cm

9030B, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9010C, 9012B, 9030B, 9014, 9038, 9040C, 9045D, 9251, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 3550B, 3580A, 3620C, 3630C, 6020A, 8260B, 8260C, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B 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, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether. **EPA 8260B:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8260 Non-potable water matrix:** Iodomethane (methyl iodide), Methyl methacrylate. **EPA 8260 Soil matrix:** Tert-amyl methyl ether (TAME), Diisopropyl ether (DIPE), Azobenzene. **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. **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 1

3 of 3

Date Rec'd in Lab: 8/14/13

ALPHA Job #: L1315768

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

Client Information

Client: HALEY & ALDRICH
Address: 465 MEDFORD ST
CHARLESTOWN MA 02129
Phone: (617) 886-7400
Fax:
Email: MCIUFFETTI@HALEYALDRICH.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: SEAPORT SQUARE Parcel A
Project Location: BOSTON
Project #: 34099-120
Project Manager: M. BALFE
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 8/20/13 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE 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)

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	TRC, CL	Total Phenol	Hex Cr	TCN	8260	8260 SIM 1,4 Dioxane	EDB 1504	Sample Specific Comments	TOTAL # BOTTLES
15768-1	HA-A4(OW)	8/14/13	1320	GW	CMS	X	X	X	X	X	X	X		12
Container Type						P	A	P	P	V	V	V		
Preservative						A	D	A	E	B	B	H		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	8/14/13 1500		8/14/13 1645
	8/14/13 1645		8/14/13 1645
	8/14/13 1815		8/14/13 1815

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. 16-Jan-2010)

ANALYTICAL REPORT

Lab Number:	L1315924
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Mark Balfe
Phone:	(617) 886-7304
Project Name:	SEAPORT SQUARE PARCEL A
Project Number:	34099-120
Report Date:	08/25/13

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

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

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1315924-01	HA-A4 (OW)	BOSTON	08/15/13 06:30

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924
Project Number: 34099-120 **Report Date:** 08/25/13

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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

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

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315924
Project Number:	34099-120	**Report Date:**	08/25/13

Case Narrative (continued)

Sample Receipt

The sample was field filtered for Dissolved Metals.

Total Metals

L1315924-01 (HA-A4 (OW)) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

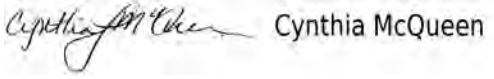
Dissolved Metals

L1315924-01(HA-A4 (OW)) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG630195-4 MS recovery, performed on L1315924-01 (HA-A4 (OW)), is below the acceptance criteria for antimony (49%) and silver (73%). A post digestion spike was performed with acceptable recoveries for antimony (99%) and silver (83%).

The WG630196-4 MS recovery, performed on L1315924-01 (HA-A4 (OW)), is below the acceptance criteria for iron (30%). A post digestion spike was performed with an acceptable recovery of 90%.

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

Authorized Signature:  Cynthia McQueen

Title: Technical Director/Representative Date: 08/25/13

ORGANICS

SEMIVOLATILES

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

SAMPLE RESULTS

Lab ID:	L1315924-01	Date Collected:	08/15/13 06:30
Client ID:	HA-A4 (OW)	Date Received:	08/15/13
Sample Location:	BOSTON	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	08/17/13 11:26
Analytical Date:	08/23/13 19:21		
Analyst:	JC		

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

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

SAMPLE RESULTS

Lab ID: L1315924-01 Date Collected: 08/15/13 06:30

Client ID: HA-A4 (OW) Date Received: 08/15/13

Sample Location: BOSTON Field Prep: See Narrative

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	111		41-149

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

SAMPLE RESULTS

Lab ID:	L1315924-01	Date Collected:	08/15/13 06:30
Client ID:	HA-A4 (OW)	Date Received:	08/15/13
Sample Location:	BOSTON	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	08/17/13 11:24
Analytical Date:	08/19/13 23:53		
Analyst:	HL		

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	106		15-120
2,4,6-Tribromophenol	**142**	Q	10-120
4-Terphenyl-d14	143		41-149

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/23/13 17:25
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 08/17/13 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG629716-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/23/13 17:25
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 08/17/13 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG629716-1					
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/23/13 17:25
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 08/17/13 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG629716-1					
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	102		41-149

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 08/19/13 22:15
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 08/17/13 11:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG629717-1					
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: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 08/19/13 22:15
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 08/17/13 11:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG629717-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	131		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

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: WG629716-2 WG629716-3								
Acenaphthene	80		72		37-111	11		30
Benzidine	40		36		10-75	11		30
1,2,4-Trichlorobenzene	60		54		39-98	11		30
Hexachlorobenzene	113		105		40-140	7		30
Bis(2-chloroethyl)ether	80		68		40-140	16		30
2-Chloronaphthalene	74		68		40-140	8		30
1,2-Dichlorobenzene	62		53		40-140	16		30
1,3-Dichlorobenzene	60		51		40-140	16		30
1,4-Dichlorobenzene	60		52		36-97	14		30
3,3'-Dichlorobenzidine	99		94		40-140	5		30
2,4-Dinitrotoluene	**117**	Q	**111**	Q	24-96	5		30
2,6-Dinitrotoluene	108		104		40-140	4		30
Azobenzene	105		97		40-140	8		30
Fluoranthene	121		115		40-140	5		30
4-Chlorophenyl phenyl ether	94		85		40-140	10		30
4-Bromophenyl phenyl ether	109		103		40-140	6		30
Bis(2-chloroisopropyl)ether	83		72		40-140	14		30
Bis(2-chloroethoxy)methane	88		77		40-140	13		30
Hexachlorobutadiene	60		53		40-140	12		30
Hexachlorocyclopentadiene	45		42		40-140	7		30
Hexachloroethane	57		49		40-140	15		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

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: WG629716-2 WG629716-3								
Isophorone	101		90		40-140	12		30
Naphthalene	67		59		40-140	13		30
Nitrobenzene	87		76		40-140	13		30
NDPA/DPA	107		101		40-140	6		30
n-Nitrosodi-n-propylamine	98		86		29-132	13		30
Bis(2-ethylhexyl)phthalate	91		88		40-140	3		30
Butyl benzyl phthalate	125		120		40-140	4		30
Di-n-butylphthalate	126		122		40-140	3		30
Di-n-octylphthalate	102		97		40-140	5		30
Diethyl phthalate	112		106		40-140	6		30
Dimethyl phthalate	107		99		40-140	8		30
Benzo(a)anthracene	112		104		40-140	7		30
Benzo(a)pyrene	103		97		40-140	6		30
Benzo(b)fluoranthene	120		114		40-140	5		30
Benzo(k)fluoranthene	105		104		40-140	1		30
Chrysene	106		103		40-140	3		30
Acenaphthylene	94		88		45-123	7		30
Anthracene	114		111		40-140	3		30
Benzo(ghi)perylene	112		102		40-140	9		30
Fluorene	98		92		40-140	6		30
Phenanthrene	103		98		40-140	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

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: WG629716-2 WG629716-3								
Dibenzo(a,h)anthracene	114		107		40-140	6		30
Indeno(1,2,3-cd)pyrene	116		107		40-140	8		30
Pyrene	123		120		26-127	2		30
Biphenyl	69		61		40-140	12		30
Aniline	55		46		40-140	18		30
4-Chloroaniline	96		87		40-140	10		30
1-Methylnaphthalene	70		62		41-103	12		30
2-Nitroaniline	105		99		52-143	6		30
3-Nitroaniline	77		76		25-145	1		30
4-Nitroaniline	100		98		51-143	2		30
Dibenzofuran	87		79		40-140	10		30
2-Methylnaphthalene	70		64		40-140	9		30
n-Nitrosodimethylamine	54		46		22-74	16		30
2,4,6-Trichlorophenol	102		93		30-130	9		30
p-Chloro-m-cresol	**105**	Q	**99**	Q	23-97	6		30
2-Chlorophenol	85		73		27-123	15		30
2,4-Dichlorophenol	99		88		30-130	12		30
2,4-Dimethylphenol	94		81		30-130	15		30
2-Nitrophenol	91		80		30-130	13		30
4-Nitrophenol	60		56		10-80	7		30
2,4-Dinitrophenol	104		102		20-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

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: WG629716-2 WG629716-3								
4,6-Dinitro-o-cresol	110		109		20-164	1		30
Pentachlorophenol	**120**	Q	**112**	Q	9-103	7		30
Phenol	43		38		12-110	12		30
2-Methylphenol	83		72		30-130	14		30
3-Methylphenol/4-Methylphenol	79		70		30-130	12		30
2,4,5-Trichlorophenol	110		105		30-130	5		30
Benzoic Acid	48		48		10-164	0		30
Benzyl Alcohol	82		71		26-116	14		30
Carbazole	115		108		55-144	6		30
Pyridine	27		20		10-66	30		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		51		21-120
Phenol-d6	40		36		10-120
Nitrobenzene-d5	90		81		23-120
2-Fluorobiphenyl	86		79		15-120
2,4,6-Tribromophenol	**126**	Q	120		10-120
4-Terphenyl-d14	114		111		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

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: WG629717-2 WG629717-3								
Acenaphthene	92		88		37-111	4		40
2-Chloronaphthalene	84		82		40-140	2		40
Fluoranthene	122		114		40-140	7		40
Hexachlorobutadiene	72		69		40-140	4		40
Naphthalene	78		76		40-140	3		40
Benzo(a)anthracene	127		115		40-140	10		40
Benzo(a)pyrene	117		107		40-140	9		40
Benzo(b)fluoranthene	**141**	Q	117		40-140	19		40
Benzo(k)fluoranthene	116		120		40-140	3		40
Chrysene	113		105		40-140	7		40
Acenaphthylene	91		91		40-140	0		40
Anthracene	110		107		40-140	3		40
Benzo(ghi)perylene	95		88		40-140	8		40
Fluorene	113		109		40-140	4		40
Phenanthrene	103		102		40-140	1		40
Dibenzo(a,h)anthracene	93		90		40-140	3		40
Indeno(1,2,3-cd)Pyrene	99		93		40-140	6		40
Pyrene	115		107		26-127	7		40
1-Methylnaphthalene	78		75		40-140	4		40
2-Methylnaphthalene	76		73		40-140	4		40
Pentachlorophenol	**110**	Q	103		9-103	7		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

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: WG629717-2 WG629717-3								
Hexachlorobenzene	82		79		40-140	4		40
Hexachloroethane	71		68		40-140	4		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		51		21-120
Phenol-d6	32		34		10-120
Nitrobenzene-d5	82		86		23-120
2-Fluorobiphenyl	75		77		15-120
2,4,6-Tribromophenol	95		101		10-120
4-Terphenyl-d14	99		116		41-149

PCBS

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

SAMPLE RESULTS

Lab ID:	L1315924-01	Date Collected:	08/15/13 06:30
Client ID:	HA-A4 (OW)	Date Received:	08/15/13
Sample Location:	BOSTON	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	08/17/13 18:13
Analytical Date:	08/19/13 13:59	Cleanup Method1:	EPA 3665A
Analyst:	JT	Cleanup Date1:	08/19/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.200	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	53		30-150
Decachlorobiphenyl	62		30-150

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 08/19/13 12:45
Analyst: JT

Extraction Method: EPA 608
Extraction Date: 08/17/13 18:13
Cleanup Method1: EPA 3665A
Cleanup Date1: 08/19/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 08/19/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG629758-1					
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	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	59		30-150
Decachlorobiphenyl	91		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

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: WG629758-3 QC Sample: L1315772-01 Client ID: MS Sample												
Aroclor 1016	ND	1.11	0.854	77		-	-		40-140	-		50
Aroclor 1260	ND	1.11	0.796	72		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	62				30-150
Decachlorobiphenyl	75				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG629758-2								
Aroclor 1016	82		-		40-140	-		50
Aroclor 1260	89		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	51				30-150
Decachlorobiphenyl	89				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629758-4 QC Sample: L1315922-01 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	65		61		30-150
Decachlorobiphenyl	72		66		30-150

METALS

Project Name: SEAPORT SQUARE PARCEL A
Lab Number: L1315924
Project Number: 34099-120
Report Date: 08/25/13

SAMPLE RESULTS

Lab ID: L1315924-01
Client ID: HA-A4 (OW)
Sample Location: BOSTON
Matrix: Water

Date Collected: 08/15/13 06:30
Date Received: 08/15/13
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.01000	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Arsenic, Total	0.01077		mg/l	0.01000	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00200	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Chromium, Total	ND		mg/l	0.01000	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Copper, Total	ND		mg/l	0.01000	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Iron, Total	8.5		mg/l	0.05	--	1	08/20/13 09:57	08/20/13 16:34	EPA 3005A	19,200.7	TT
Lead, Total	ND		mg/l	0.00500	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	08/17/13 09:36	08/20/13 13:36	EPA 245.1	3,245.1	JH
Nickel, Total	0.00980		mg/l	0.00500	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.0500	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00400	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Zinc, Total	ND		mg/l	0.1000	--	10	08/20/13 09:57	08/20/13 17:28	EPA 3005A	1,6020A	AK
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.01000	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.01000	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00200	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Chromium, Dissolved	ND		mg/l	0.01000	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Copper, Dissolved	ND		mg/l	0.01000	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Iron, Dissolved	2.2		mg/l	0.05	--	1	08/20/13 11:32	08/20/13 14:38	NA	19,200.7	TT
Lead, Dissolved	ND		mg/l	0.00500	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Mercury, Dissolved	ND		mg/l	0.0002	--	1	08/20/13 12:48	08/21/13 09:16	EPA 245.1	3,245.1	DR
Nickel, Dissolved	ND		mg/l	0.00500	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Selenium, Dissolved	ND		mg/l	0.0500	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00400	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK
Zinc, Dissolved	ND		mg/l	0.1000	--	10	08/20/13 11:32	08/20/13 16:32	NA	1,6020A	AK

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG629706-1										
Mercury, Total	ND		mg/l	0.0002	--	1	08/17/13 09:36	08/20/13 13:07	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG630153-1										
Antimony, Total	ND		mg/l	0.00100	--	1	08/20/13 09:57	08/20/13 17:10	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00100	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00020	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Copper, Total	ND		mg/l	0.00100	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Lead, Total	ND		mg/l	0.00050	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Nickel, Total	ND		mg/l	0.00050	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	--	1	08/20/13 09:57	08/20/13 17:10	1,6020A	AK
Zinc, Total	ND		mg/l	0.01000	--	1	08/20/13 09:57	08/20/13 17:00	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG630155-1										
Iron, Total	ND		mg/l	0.05	--	1	08/20/13 09:57	08/20/13 15:13	19,200.7	TT

Prep Information

Digestion Method: EPA 3005A

Project Name: SEAPORT SQUARE PARCEL A **Lab Number:** L1315924

Project Number: 34099-120 **Report Date:** 08/25/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG630189-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	08/20/13 12:48	08/21/13 09:12	3,245.1	DR

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG630195-1										
Antimony, Dissolved	ND		mg/l	0.00100	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.00100	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00020	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Chromium, Dissolved	ND		mg/l	0.00100	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Copper, Dissolved	ND		mg/l	0.00100	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Lead, Dissolved	ND		mg/l	0.00050	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Nickel, Dissolved	ND		mg/l	0.00050	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Selenium, Dissolved	ND		mg/l	0.00500	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00040	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK
Zinc, Dissolved	ND		mg/l	0.01000	--	1	08/20/13 11:32	08/20/13 16:15	1,6020A	AK

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG630196-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	08/20/13 11:32	08/20/13 14:31	19,200.7	TT

Prep Information

Digestion Method: NA

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG629706-2								
Mercury, Total	92		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG630153-2								
Antimony, Total	80		-		80-120	-		
Arsenic, Total	100		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	98		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Selenium, Total	105		-		80-120	-		
Silver, Total	111		-		80-120	-		
Zinc, Total	106		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG630155-2								
Iron, Total	100		-		85-115	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG630189-2								
Mercury, Dissolved	104		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG630195-2					
Antimony, Dissolved	82	-	80-120	-	
Arsenic, Dissolved	100	-	80-120	-	
Cadmium, Dissolved	112	-	80-120	-	
Chromium, Dissolved	98	-	80-120	-	
Copper, Dissolved	102	-	80-120	-	
Lead, Dissolved	96	-	80-120	-	
Nickel, Dissolved	99	-	80-120	-	
Selenium, Dissolved	104	-	80-120	-	
Silver, Dissolved	101	-	80-120	-	
Zinc, Dissolved	108	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG630196-2					
Iron, Dissolved	99	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

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: WG629706-4 QC Sample: L1315252-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.0057	113		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630153-4 QC Sample: L1315922-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4931	99		-	-		80-120	-		20
Arsenic, Total	0.00621	0.12	0.1306	104		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.05232	102		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1915	96		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2460	98		-	-		80-120	-		20
Lead, Total	ND	0.51	0.4944	97		-	-		80-120	-		20
Nickel, Total	ND	0.5	0.4792	96		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.122	102		-	-		80-120	-		20
Silver, Total	ND	0.05	0.05503	110		-	-		80-120	-		20
Zinc, Total	ND	0.5	0.5133	103		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630155-4 QC Sample: L1315922-01 Client ID: MS Sample												
Iron, Total	1.1	1	2.0	90		-	-		75-125	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630189-4 QC Sample: L1315924-01 Client ID: HA-A4 (OW)												
Mercury, Dissolved	ND	0.005	0.0041	83		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630195-4 QC Sample: L1315924-01 Client ID: HA-A4 (OW)										
Antimony, Dissolved	ND	0.5	0.2434	**49**	Q	-	-	80-120	-	20
Arsenic, Dissolved	ND	0.12	0.1159	96		-	-	80-120	-	20
Cadmium, Dissolved	ND	0.051	0.05190	102		-	-	80-120	-	20
Chromium, Dissolved	ND	0.2	0.1837	92		-	-	80-120	-	20
Copper, Dissolved	ND	0.25	0.2375	95		-	-	80-120	-	20
Lead, Dissolved	ND	0.51	0.4949	97		-	-	80-120	-	20
Nickel, Dissolved	ND	0.5	0.4596	92		-	-	80-120	-	20
Selenium, Dissolved	ND	0.12	0.112	93		-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.03634	**73**	Q	-	-	80-120	-	20
Zinc, Dissolved	ND	0.5	0.4680	94		-	-	80-120	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630196-4 QC Sample: L1315924-01 Client ID: HA-A4 (OW)										
Iron, Dissolved	2.2	1	2.5	**30**	Q	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629706-3 QC Sample: L1315252-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630153-3 QC Sample: L1315922-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00621	0.00578	mg/l	7		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630155-3 QC Sample: L1315922-01 Client ID: DUP Sample						
Iron, Total	1.1	1.0	mg/l	10		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630189-3 QC Sample: L1315924-01 Client ID: HA-A4 (OW)						
Mercury, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630195-3 QC Sample: L1315924-01 Client ID: HA-A4 (OW)					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG630196-3 QC Sample: L1315924-01 Client ID: HA-A4 (OW)					
Iron, Dissolved	2.2	2.3	mg/l	4	20

INORGANICS
&
MISCELLANEOUS

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

SAMPLE RESULTS

Lab ID: L1315924-01
Client ID: HA-A4 (OW)
Sample Location: BOSTON
Matrix: Water

Date Collected: 08/15/13 06:30
Date Received: 08/15/13
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	110		mg/l	10	NA	2	-	08/16/13 10:30	30,2540D	DW
TPH	ND		mg/l	4.00	--	1	08/16/13 08:15	08/16/13 14:30	74,1664A	JO

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120
Lab Number: L1315924
Report Date: 08/25/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629434-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	08/16/13 10:30	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG629547-1										
TPH	ND		mg/l	4.00	--	1	08/16/13 08:15	08/16/13 14:30	74,1664A	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A

Project Number: 34099-120

Lab Number: L1315924

Report Date: 08/25/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG629547-2								
TPH	85		-		64-132	-		34

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

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: WG629547-4 QC Sample: L1315835-01 Client ID: MS Sample												
TPH	ND	20.8	18.1	87		-	-		64-132	-		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629434-2 QC Sample: L1315798-01 Client ID: DUP Sample						
Solids, Total Suspended	130	120	mg/l	8		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG629547-3 QC Sample: L1315817-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34

Project Name: SEAPORT SQUARE PARCEL A
Project Number: 34099-120

Lab Number: L1315924
Report Date: 08/25/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1315924-01A	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1315924-01B	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1315924-01C	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1315924-01D	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1315924-01E	Amber 1000ml Na2S2O3	B	7	4	Y	Absent	PCB-608(7)
L1315924-01F	Amber 1000ml Na2S2O3	B	7	4	Y	Absent	PCB-608(7)
L1315924-01G	Amber 1000ml HCl preserved	B	N/A	4	Y	Absent	TPH-1664(28)
L1315924-01H	Amber 1000ml HCl preserved	B	N/A	4	Y	Absent	TPH-1664(28)
L1315924-01I	Plastic 250ml HNO3 preserved	B	<2	4	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L1315924-01J	Plastic 250ml HNO3 preserved	B	<2	4	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)
L1315924-01K	Plastic 1000ml unpreserved	B	7	4	Y	Absent	TSS-2540(7)

*Values in parentheses indicate holding time in days

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315924
Project Number:	34099-120	**Report Date:**	08/25/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

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

I - The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315924
Project Number:	34099-120	**Report Date:**	08/25/13

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	SEAPORT SQUARE PARCEL A	**Lab Number:**	L1315924
Project Number:	34099-120	**Report Date:**	08/25/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

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

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 Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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

Certificate/Approval Program Summary

Last revised July 2, 2013 - 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, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

State of Illinois Certificate/Lab ID: 003155. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM2120B, 2320B, 2510B, 2540C, SM4500CN-CE, 4500F-C, 4500H-B, 4500NO3-F, 5310C, EPA 200.7, 200.8, 245.1, 300.0. Organic Parameters: EPA 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: SM2120B, 2310B, 2320B, 2340B, 2510B, 2540B, 2540C, 2540D, SM4500CL-E, 4500CN-E, 4500F-C, 4500H-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-E, 4500S-D, 4500SO3-B, 5210B, 5220D, 5310C, 5540C, EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1. Organic Parameters: EPA 608, 624, 625.)

Hazardous and Solid Waste (Inorganic Parameters: EPA 1010A, 1030, 1311, 1312, 6010C, 6020A, 7196A, 7470A, 7471B, 9012B, 9014, 9038, 9040C, 9045D, 9050A, 9065, 9251. Organic Parameters: 8011 (NPW only), 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8315A, 8330.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2120B, 2130B, 2320B, 2510C, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, 5310C, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 8315A, 9010C, SM2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-B, 4500P-E, 4500S2-D, 4500SO3-B, 5540C, 5210B, 5220D, 5310C, 9010B, 9030B, 9040C, 7470A, 7196A, 2340B, EPA 200.7, 6010C, 200.8, 6020A, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8011, 8081B, 8082A, 8330, 8151A, 8260C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9040B, 9045C, 6010C, 6020A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B, 9038, 9251. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260C, 8270D, 8330, 8151A, 8081B, 8082A, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035.)

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

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2064. ***NELAP Accredited.***
Drinking Water (Organic Parameters: **EPA 524.2:** Di-isopropyl ether (DIPE), Ethyl-t-butyl ether (ETBE), Tert-amyl methyl ether (TAME)).

Non-Potable Water (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene. **EPA 8015C(M):** TPH.)

Solid & Chemical Materials (Organic Parameters: **EPA 8260C:** 1,3,5-Trichlorobenzene.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D,

9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.1, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2340B, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010C, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 8315A, 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260C, 8270D, 8270D-SIM, 625, 608, 8081B, 8151A, 8330, 8082A, EPA 3510C, 5030B, 8015C, 8011.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010C, 6020A, 7196A, 7471B, 8315A, 9012B, 9014, 9065, 9050A, 9038, 9251, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260C, 8270D, 8270D-SIM, 8015C, 8081B, 8151A, 8330, 8082A, 3540C, 3546, 3580A, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9012B, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

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

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

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

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

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

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.1, 2320B, 4500F-C, 4500NO3-F, 4500H+B, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 351.2, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 2340B, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500 SO3-B, 4500H-B, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C, 9010Cm

9030B, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9010C, 9012B, 9030B, 9014, 9038, 9040C, 9045D, 9251, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 3550B, 3580A, 3620C, 3630C, 6020A, 8260B, 8260C, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B 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, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether. **EPA 8260B:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8260 Non-potable water matrix:** Iodomethane (methyl iodide), Methyl methacrylate. **EPA 8260 Soil matrix:** Tert-amyl methyl ether (TAME), Diisopropyl ether (DIPE), Azobenzene. **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. **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 1

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: 8/15/13

ALPHA Job #: L1315924

Client Information

Client: HALEY ALDRICH

Address: 465 MEDFORD ST

CHARLESTOWN MA 02129

Phone: (617) 886-7400

Fax:

Email: MCIUFFETTI@HALEYALDRICH.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: SEAPORT SQUARE PARCEL A

Project Location: BOSTON

Project #: 34099-120

Project Manager: MARK BALFE

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 8/21/13 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE 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)

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	PCBs - 608	Total Cd, Cr, Cu, As, Se, Sb, Hg, Fe, Pb, Ni, Ag	Dissolved Cd, Cr, Cu, As, Se, Sb, Hg, Fe, Pb, Ni, Ag	TPH - 1664	8270	8270 - SIM	TSS	Sample Specific Comments	TOTAL # BOTTLES
15924-01	HA - MW(OW)	8/15/13	6:30	GW	CAS	x	x	x	x	x	x	x		11
Container Type						A	P	P	A	A	A	P		
Preservative						H	C	C	B	A	A	A		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
CHRIS SULLIVAN HAA	8/15/13 1200	M. Lantz	8/15/13 16:30
M. Lantz	8/15/13 16:30		8-15-13 1630
	8-15-13 1905		8/15/13 19:05

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.

Serial_No:08251321:46

CHAIN OF CUSTODY

PAGE 1 OF 1

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: 8/15/13

ALPHA Job #: L1315924

Client Information

Client: HALEY ALDRICH
Address: 465 MEDFORD ST
CHARLESTOWN MA 02129
Phone: (617) 886-7400
Fax:
Email: MCIUFFETTI@HALEYALDRICH.COM
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: SEAPORT SQUARE PARCEL A
Project Location: BOSTON
Project #: 34099-120
Project Manager: MARK BALFE
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 8/21/13 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE 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)

per Mark Balfe NPDES criteria/methods--GMH 8/16/13

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCBs - 608	Total Cd, Cr, Cu, Pb, Zn, As, Se, Sb, Hg, Fe, Ni, Ag	Dissolved Cd, Cr, Cu, Pb, Zn, As, Se, Sb, Hg, Fe, Ni, Ag	TPH - 1664	8270	8270 - SIM	TSS						Sample Specific Comments	TOTAL # BOTTLES
15924-01	HA-MW4(OW)	8/15/13	6:30	GW	CAS	X	X	X	X	X	X	X							11
Container Type						A	P	P	A	A	A	P							
Preservative						H	C	C	B	A	A	A							

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

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
CHRIS SULLIVAN HAA	8/15/13 1200	M. Lantz	8/15/13 16:30
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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.