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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JAN 1 1 2013

Michael Bergeron, Assistant Director
Wentworth Institute of Technology
550 Huntington Avenue
Boston, MA 02115

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Construction Development at the site located at 525 Huntington Avenue, Boston, MA 02115, Suffolk County; Authorization # MAG910564

Dear Mr. Bergeron:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Wentworth Institute of Technology by the firm McPhail Associates, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner representative and 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 that exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that cyanide was included due to its historic presence and the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 99.0 for this site is within a dilution range greater than fifty to one hundred (> 50-100), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 500 ug/L, lead of 66 ug/L,

zinc of 1,480 ug/L and iron of 5,000 ug/L, are 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 August 30, 2013. 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, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul Cavanan, BWSC
Benjamin Downing

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910564**
Authorization Issued:	January 2013
Facility/Site Name:	Construction Development at
Facility/Site Address:	525 Huntington Avenue, Boston, MA 02115, Suffolk County
	Email address of owner: bergeronm@wit.edu
Legal Name of Operator:	Wentworth Institute of Technology
Operator contact name, title, and Address:	Michael Bergeron, Assistant Director of Physical Plant, 550 Huntington Avenue, Boston MA 02115
	Email: Same as the Owner
Estimated date of Completion:	August 30 2013
Category and Sub-Category:	III- Contaminated Construction Dewatering. Subcategory B. Known Contaminated Sites.
RGP Termination Date:	September 10, 2015
Receiving Water:	Muddy River

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 parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12]		Minimum level=ML	
		Freshwater	Saltwater		
	39. Antimony	5.6/ML 10			
√	40. Arsenic **	500/ML20	36/ML 20		

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12]		Minimum level=ML	
		Freshwater	Saltwater		
	41. Cadmium **	0.2/ML10	8.9/ML 10		
	42. Chromium III (trivalent) **	48.8/ML15	100/ML 15		
	43. Chromium VI (hexavalent) **	11.4/ML10	50.3/ML 10		
	44. Copper **	5.2/ML15	3.7/ML 15		
√	45. Lead **	66/ML20	8.5/ML 20		
	46. Mercury **	0.9/ML0.2	1.1/ML 0.2		
	47. Nickel **	29/ML20	8.2/ML 20		
	48. Selenium **	5/ML20	71/ML 20		
	49. Silver	1.2/ML10	2.2/ML 10		
√	50. Zinc **	1,480/ML15	85.6/ML 15		
√	51. Iron	5,000/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

McPHAIL ASSOCIATES, LLC

NOTICE OF INTENT FOR DISCHARGE UNDER MASSACHUSETTS REMEDIAL GENERAL PERMIT MAG910000

525 HUNTINGTON AVENUE

BOSTON MASSACHUSETTS

to

U.S. Environmental Protection Agency

January 2, 2013

Project No. 5419

McPHAIL ASSOCIATES, LLC

January 2, 2013

U.S Environmental Protection Agency
RGP-NOC Processing Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attention: RGP-NOC Processing

Reference: 525 Huntington Avenue; Boston, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under Massachusetts
Remedial General Permit MAG910000

Ladies and Gentlemen:

The purpose of this letter report is to provide a summary of the site and groundwater quality information in support of an application for approval from the U.S. Environmental Protection Agency (EPA) for the temporary discharge of groundwater into the Muddy River via a storm drain system during construction at the above referenced site. Refer to **Figure 1** Project Location Plan for the general site locus.

These services were performed and this report was prepared in accordance with the authorization of Wentworth Institute of Technology. These services are subject to the limitations contained in **Appendix A**.

The development site occupies an approximate 16,355 square-foot plan area bounded by Huntington Avenue to the south, Vancouver Street to the west, and Louis Prang Street to the northeast. The site is currently utilized as a green space and primarily consists of grassed areas with scattered trees and other landscaping. Existing ground surface across the site is relatively level at about Elevation +17. Existing site conditions are shown on the attached **Subsurface Exploration Plan, Figure 2**.

It is understood that the proposed development includes the construction of a seven-story steel-framed building with one below-grade level. The first floor of the structure will occupy an approximate 13,155 square-foot plan area. The first floor slab is understood to be at about Elevation +17.87. The below-grade level will occupy an approximate 13,050 square-foot plan area. The lowest level slab of the below-grade level is understood to be located about 10 feet below grade at about Elevation +7.87. A stormwater recharge structure will also be constructed as part of the project. The stormwater recharge structure will be located on the northeast side of the site adjacent to Louis Prang Street and will located up to about 8 feet below ground surface.

Subsurface explorations conducted at the site indicate that the ground surface is underlain by a deposit of granular fill ranging in thickness from 11 to 14 feet. Below the fill was an organic soil deposit. Underlying the organic soils, an outwash deposit was encountered at depths ranging from 28.5 to 31 feet below the ground surface and was observed to vary from 2 to 10.5 feet in thickness. The outwash deposit was observed to be underlain by successive deposits of marine clay and marine sand.

The stabilized groundwater level in observation wells located at the site was observed to range from depths of about 9.6 to 9.9 feet below existing ground surface, corresponding to Elevation +8.1 to Elevation +7.9 on the Boston City Base (BCB) Datum. Groundwater observation wells operated by the Boston Groundwater Trust in the vicinity of the site indicate stabilized groundwater levels ranging from Elevation +7.2 to Elevation +8 on the BCB between 2005 and 2012.

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERS
2269 Massachusetts Avenue
Cambridge, Massachusetts 02140
617 / 868-1420

Historically the site operated as a petroleum-filling station and a convenience store from approximately 1930 through 2007. The site is the location of two Massachusetts Contingency Plan (MCP) disposal sites referenced as Release Tracking Numbers (RTN) 3-11149 and 3-15055 which have been linked under RTN 3-11149. It is understood that surficial releases of petroleum occurred as a result of filling activities and additional petroleum releases to soil and groundwater occurred as a result of leaking underground storage tanks (USTs). Various response actions were completed at the subject site from 1994 through 2008 to address the releases to site soil and groundwater. As part of the response activities, it is understood that the upper 3.5 feet of soil was removed from the site and replaced with "clean" gravel fill underlain by a marker barrier. On January 22, 2009, an Activity and Use Limitation (AUL) was recorded for the facility under RTN 3-11149 at the Suffolk County Registry of Deeds. It is understood that the AUL prohibits use of the site for residential purposes. The response actions culminated in the submittal of a Class A-3 Response Action Outcome (RAO) Statement in December 2011.

During the period from July 17 to September 23, 2012, subsurface explorations were performed at the 525 Huntington Avenue site to pre-characterize the soil for off-site disposal in preparation for site redevelopment. The analytical results of soil samples identified concentrations of semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), total cadmium, and total lead above the applicable RCS-1 Reportable Concentrations as defined in the Massachusetts Contingency Plan. These findings are generally consistent with impact areas identified under the previous RTNs and are considered to be related to the previously identified release.

Based on the proposed area to be excavated as part of the proposed site development, and the approximate depth of impacted soils, the impacted soil will be removed under a Release Abatement Measure (RAM) Plan. Remedial activities will include the excavation and off-site disposal of petroleum-impacted soil. Due to the historical use of the site as a gasoline filling station, the potential for encountering petroleum-impacted groundwater during excavation exists. Therefore, temporary construction dewatering of petroleum-impacted groundwater may be required and temporary construction dewatering under the provisions of the RGP is requested.

In order to permit construction of the below-grade portion of the structure an effective groundwater cut-off during construction will be provided by a perimeter steel sheet pile cofferdam which will extend to a depth of approximately 20 to 30 feet below the bottom of the excavation into a relatively impermeable silty clay deposit.

Excavation within the proposed building footprint will extend to a depth of approximately 15 feet below the current ground surface and approximately 6 feet below the observed groundwater level. Hence, construction dewatering will be required within the steel sheet pile groundwater cut-off area to allow the construction of the below-grade portion of the concrete slab and foundations.

It is estimated that the typical continuous groundwater discharge required during the initial stages of the excavation phase of the construction, during which more permeable fill material will be excavated, will be on the order of 20 to 40 gallons per minute (GPM). The quantity of groundwater to be discharged is based on the relatively pervious nature of the existing fill material and the presence of the steel sheet pile wall which will act as a groundwater cut-off. A reduction in the rate of discharge is anticipated to occur during excavation of the less permeable underlying organic soils. These estimates of discharge do not include surface runoff which will be removed from the excavation during a limited duration of a rain storm and shortly thereafter.

Construction dewatering will require the discharge of collected groundwater into the storm drain system under the requested Remedial General Permit. A review of relevant sewer and drainage plans provided by the Boston Water and Sewer and Commission (BWSC) indicates that storm water lines adjacent to the planned construction area on Huntington Avenue flow to the east before they connect to a combined sewer overflow that flows to the northeast along Forsyth Way to Outfall CS0046-1 in the Muddy River. The locations of relevant catch basins with relation to the subject property are indicated on **Figure 2**. **Figure 3** shows the route of the storm drains along Huntington Avenue and Forsyth Way to the Muddy River.

Based on the results of groundwater chemical analyses, it is our opinion that a settling tank, bag filter and a granular activated carbon (GAC) filter will be required to settle out particulate matter and lower the elevated levels of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs) including total benzene, toluene, ethylbenzene and xylenes (BTEX), total phenol, and total recoverable metals in the water to meet allowable discharge limits established by the US EPA prior to discharge. One settling tank 10,000-gallons in capacity, two bag filters and one GAC filter will be incorporated into the discharge system in series in order to meet allowable discharge limits for TSS, VOCs, total phenol and total metals established by the RGP. It is our opinion that the removal of sediment will also result in a reduction in total metals to levels below the RGP permit limits. A schematic of the treatment system is shown on **Figure 4**.

Cyanide was detected in the tested groundwater sample taken on November 13, 2012 from well M5A (OW) at a concentration of 6 ug/l, which is in excess of the upper limit of 5.2 ug/l established by the EPA. The test results of the groundwater sample taken from well M3 (OW) on the same date indicated no detectable levels of cyanide above the method detection limit of 5 ug/l. Due to the lack of a source for cyanide at the site and the relatively small difference between the detection limits and the detected concentration of cyanide in the groundwater sample, we believe the presence of cyanide in the test result from well M5A (OW) to be an anomaly and not indicative of actual conditions at the site. A second groundwater sample was taken on December 14, 2012 from well M5A (OW) and the results indicated no detectable levels of cyanide above the method detection limit of 5 ug/l. Based on this test result and the original test result on the groundwater sample taken from well M3 (OW) it is our belief that cyanide is not present at the subject site.

To document the effectiveness of the treatment system, samples of the discharge water will be obtained and tested for the presence of TSS, VOCs, total phenol and total metals prior to the start of discharge into the storm drain system. Should the pre-start up testing indicate that the levels of these compounds in the effluent exceed the limits established under the RGP, additional treatment of the effluent will be implemented prior to initial discharge. In addition, should other contaminants be detected within the discharge water during the construction dewatering phase of the project at levels that exceed the effluent limitations, mitigative measures will be implemented to meet the allowable discharge limits.

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the BWSC storm drain system and ultimately into the Muddy River under a Remedial General Permit. Sampling and analysis of the influent and effluent will be carried out in accordance with the terms of the Remedial General Permit.

Supplemental information appended to this letter in support of the RGP includes the following;

- Notice of Intent Transmittal Form for Permit Application (**Appendix B**);

- A summary of groundwater analysis (**Appendix C, Table 1**);
- A review of Areas of Critical Concern and Endangered and Threatened Species (**Appendix D**);
- A review of National Historic Places (**Attachment E**); and
- Best Management Practice Plan (**Appendix F**).

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

Benjamin E. Downing

Ambrose J. Donovan, P.E., L.S.P.

Enclosures

c: Wentworth Institute of Technology (Mr. David Wahlstrom)
Boston Water and Sewer Commission (Mr. Francis M. McLaughlin)

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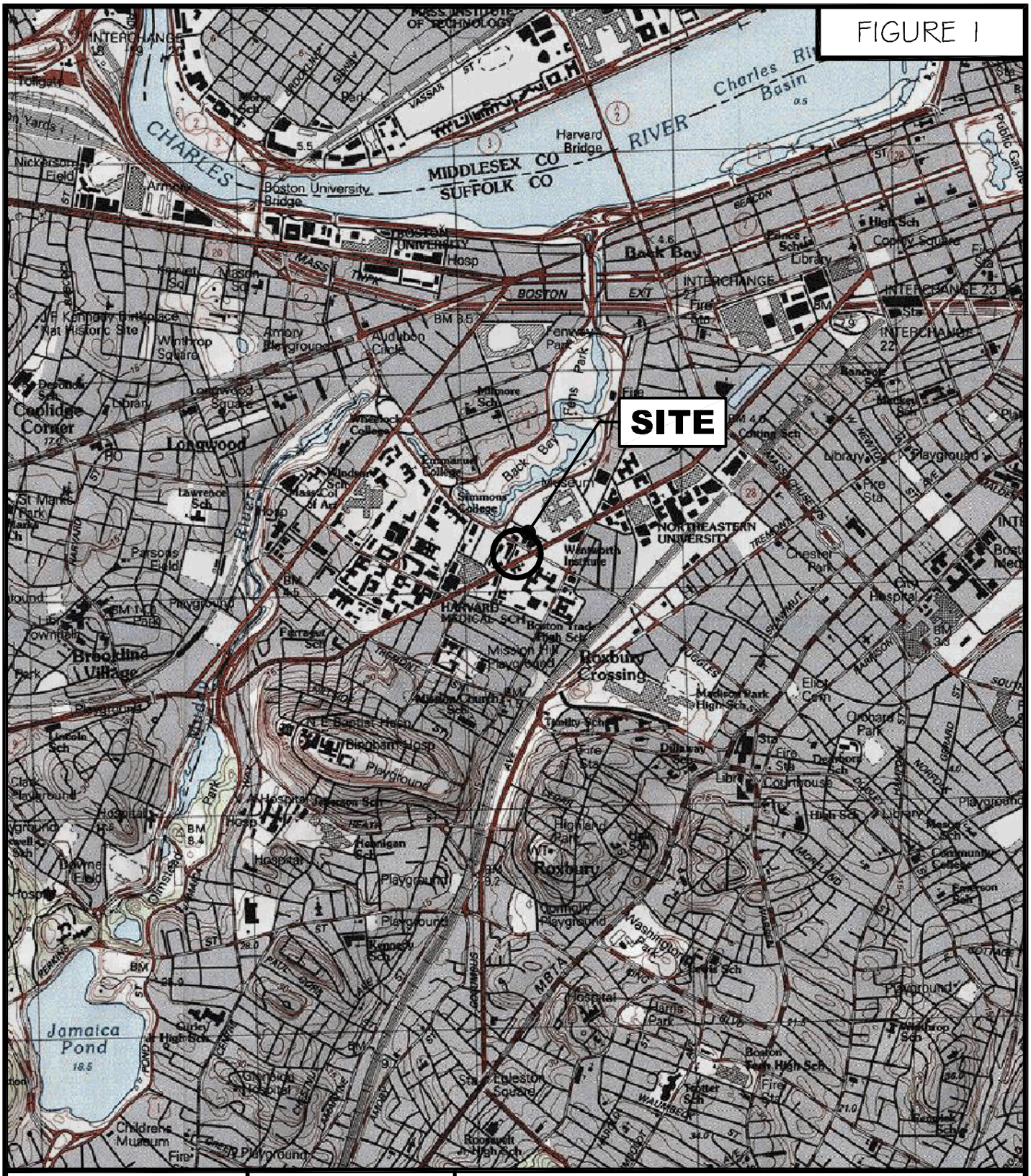
BED/jwp/ajd

FIGURE 1



McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

N

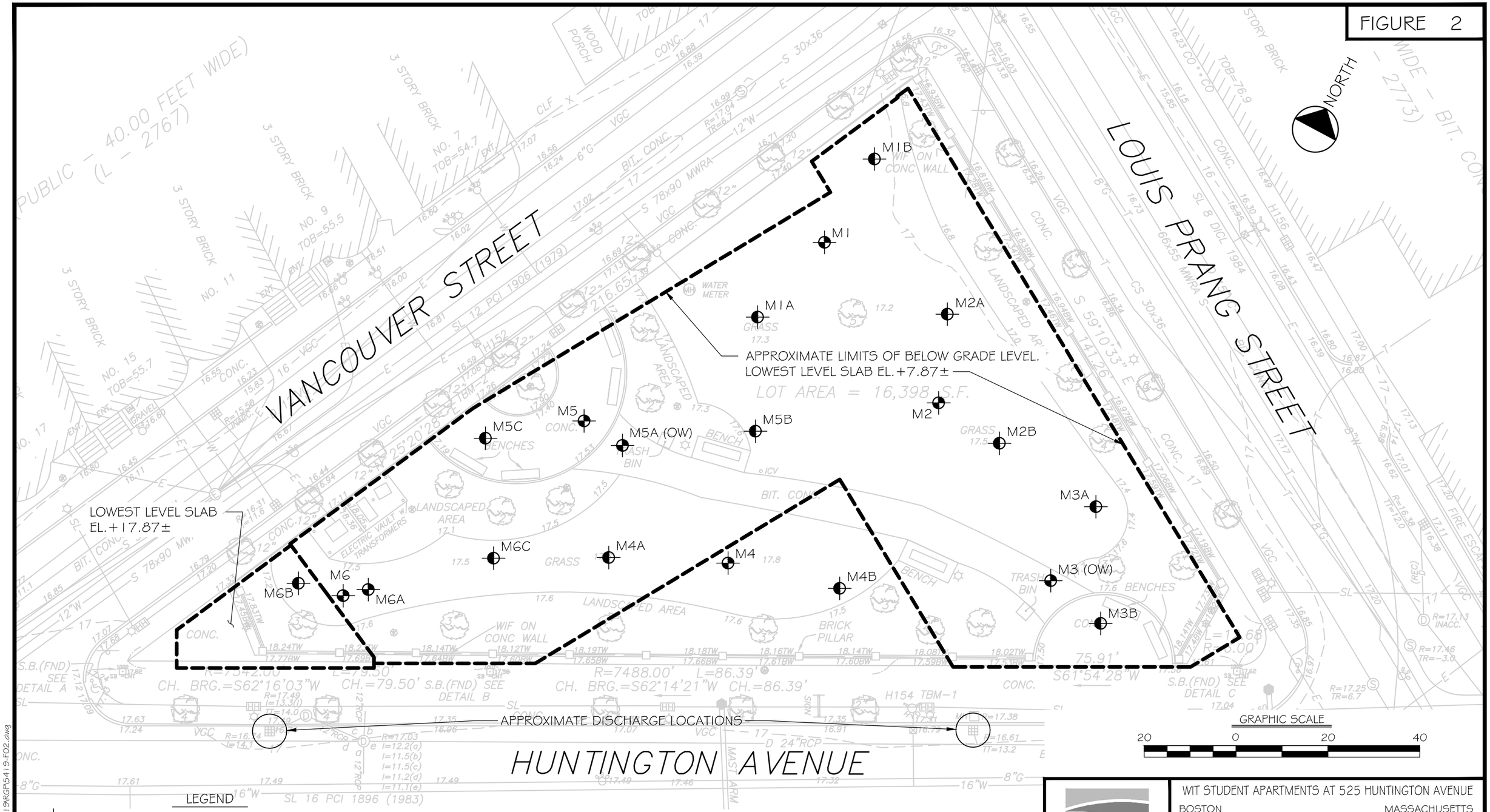
SCALE 1:25,000

PROJECT LOCATION PLAN

WIT STUDENT APARTMENTS
AT 525 HUNTINGTON AVENUE

BOSTON MASSACHUSETTS

FIGURE 2



LEGEND

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF JULY 17 THROUGH 24, 2012 FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF SEPTEMBER 13 THROUGH 24, 2012 FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE.

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED "TOPOGRAPHIC PLAN OF LAND" DATED JUNE 5, 2012 BY HARRY R. FELDMAN, INC.

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

WIT STUDENT APARTMENTS AT 525 HUNTINGTON AVENUE
BOSTON MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

FOR
WENTWORTH INSTITUTE OF TECHNOLOGY
BY
McPHAIL ASSOCIATES, LLC

Date: DECEMBER 2012	Dwn: F.G.P.	Chkd: B.E.D	Scale: 1" = 20'
Project No: 5419			

FILE NAME: H:\Acad\JOBS\5419\RGP5419-F02.dwg

FIGURE 3

NORTH

LOCATION OF DISCHARGE INTO MUDDY RIVER

DISCHARGE LOCATION

MUDDY RIVER

FENWAY WY

EVANS WY

LOUIS PRANG ST

MUSEUM RD

FORSYTH WY

HEMENWAY ST

FENCOURT ST

HUNTINGTON AV

VANCOUVER ST

RUGGLES ST

MUSEUM OF FINE ARTS

SCHOOL OF THE MUSEUM OF FINE ARTS

PARKING

Stetson West (NU)

Marino Recreation Center (NU)

White Hall (NU)

Cabot Physical Education Center

Knowles Center (NU)

Stearns Center (NU)

Gilmore Hall (NU)

West Village H (NU)

Rubenstein Hall (NE)

Burstein Hall (NE)

Cushing Hall (NU)

Cahners Hall (NU)

FORSYTHE DENTAL SCHOOL

CHAMBERS GATES

GATE HOUSE #1

GATE HOUSE #2

219' FLAP GATES

HUNTINGTON FIRE STATION

Massachusetts College of Art Design Dorm

GRAPHIC SCALE

150 0 150 300

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON NOVEMBER 7, 2012 BY BOSTON WATER AND SEWER COMMISSION.

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

WIT STUDENT APARTMENTS AT 525 HUNTINGTON AVENUE
BOSTON MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

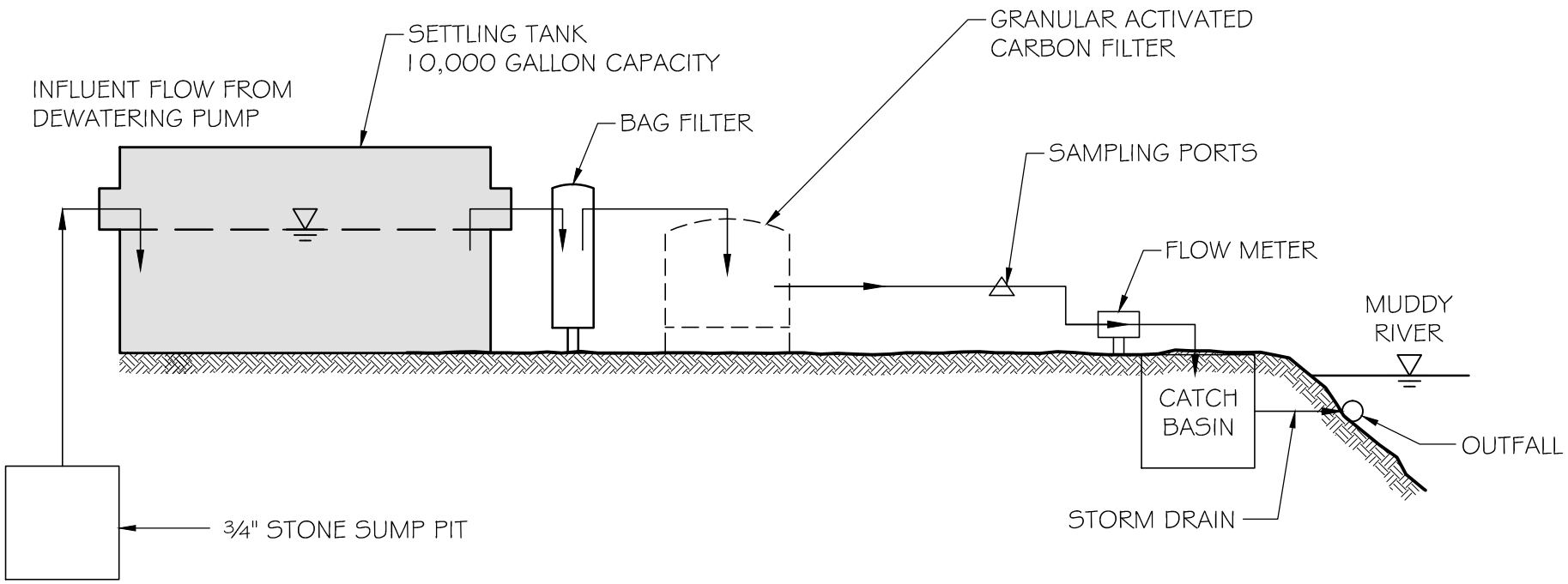
FOR
WENTWORTH INSTITUTE OF TECHNOLOGY
BY
McPHAIL ASSOCIATES, LLC

Date: DECEMBER 2012	Dwn: F.G.P.	Chkd: B.E.D.	Scale: 1" = 150'
Project No: 5419			

FILE NAME: H:\Acad\JOBS\5419\RGP5419-FO3.dwg

FILE NAME: H:\Acad\JOBS\5419\RGP\5419-F04.dwg

FIGURE 4



McPHAIL ASSOCIATES,LLC
Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
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617/868-1423 (Fax)

WIT STUDENT APARTMENTS AT 525 HUNTINGTON AVENUE
BOSTON MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR
WENTWORTH INSTITUTE OF TECHNOLOGY
BY
McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS

Date: DECEMBER 2012	Dwn: F.G.P.	Chkd: B.E.D.	Scale: N.T.S.
Project No: 5419			

McPHAIL ASSOCIATES, LLC

APPENDIX A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from groundwater monitoring wells located at 525 Huntington Avenue in Boston, Massachusetts, in support of an application for approval of temporary construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under the US EPA's Massachusetts Remedial General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the specific subsurface explorations that were performed become evident in the future, it may be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon analytical test data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Analytical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of Wentworth Institute of Technology. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party except relevant governmental agencies associated with the subject permit application, nor used in whole or in part by any other party, without the prior written consent of McPhail Associates, LLC.

McPHAIL ASSOCIATES, LLC

APPENDIX B

Notice of Intent Transmittal Form

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**: 525 Huntington Avenue		**Facility/site** mailing address:			
Location of **facility/site**: longitude: -71.096363 latitude: 42.337684	Facility SIC code(s): 1522	Street: 525 Huntington Avenue			
b) Name of **facility/site owner:** Wentworth Institute of Technology		Town: Boston			
Email address of facility/site owner: bergeronm@wit.edu		State: Massachusetts	Zip: 02115	County: Suffolk	
Telephone no. of facility/site **owner**: 617-989-4577					
Fax no. of facility/site **owner**: 617-989-4567		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:			
Address of **owner** (if different from site):					
Street: 550 Huntington Avenue					
Town: Boston	State: MA	Zip: 02115	County: Suffolk		
c) Legal name of **operator**: Wentworth Institute of Technology	**Operator** telephone no: 617-989-4577	**Operator** fax no.: 617-989-4567	**Operator** email: bergeronm@wit.edu		
Operator contact name and title: Michael Bergeron, Assistant Director of Physical Plant					
Address of **operator** (if different from owner):	Street:				
Town:	State:	Zip:	County:		

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: 0.0892 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units): 20 gpm Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 42.337684 long. -71.096363 pt.2: lat. _____ long. _____;
pt.3: lat. _____ long. _____ pt.4: lat. _____ long. _____;
pt.5: lat. _____ long. _____ pt.6: lat. _____ long. _____;
pt.7: lat. _____ long. _____ pt.8: lat. _____ long. _____; etc.

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

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

c) Expected dates of discharge (mm/dd/yy): start 02/25/2013 end 08/30/2013

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). Refer to Figure 4 in the attached report

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)		☐	☒	2	grab	30,2540D		97000	21.2	54000	5.89
2. Total Residual Chlorine (TRC)		☒	☐	2	grab	30,4500Cl-D	20	ND	0		
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	2	grab	74,1664A	4400	ND	0		
4. Cyanide (CN)	57125	☒	☐	3	grab	30,4500CN-CE		6	0.00131	2	0.00022
5. Benzene (B)	71432	☐	☒	2	grab	5,624		600	0.13101	304.45	0.03324
6. Toluene (T)	108883	☐	☒	2	grab	5,624		11	0.00240	6.8	0.00074
7. Ethylbenzene (E)	100414	☐	☒	2	grab	5,624		12	0.00262	6	0.00066
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☒	2	grab	5,624		14	0.00306	9.55	0.00104
9. Total BTEX [2]	n/a	☐	☒	2	grab	5,624		637	0.13909	326.8	0.03568
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	2	grab	14,504.1	0.01	ND	0		
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	2	grab	5,624	100	ND	0		
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	2	grab	5,624	500	ND	0		

***** 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	☒	☐	2	grab	5,624	100	ND	0		
14. Naphthalene	91203	☒	☐	2	grab	1,8270D-SIM		1.5	0.00033	0.935	0.00010
15. Carbon Tetrachloride	56235	☒	☐	2	grab	5,624	5	ND	0		
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	2	grab	5,624	2	ND	0		
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	2	grab	5,624	2	ND	0		
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	2	grab	5,624	2	ND	0		
18a. Total dichlorobenzene		☒	☐	2	grab	5,624	2	ND	0		
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	2	grab	5,624	7.5	ND	0		
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	2	grab	5,624	7.5	ND	0		
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	2	grab	5,624	5	ND	0		
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	2	grab	5,624	5	ND	0		
23. Methylene Chloride	75092	☒	☐	2	grab	5,624	25	ND	0		
24. Tetrachloroethene (PCE)	127184	☒	☐	2	grab	5,624	7.5	ND	0		
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	2	grab	5,624	10	ND	0		
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	2	grab	5,624	7.5	ND	0		
27. Trichloroethene (TCE)	79016	☒	☐	2	grab	5,624	5	ND	0		

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	☒	☐	2	grab	5,624	10	ND	0		
29. Acetone	67641	☒	☐	2	grab	5,624		15	0.00328	7.5	0.00082
30. 1,4 Dioxane	123911	☒	☐	2	grab	5,624	10000	ND	0		
31. Total Phenols	108952	☐	☒	2	grab	4,420.1		420	0.09171	230	0.02511
32. Pentachlorophenol (PCP)	87865	☒	☐	2	grab	1,8270D-SIM	4	ND	0		
33. Total Phthalates (Phthalate esters) [4]		☒	☐	2	grab	1,8270D	5	ND	0		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	2	grab	1,8270D	3	ND	0		
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	2	grab	1,8270D-SIM	1	ND	0		
a. Benzo(a) Anthracene	56553	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
b. Benzo(a) Pyrene	50328	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
c. Benzo(b)Fluoranthene	205992	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
d. Benzo(k)Fluoranthene	207089	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
e. Chrysene	21801	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
f. Dibenzo(a,h)anthracene	53703	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	2	grab	1,8270D-SIM	1	ND	0		
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	2	grab	1,8270D-SIM		7.3	0.00159	4.5	0.00049

[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	☐	☒	2	grab	1,8270D-SIM		2	0.00044	1.21	0.00013
i. Acenaphthylene	208968	☐	☒	2	grab	1,8270D-SIM	1	ND	0		
j. Anthracene	120127	☐	☒	2	grab	1,8270D-SIM	1	ND	0		
k. Benzo(ghi) Perylene	191242	☐	☒	2	grab	1,8270D-SIM	1	ND	0		
l. Fluoranthene	206440	☐	☒	2	grab	1,8270D-SIM	1	ND	0		
m. Fluorene	86737	☐	☒	2	grab	1,8270D-SIM		1.9	0.00041	1.295	0.00014
n. Naphthalene	91203	☐	☒	2	grab	1,8270D-SIM		1.5	0.00033	0.935	0.00010
o. Phenanthrene	85018	☐	☒	2	grab	1,8270D-SIM		1.9	0.00041	1.065	0.00012
p. Pyrene	129000	☐	☒	2	grab	1,8270D-SIM	1	ND	0		
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	2	grab	5,608	0.25	ND	0		
38. Chloride	16887006	☒	☐	2	grab	44,300.0		1800000	393	1225000	133.7
39. Antimony	7440360	☒	☐	2	grab	1,6020A		1.7	0.00037	1.1	0.00012
40. Arsenic	7440382	☐	☒	2	grab	1,6020A		16.6	0.00362	13.75	0.00150
41. Cadmium	7440439	☒	☐	2	grab	1,6020A	0.2	ND	0		
42. Chromium III (trivalent)	16065831	☒	☐	2	grab	1,6020A		2.2	0.00048	1.75	0.00019
43. Chromium VI (hexavalent)	18540299	☒	☐	2	grab	30,3500CR-D	10	ND	0		
44. Copper	7440508	☒	☐	2	grab	1,6020A		1.7	0.00037	0.85	0.00009
45. Lead	7439921	☐	☒	2	grab	1,6020A		4.5	0.00098	3.5	0.00038
46. Mercury	7439976	☒	☐	2	grab	3,245.1	0.2	ND	0		
47. Nickel	7440020	☒	☐	2	grab	1,6020A		1.7	0.00037	1.4	0.00015
48. Selenium	7782492	☐	☒	2	grab	1,6020A		63	0.01376	31.5	0.00334
49. Silver	7440224	☒	☐	2	grab	1,6020A	0.4	ND	0		
50. Zinc	7440666	☒	☐	2	grab	1,6020A		13.9	0.00304	13.7	0.00150
51. Iron	7439896	☐	☒	2	grab	19,200.7		29000	6.332	14785	1.614
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)
		☐	☐					0			
		☐	☐								

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? Arsenic, Lead, Selenium, and 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: Arsenic DF: 53 Metal: Lead DF: 53 Metal: Selenium DF: 53 Metal: Iron DF: 53 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: Iron

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:

A 10,000 gallon settling tank, with bag filter(s), GAC filter(s), and an ion exchange system/cyanide treatment system in series

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 system/treatment for cyanide		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 20 gpm Maximum flow rate of treatment system 40 gpm
Design flow rate of treatment system 40 gpm

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

None

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

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

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

Discharge into storm drain on Huntington Avenue that eventually discharges into the Muddy River. Please refer to attached report for further details and plan.

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 8.74 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

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

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

6. ESA and NHPA Eligibility.

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

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

A ◉ B ○ C ○ D ○ E ○ F ○

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

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

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

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

1 ○ 2 ◉ 3 ○

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

7. Supplemental information.

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

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

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

Facility/Site Name:	525 Huntington Ave.
Operator signature:	Michael A. Bergeron
Printed Name &Title:	Michael A. Bergeron, Assistant Director
Date:	12/26/12

McPHAIL ASSOCIATES, LLC

APPENDIX C

RESULTS OF RECENT GROUNDWATER ANALYSIS

On November 13 and December 14, 2012, McPhail Associates, LLC obtained samples of groundwater from on-site monitoring wells M3(OW) and M5A(OW) and submitted the samples to a certified laboratory for analysis for the presence of paramaters required under the EPA's Remediation General Permit (RGP) application, including pH, total suspended solids (TSS), total residual chlorine, total petroleum hydrocarbons (TPH), cyanide, volatile organic compounds (VOCs) including total benzene, toluene, ethylbenzene and xylenes (BTEX), poly-aromatic hydrocarbons (PAHs), total phenols, PCBs, and total recoverable metals.

The results of the laboratory analysis are summarized in Table 1 included in Appendix C. The results of laboratory analysis indicate the following:

1. **pH**: The tested samples exhibited pH levels of 6.7 and 6.8 Standard Units (S.U.) which is within the recommended range of 6.5 to 8.5 S.U. for discharge into freshwater.

2. **TSS**: Total suspended solids (TSS) were detected in the tested samples at concentrations of 11 and 97 milligram per liter (mg/l), which is in excess of the upper limit of 30 mg/l established by the EPA for discharge into surface water. The detected level of TSS is considered to be attributable to the disturbance of suspended solids in the monitoring wells during development of the wells and subsequent sampling. However, it should be noted that groundwater will be pre-treated by passing the water through a sediment tank(s) and a bag filter(s) prior to discharge in order to reduce the concentration of TSS in the effluent.

3. **VOCs**: BTEX compounds were detected in the tested samples at concentrations of 16.6 and 637 microgram per liter (ug/l), which is in excess of the upper limit of 100 ug/l established by the EPA. The groundwater will be pre-treated by passing the water through a granular activated carbon (GAC) filter(s) prior to discharge in order to the reduce the concentration of VOCs in the effluent.

4. **TPH**: Laboratory analysis of the groundwater samples indicated no detectable levels of TPH.

5. **PAHs and Total Phenols**: The laboratory reported no detectable levels of Group 1 PAHs. Group II PAHs were detected at concentrations of 1.71 and 7.3 ug/l, which are below the upper limit of 10 ug/l established by the EPA. Total Phenols were detected at concentrations of 40 and 420 ug/l, which is in excess of the upper limit of 300 ug/l established by the EPA for discharge into surface water. As stated above, the groundwater will be pre-treated by passing through a GAC filter(s) to reduce the concentration of Total Phenols in the effluent.

6. **PCBs:** The laboratory results indicated no detectable levels of PCBs.

McPHAIL ASSOCIATES, LLC

7. **Cyanide**: Cyanide was detected in the tested groundwater sample taken on November 13, 2012 from well M5A (OW) at a concentration of 6 ug/l, which is in excess of the upper limit of 5.2 ug/l established by the EPA. The test results of the groundwater sample taken from well M3 (OW) on the same date indicated no detectable levels of cyanide above the method detection limit of 5 ug/l. Due to the lack of a source for cyanide at the site and the relatively small difference between the detection limits and the detected concentration of cyanide in the groundwater sample, we believe the presence of cyanide in the test result from well M5A (OW) to be an anomaly and not indicative of actual conditions at the site. A second groundwater sample was taken on December 14, 2012 from well M5A (OW) and the results indicated no detectable levels of cyanide above the method detection limit of 5 ug/l. Based on this test result and the original test result on the groundwater sample taken from well M3 (OW) it is our belief that cyanide is not present at the subject site.

8. **Total Metals**: The laboratory reported no detectable levels of cadmium, chromium VI, mercury, or silver in the submitted samples of groundwater. Levels of antimony, arsenic, chromium III, copper, lead, nickel, selenium, zinc and iron were reported at levels up to 1.7 microgram per liter (ug/l), 16.6 ug/l, 2.2 ug/l, 1.7 ug/l, 4.5 ug/l, 1.7 ug/l, 63 ug/l, 13.9 ug/l and 29,000 ug/l, respectively. The detected levels of antimony, chromium III, copper, nickel and zinc are below the EPA effluent limits of 5.6 ug/l, 48.8 ug/l, 5.2 ug/l, 29 ug/l and 66.6 ug/l, respectively, for discharge to a freshwater body.

   The detected levels of arsenic, lead, selenium and iron exceed the EPA effluent limits of 10 ug/l, 1.3 ug/l, 5 ug/l and 1,000 ug/l, respectively, for discharge into a freshwater body. A Dilution Factor (DF) was calculated for the detected levels pursuant to the procedure contained in RGP MAG910000, Appendix V. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the Muddy River. The calculated DF was then used to find the appropriate Dilution Range Concentration (DRC) contained in MAG910000, Appendix IV. The Minimum Flow Rate calculated by the USGS Streamstats GIS database at the location of discharge into the Muddy River for seven consecutive days with a recurrence interval of 10 years (7Q10 flow) is 8.74, thus resulting in a DF of 53. A DF between 50 and 100 corresponds to a dilution concentration of 500 ug/l, 66 ug/l, 250 ug/l and 5,000 ug/l for arsenic, lead, selenium and iron, respectively. Therefore, based on the calculation of the applicable dilution factor, only the maximum detected level of iron at 29,000 ug/l exceeds the applicable dilution concentration of 5,000 ug/l for discharge into a freshwater body. As a result, it is anticipated that the level of iron detected in groundwater will be reduced to below the EPA RGP effluent limitations prior to off-site discharge.

TABLE 1

ANALYTICAL TEST RESULTS--GROUNDWATER NOVEMBER 2012

525 Huntington Avenue;
Boston, Massachusetts
Project Number 5419

LOCATION		RGP Limits		M3 (OW)	M5A (OW)	M5A (OW)
SAMPLING DATE				11/13/2012	11/13/2012	12/14/2012
LAB SAMPLE ID				L1220588-01	L1220588-02	L1222738-01
			Units		L1220588-02 R1	
1	Solids, Total Suspended	30	mg/l	97	11	
	pH (H)	6.5-8.3	SU	6.8	6.7	
2	Total Residual Chlorine	11	ug/l	ND(20)	ND(20)	
3	TPH	5000	ug/l	ND(4400)	ND(4400)	
4	Total Cyanide	5.2	ug/l	ND(5)	6	ND(5)
5	Benzene	Total BTEX	ug/l	600	8.9	
6	Toluene	Total BTEX	ug/l	11	2.6	
7	Ethylbenzene	Total BTEX	ug/l	12	ND(1)	
8	Xylene (Total)	Total BTEX	ug/l	14	5.1	
9	Total BTEX	100	ug/l	637	16.6	
10	1,2-Dibromoethane	0.05	ug/l	ND(0.011)	ND(0.01)	
11	Methyl tert butyl ether	70	ug/l	ND(100)	ND(20)	
12	Tert-Butyl Alcohol	Monitor Only	ug/l	ND(500)	ND(100)	
13	Tertiary-Amyl Methyl Ether	Monitor Only	ug/l	ND(100)	ND(20)	
14	Naphthalene	20	ug/l	1.5	0.37	
15	Carbon tetrachloride	4.44	ug/l	ND(5)	ND(1)	
16	1,2-Dichlorobenzene	600	ug/l	ND(2)	ND(2)	
17	1,3-Dichlorobenzene	320	ug/l	ND(2)	ND(2)	
18	1,4-Dichlorobenzene	5	ug/l	ND(2)	ND(2)	
19	1,1-Dichloroethane	70	ug/l	ND(7.5)	ND(1.5)	
20	1,2-Dichloroethane	5	ug/l	ND(7.5)	ND(1.5)	
21	1,1-Dichloroethene	3.2	ug/l	ND(5)	ND(1)	
22	cis-1,2-Dichloroethene	70	ug/l	ND(5)	ND(1)	
23	Methylene chloride	4.6	ug/l	ND(25)	ND(5)	
24	Tetrachloroethene	5	ug/l	ND(7.5)	ND(1.5)	
25	1,1,1-Trichloroethane	200	ug/l	ND(10)	ND(2)	
26	1,1,2-Trichloroethane	5	ug/l	ND(7.5)	ND(1.5)	
27	Trichloroethene	5	ug/l	ND(5)	ND(1)	
28	Vinyl chloride	2	ug/l	ND(10)	ND(2)	
29	Acetone	Monitor Only	ug/l	ND(50)	15	
30	1,4-Dioxane	Monitor Only	ug/l	ND(10000)	ND(2000)	
31	Total Phenolics	300	ug/l	40	420	
32	Pentachlorophenol	1	ug/l	ND(4)	ND(0.8)	
33	Total Phthalates (Phthalate est	3	ug/l	ND	ND	
34	Bis(2-ethylhexyl)phthalate	6	ug/l	ND(3)	ND(3)	
35	Total Group I PAHs	10	ug/l	ND(1)	ND(0.2)	
a	Benzo(a)anthracene	0.0038	ug/l	ND(1)	ND(0.2)	
b	Benzo(a)pyrene	0.0038	ug/l	ND(1)	ND(0.2)	
c	Benzo(b)fluoranthene	0.0038	ug/l	ND(1)	ND(0.2)	
d	Benzo(k)fluoranthene	0.0038	ug/l	ND(1)	ND(0.2)	
e	Chrysene	0.0038	ug/l	ND(1)	ND(0.2)	
f	Dibenzo(a,h)anthracene	0.0038	ug/l	ND(1)	ND(0.2)	
g	Indeno(1,2,3-cd)Pyrene	0.0038	ug/l	ND(1)	ND(0.2)	

Shading indicates an exceedence of the RGP Standards
ND--not detected above laboratory detection limit

TABLE 1

ANALYTICAL TEST RESULTS--GROUNDWATER NOVEMBER 2012

525 Huntington Avenue;
Boston, Massachusetts
Project Number 5419

LOCATION		RGP Limits		M3 (OW)	M5A (OW)	M5A (OW)
SAMPLING DATE				11/13/2012	11/13/2012	12/14/2012
LAB SAMPLE ID				L1220588-01	L1220588-02	L1222738-01
			Units		L1220588-02 R1	
36	Total Group II PAHs	10	ug/l	7.3	1.71	
h	Acenaphthene	Total Group II PAH	ug/l	2	0.42	
i	Acenaphthylene	Total Group II PAH	ug/l	ND(1)	ND(0.2)	
j	Anthracene	Total Group II PAH	ug/l	ND(1)	ND(0.2)	
k	Benzo(ghi)perylene	Total Group II PAH	ug/l	ND(1)	ND(0.2)	
l	Fluoranthene	Total Group II PAH	ug/l	ND(1)	ND(0.2)	
m	Fluorene	Total Group II PAH	ug/l	1.9	0.69	
n	Naphthalene	20	ug/l	1.5	0.37	
o	Phenanthrene	Total Group II PAH	ug/l	1.9	0.23	
p	Pyrene	Total Group II PAH	ug/l	ND(1)	ND(0.2)	
37	Total PCBs	0.000046	ug/l	ND	ND	
38	Chloride	Monitor Only	ug/l	650000	1800000	
	Total Recoverable Metal Limits					
39	Antimony, Total	5.6	ug/l	0.5	1.7	
40	Arsenic, Total	10	ug/l	10.9	16.6	
41	Cadmium, Total	3	ug/l	ND(0.2)	ND(0.2)	
42	Chromium, Total	48.8	ug/l	1.3	2.2	
43	Chromium, Hexavalent	11.4	ug/l	ND(10)	ND(10)	
44	Copper, Total	5.2	ug/l	1.7	ND(1)	
45	Lead, Total	1.3	ug/l	4.5	2.5	
46	Mercury, Total	0.9	ug/l	ND(0.2)	ND(0.2)	
47	Nickel, Total	29	ug/l	1.7	1.1	
48	Selenium, Total	5	ug/l	ND(5)	63	
49	Silver, Total	1.2	ug/l	ND(0.4)	ND(0.4)	
50	Zinc, Total	66.6	ug/l	13.9	13.5	
51	Iron, Total	1000	ug/l	29000	570	

Shading indicates an exceedence of the RGP Standards
ND--not detected above laboratory detection limit

ANALYTICAL REPORT

Lab Number:	L1220588
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	525 HUNTINGTON AVE.
Project Number:	5419.9.01
Report Date:	11/26/12

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: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1220588-01	M3 (OW)	BOSTON, MA	11/13/12 11:45
L1220588-02	M5A (OW)	BOSTON, MA	11/13/12 13:20

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588
Project Number: 5419.9.01 **Report Date:** 11/26/12

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:	525 HUNTINGTON AVE.	**Lab Number:**	L1220588
Project Number:	5419.9.01	**Report Date:**	11/26/12

Case Narrative (continued)

Report Submission

This report replaces the report issued on November 19, 2012. 1,4-Dioxane is now reported with the Volatile Organics analysis.

MCP Related Narratives

Sample Receipt

Samples "M3 (OW)" and "M5A (OW)" were received without a container for the Total Cyanide analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

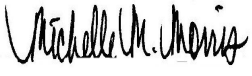
Sample "M5A (OW)" was received above the appropriate pH for the TPH analysis. The laboratory added additional HCl to a pH <2.

Metals

The WG573612-4 MS recoveries, performed on L1220588-02, are below the acceptance criteria for Selenium (0%) and Silver (70%). A post digestion spike was performed with unacceptable recoveries for Selenium (0%) and Silver (73%). This has been attributed to the sample matrix.

The WG573612-3 Laboratory Duplicate RPD, performed on L1220588-02, is outside the acceptance criteria for Selenium (61%). The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the laboratory duplicate.

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: 11/26/12

ORGANICS

VOLATILES

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-01	Date Collected:	11/13/12 11:45
Client ID:	M3 (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	11/15/12 11:00
Analytical Date:	11/15/12 22:59		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Microextractables by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.011	--	1

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-01	D	Date Collected:	11/13/12 11:45
Client ID:	M3 (OW)		Date Received:	11/13/12
Sample Location:	BOSTON, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	5,624			
Analytical Date:	11/14/12 18:59			
Analyst:	KL			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	--	5
1,1-Dichloroethane	ND		ug/l	7.5	--	5
Chloroform	ND		ug/l	7.5	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	18	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	7.5	--	5
2-Chloroethylvinyl ether	ND		ug/l	50	--	5
Tetrachloroethene	ND		ug/l	7.5	--	5
Chlorobenzene	ND		ug/l	18	--	5
Trichlorofluoromethane	ND		ug/l	25	--	5
1,2-Dichloroethane	ND		ug/l	7.5	--	5
1,1,1-Trichloroethane	ND		ug/l	10	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	7.5	--	5
cis-1,3-Dichloropropene	ND		ug/l	7.5	--	5
Bromoform	ND		ug/l	5.0	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	600		ug/l	5.0	--	5
Toluene	11		ug/l	5.0	--	5
Ethylbenzene	12		ug/l	5.0	--	5
Chloromethane	ND		ug/l	50	--	5
Bromomethane	ND		ug/l	25	--	5
Vinyl chloride	ND		ug/l	10	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	7.5	--	5
cis-1,2-Dichloroethene[1]	ND		ug/l	5.0	--	5
Trichloroethene	ND		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	25	--	5
1,3-Dichlorobenzene	ND		ug/l	25	--	5

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-01 D Date Collected: 11/13/12 11:45

Client ID: M3 (OW) Date Received: 11/13/12

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	25	--	5
p/m-Xylene[1]	14		ug/l	10	--	5
o-xylene[1]	ND		ug/l	5.0	--	5
Xylene (Total)[1]	14		ug/l	10	--	5
Styrene[1]	ND		ug/l	5.0	--	5
Acetone[1]	ND		ug/l	50	--	5
Carbon disulfide[1]	ND		ug/l	25	--	5
2-Butanone[1]	ND		ug/l	50	--	5
Vinyl acetate[1]	ND		ug/l	100	--	5
4-Methyl-2-pentanone[1]	ND		ug/l	50	--	5
2-Hexanone[1]	ND		ug/l	50	--	5
Acrolein[1]	ND		ug/l	40	--	5
Acrylonitrile[1]	ND		ug/l	50	--	5
Methyl tert butyl ether[1]	ND		ug/l	100	--	5
Dibromomethane[1]	ND		ug/l	5.0	--	5
1,4-Dioxane[1]	ND		ug/l	10000	--	5
Tert-Butyl Alcohol[1]	ND		ug/l	500	--	5
Tertiary-Amyl Methyl Ether[1]	ND		ug/l	100	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		80-120
Fluorobenzene	109		80-120
4-Bromofluorobenzene	93		80-120

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-02	Date Collected:	11/13/12 13:20
Client ID:	M5A (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	11/15/12 11:00
Analytical Date:	11/15/12 23:14		
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: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-02	Date Collected:	11/13/12 13:20
Client ID:	M5A (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	5,624		
Analytical Date:	11/14/12 19:34		
Analyst:	KL		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	8.9		ug/l	1.0	--	1
Toluene	2.6		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	10	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	2.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-02 Date Collected: 11/13/12 13:20

Client ID: M5A (OW) Date Received: 11/13/12

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene[1]	3.0		ug/l	2.0	--	1
o-xylene[1]	2.1		ug/l	1.0	--	1
Xylene (Total)[1]	5.1		ug/l	2.0	--	1
Styrene[1]	ND		ug/l	1.0	--	1
Acetone[1]	15		ug/l	10	--	1
Carbon disulfide[1]	22		ug/l	5.0	--	1
2-Butanone[1]	ND		ug/l	10	--	1
Vinyl acetate[1]	ND		ug/l	20	--	1
4-Methyl-2-pentanone[1]	ND		ug/l	10	--	1
2-Hexanone[1]	ND		ug/l	10	--	1
Acrolein[1]	ND		ug/l	8.0	--	1
Acrylonitrile[1]	ND		ug/l	10	--	1
Methyl tert butyl ether[1]	ND		ug/l	20	--	1
Dibromomethane[1]	ND		ug/l	1.0	--	1
1,4-Dioxane[1]	ND		ug/l	2000	--	1
Tert-Butyl Alcohol[1]	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether[1]	ND		ug/l	20	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	103		80-120
Fluorobenzene	102		80-120
4-Bromofluorobenzene	93		80-120

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 11/15/12 20:40
Analyst: SH

Extraction Date: 11/15/12 11:00

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01-02 Batch: WG573892-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 11/14/12 10:40
Analyst: KL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG574236-4					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	10	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	2.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 11/14/12 10:40
Analyst: KL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG574236-4					
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene[1]	ND		ug/l	2.0	--
o-xylene[1]	ND		ug/l	1.0	--
Xylene (Total)[1]	ND		ug/l	2.0	--
Styrene[1]	ND		ug/l	1.0	--
Acetone[1]	ND		ug/l	10	--
Carbon disulfide[1]	ND		ug/l	5.0	--
2-Butanone[1]	ND		ug/l	10	--
Vinyl acetate[1]	ND		ug/l	20	--
4-Methyl-2-pentanone[1]	ND		ug/l	10	--
2-Hexanone[1]	ND		ug/l	10	--
Acrolein[1]	ND		ug/l	8.0	--
Acrylonitrile[1]	ND		ug/l	10	--
Methyl tert butyl ether[1]	ND		ug/l	20	--
Dibromomethane[1]	ND		ug/l	1.0	--
1,4-Dioxane[1]	ND		ug/l	2000	--
Tert-Butyl Alcohol[1]	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether[1]	ND		ug/l	20	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	107		80-120
Fluorobenzene	105		80-120
4-Bromofluorobenzene	99		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG573892-2								
1,2-Dibromoethane	112		-		70-130	-		20
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG574236-3								
Methylene chloride	100		-		70-111	-		30
1,1-Dichloroethane	97		-		78-116	-		30
Chloroform	102		-		86-111	-		30
Carbon tetrachloride	90		-		60-112	-		30
1,2-Dichloropropane	100		-		83-113	-		30
Dibromochloromethane	99		-		58-129	-		30
1,1,2-Trichloroethane	101		-		80-118	-		30
2-Chloroethylvinyl ether	110		-		69-124	-		30
Tetrachloroethene	104		-		80-126	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG574236-3								
Chlorobenzene	98		-		80-126	-		30
Trichlorofluoromethane	100		-		83-128	-		30
1,2-Dichloroethane	103		-		82-110	-		30
1,1,1-Trichloroethane	94		-		72-109	-		30
Bromodichloromethane	101		-		71-120	-		30
trans-1,3-Dichloropropene	90		-		73-106	-		30
cis-1,3-Dichloropropene	94		-		78-111	-		30
Bromoform	85		-		45-131	-		30
1,1,2,2-Tetrachloroethane	97		-		81-122	-		30
Benzene	99		-		84-116	-		30
Toluene	101		-		83-121	-		30
Ethylbenzene	98		-		84-123	-		30
Chloromethane	88		-		70-144	-		30
Bromomethane	74		-		63-141	-		30
Vinyl chloride	92		-		56-118	-		30
Chloroethane	95		-		74-130	-		30
1,1-Dichloroethene	96		-		77-116	-		30
trans-1,2-Dichloroethene	94		-		81-121	-		30
cis-1,2-Dichloroethene[1]	106		-		85-110	-		30
Trichloroethene	99		-		84-118	-		30
1,2-Dichlorobenzene	98		-		78-128	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG574236-3								
1,3-Dichlorobenzene	99		-		77-125	-		30
1,4-Dichlorobenzene	98		-		77-125	-		30
p/m-Xylene[1]	100		-		81-121	-		30
o-Xylene[1]	100		-		81-124	-		30
XYLENE (TOTAL)[1]	100		-		81-122	-		30
Styrene[1]	99		-		84-133	-		30
Acetone[1]	102		-		40-160	-		30
Carbon disulfide[1]	105		-		54-134	-		30
2-Butanone[1]	109		-		57-116	-		30
Vinyl acetate[1]	102		-		40-160	-		30
4-Methyl-2-pentanone[1]	105		-		79-125	-		30
2-Hexanone[1]	108		-		78-120	-		30
Acrolein[1]	105		-		40-160	-		30
Acrylonitrile[1]	104		-		66-123	-		30
Methyl tert butyl ether[1]	108		-		57-126	-		30
Dibromomethane[1]	102		-		65-126	-		30
1,4-Dioxane[1]	111		-		74-121	-		30
tert-Butyl Alcohol[1]	101		-		52-114	-		30
Tertiary-Amyl Methyl Ether[1]	102		-		66-111	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG574236-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	104				80-120
Fluorobenzene	103				80-120
4-Bromofluorobenzene	100				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

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): 01-02 QC Batch ID: WG573892-3 QC Sample: L1220545-06 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.258	0.251	98		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-6 QC Sample: L1220561-02 Client ID: MS Sample												
Methylene chloride	ND	200	240	**122**	Q	-	-		70-111	-		30
1,1-Dichloroethane	ND	200	250	**124**	Q	-	-		78-116	-		30
Chloroform	ND	200	250	**125**	Q	-	-		86-111	-		30
Carbon tetrachloride	ND	200	240	**118**	Q	-	-		60-112	-		30
1,2-Dichloropropane	ND	200	240	**121**	Q	-	-		83-113	-		30
Dibromochloromethane	ND	200	240	119		-	-		58-129	-		30
1,1,2-Trichloroethane	ND	200	240	118		-	-		80-118	-		30
2-Chloroethylvinyl ether	ND	200	230	115		-	-		69-124	-		30
Tetrachloroethene	ND	200	240	123		-	-		80-126	-		30
Chlorobenzene	ND	200	220	109		-	-		80-126	-		30
Trichlorofluoromethane	ND	200	250	123		-	-		83-128	-		30
1,2-Dichloroethane	ND	200	250	**125**	Q	-	-		82-110	-		30
1,1,1-Trichloroethane	ND	200	240	**120**	Q	-	-		72-109	-		30
Bromodichloromethane	ND	200	240	120		-	-		71-120	-		30
trans-1,3-Dichloropropene	ND	200	200	101		-	-		73-106	-		30
cis-1,3-Dichloropropene	ND	200	210	105		-	-		78-111	-		30
Bromoform	ND	200	210	106		-	-		45-131	-		30
1,1,2,2-Tetrachloroethane	ND	200	220	109		-	-		81-122	-		30
Benzene	ND	200	240	**120**	Q	-	-		84-116	-		30
Toluene	ND	200	230	117		-	-		83-121	-		30
Ethylbenzene	ND	200	220	113		-	-		84-123	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-6 QC Sample: L1220561-02 Client ID: MS Sample												
Chloromethane	ND	200	210	104		-	-		70-144	-		30
Bromomethane	ND	200	170	84		-	-		63-141	-		30
Vinyl chloride	ND	200	220	111		-	-		56-118	-		30
Chloroethane	ND	200	230	116		-	-		74-130	-		30
1,1-Dichloroethene	ND	200	240	**120**	Q	-	-		77-116	-		30
trans-1,2-Dichloroethene	ND	200	230	117		-	-		81-121	-		30
cis-1,2-Dichloroethene[1]	ND	200	250	**126**	Q	-	-		85-110	-		30
Trichloroethene	ND	200	240	**122**	Q	-	-		84-118	-		30
1,2-Dichlorobenzene	ND	200	220	110		-	-		78-128	-		30
1,3-Dichlorobenzene	ND	200	220	111		-	-		77-125	-		30
1,4-Dichlorobenzene	ND	200	220	110		-	-		77-125	-		30
p/m-Xylene[1]	ND	400	460	115		-	-		81-121	-		30
o-Xylene[1]	ND	200	230	114		-	-		81-124	-		30
XYLENE (TOTAL)[1]	ND	600	680	114		-	-		81-122	-		30
Styrene[1]	ND	200	220	111		-	-		84-133	-		30
Acetone[1]	ND	500	630	127		-	-		40-160	-		30
Carbon disulfide[1]	ND	200	260	128		-	-		54-134	-		30
2-Butanone[1]	ND	500	650	**130**	Q	-	-		57-116	-		30
Vinyl acetate[1]	ND	400	420	105		-	-		40-160	-		30
4-Methyl-2-pentanone[1]	ND	500	620	124		-	-		79-125	-		30
2-Hexanone[1]	ND	500	640	**128**	Q	-	-		78-120	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-6 QC Sample: L1220561-02 Client ID: MS Sample												
Acrolein[1]	ND	400	490	123		-	-		40-160	-		30
Acrylonitrile[1]	ND	400	510	**127**	Q	-	-		66-123	-		30
Dibromomethane[1]	ND	200	240	122		-	-		65-126	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	97				80-120
Fluorobenzene	105				80-120
Pentafluorobenzene	105				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-5 QC Sample: L1220561-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-5 QC Sample: L1220561-02 Client ID: DUP Sample					
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene[1]	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene[1]	ND	ND	ug/l	NC	30
o-Xylene[1]	ND	ND	ug/l	NC	30
XYLENE (TOTAL)[1]	ND	ND	ug/l	NC	30
Styrene[1]	ND	ND	ug/l	NC	30
Acetone[1]	ND	ND	ug/l	NC	30
Carbon disulfide[1]	ND	ND	ug/l	NC	30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574236-5 QC Sample: L1220561-02 Client ID: DUP Sample					
2-Butanone[1]	ND	ND	ug/l	NC	30
Vinyl acetate[1]	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone[1]	ND	ND	ug/l	NC	30
2-Hexanone[1]	ND	ND	ug/l	NC	30
Acrolein[1]	ND	ND	ug/l	NC	30
Acrylonitrile[1]	ND	ND	ug/l	NC	30
Dibromomethane[1]	ND	ND	ug/l	NC	30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	103		104		80-120
Fluorobenzene	103		102		80-120
4-Bromofluorobenzene	97		96		80-120

SEMIVOLATILES

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-01	Date Collected:	11/13/12 11:45
Client ID:	M3 (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/14/12 07:44
Analytical Date:	11/18/12 19:00		
Analyst:	RC		

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: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-01 Date Collected: 11/13/12 11:45

Client ID: M3 (OW) Date Received: 11/13/12

Sample Location: BOSTON, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	**124**	Q	10-120
4-Terphenyl-d14	106		41-149

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-01	D	Date Collected:	11/13/12 11:45
Client ID:	M3 (OW)		Date Received:	11/13/12
Sample Location:	BOSTON, MA		Field Prep:	Not Specified
Matrix:	Water		Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM		Extraction Date:	11/14/12 07:46
Analytical Date:	11/16/12 21:34			
Analyst:	AS			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.0		ug/l	1.0	--	5
2-Chloronaphthalene	ND		ug/l	1.0	--	5
Fluoranthene	ND		ug/l	1.0	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Naphthalene	1.5		ug/l	1.0	--	5
Benzo(a)anthracene	ND		ug/l	1.0	--	5
Benzo(a)pyrene	ND		ug/l	1.0	--	5
Benzo(b)fluoranthene	ND		ug/l	1.0	--	5
Benzo(k)fluoranthene	ND		ug/l	1.0	--	5
Chrysene	ND		ug/l	1.0	--	5
Acenaphthylene	ND		ug/l	1.0	--	5
Anthracene	ND		ug/l	1.0	--	5
Benzo(ghi)perylene	ND		ug/l	1.0	--	5
Fluorene	1.9		ug/l	1.0	--	5
Phenanthrene	1.9		ug/l	1.0	--	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	--	5
Indeno(1,2,3-cd)Pyrene	ND		ug/l	1.0	--	5
Pyrene	ND		ug/l	1.0	--	5
1-Methylnaphthalene	50		ug/l	1.0	--	5
2-Methylnaphthalene	2.2		ug/l	1.0	--	5
Pentachlorophenol	ND		ug/l	4.0	--	5
Hexachlorobenzene	ND		ug/l	4.0	--	5
Hexachloroethane	ND		ug/l	4.0	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	**129**	Q	10-120
4-Terphenyl-d14	100		41-149

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-02	Date Collected:	11/13/12 13:20
Client ID:	M5A (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/14/12 07:44
Analytical Date:	11/18/12 19:26		
Analyst:	RC		

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: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-02 Date Collected: 11/13/12 13:20

Client ID: M5A (OW) Date Received: 11/13/12

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	30		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	52		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	110		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	76		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	**131**	Q	10-120
4-Terphenyl-d14	109		41-149

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-02	Date Collected:	11/13/12 13:20
Client ID:	M5A (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/14/12 07:46
Analytical Date:	11/15/12 14:09		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.42		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	0.37		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	0.69		ug/l	0.20	--	1
Phenanthrene	0.23		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	5.1		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	61		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	107		41-149

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/16/12 19:35
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 11/14/12 07:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG573575-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	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	--
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	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/16/12 19:35
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 11/14/12 07:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG573575-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
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	62		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	99		41-149

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/15/12 12:21
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 11/14/12 07:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG573576-1					
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: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/15/12 12:21
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 11/14/12 07:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG573576-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	102		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG573575-2 WG573575-3								
Benzidine	**0**	Q	17		10-75	NC		30
1,2,4-Trichlorobenzene	47		60		39-98	24		30
Bis(2-chloroethyl)ether	73		92		40-140	23		30
1,2-Dichlorobenzene	51		64		40-140	23		30
1,3-Dichlorobenzene	49		60		40-140	20		30
1,4-Dichlorobenzene	50		60		36-97	18		30
3,3'-Dichlorobenzidine	54		75		40-140	**33**	Q	30
2,4-Dinitrotoluene	95		**117**	Q	24-96	21		30
2,6-Dinitrotoluene	94		118		40-140	23		30
Azobenzene	88		110		40-140	22		30
4-Chlorophenyl phenyl ether	79		94		40-140	17		30
4-Bromophenyl phenyl ether	90		112		40-140	22		30
Bis(2-chloroisopropyl)ether	73		90		40-140	21		30
Bis(2-chloroethoxy)methane	82		99		40-140	19		30
Hexachlorocyclopentadiene	**11**	Q	**15**	Q	40-140	**31**	Q	30
Isophorone	89		108		40-140	19		30
Nitrobenzene	77		101		40-140	27		30
NitrosoDiPhenylAmine(NDPA)/DPA	86		110		40-140	24		30
Bis(2-Ethylhexyl)phthalate	84		106		40-140	23		30
Butyl benzyl phthalate	87		112		40-140	25		30
Di-n-butylphthalate	94		120		40-140	24		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG573575-2 WG573575-3								
Di-n-octylphthalate	98		123		40-140	23		30
Diethyl phthalate	91		114		40-140	22		30
Dimethyl phthalate	87		109		40-140	22		30
Aniline	**18**	Q	**37**	Q	40-140	**69**	Q	30
4-Chloroaniline	**31**	Q	51		40-140	**49**	Q	30
2-Nitroaniline	100		125		52-143	22		30
3-Nitroaniline	62		80		25-145	25		30
4-Nitroaniline	90		118		51-143	27		30
Dibenzofuran	75		93		40-140	21		30
n-Nitrosodimethylamine	48		60		22-74	22		30
2,4,6-Trichlorophenol	100		129		30-130	25		30
P-Chloro-M-Cresol	86		**108**	Q	23-97	23		30
2-Chlorophenol	87		108		27-123	22		30
2,4-Dichlorophenol	91		118		30-130	26		30
2,4-Dimethylphenol	46		96		30-130	**70**	Q	30
2-Nitrophenol	83		106		30-130	24		30
4-Nitrophenol	55		69		10-80	23		30
2,4-Dinitrophenol	57		86		20-130	**41**	Q	30
4,6-Dinitro-o-cresol	70		97		20-164	**32**	Q	30
Phenol	46		58		12-110	23		30
2-Methylphenol	79		103		30-130	26		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG573575-2 WG573575-3								
3-Methylphenol/4-Methylphenol	82		100		30-130	20		30
2,4,5-Trichlorophenol	95		121		30-130	24		30
Benzoic Acid	54		59		10-164	9		30
Benzyl Alcohol	76		97		26-116	24		30
Carbazole	94		119		55-144	23		30
Pyridine	21		36		10-66	**53**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		88		21-120
Phenol-d6	54		62		10-120
Nitrobenzene-d5	95		111		23-120
2-Fluorobiphenyl	83		102		15-120
2,4,6-Tribromophenol	106		**130**	Q	10-120
4-Terphenyl-d14	98		124		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG573576-2 WG573576-3								
Acenaphthene	75		69		37-111	8		40
2-Chloronaphthalene	71		63		40-140	12		40
Fluoranthene	112		104		40-140	7		40
Hexachlorobutadiene	50		46		40-140	8		40
Naphthalene	75		67		40-140	11		40
Benzo(a)anthracene	112		105		40-140	6		40
Benzo(a)pyrene	92		84		40-140	9		40
Benzo(b)fluoranthene	101		94		40-140	7		40
Benzo(k)fluoranthene	106		95		40-140	11		40
Chrysene	89		82		40-140	8		40
Acenaphthylene	89		79		40-140	12		40
Anthracene	97		92		40-140	5		40
Benzo(ghi)perylene	100		90		40-140	11		40
Fluorene	86		79		40-140	8		40
Phenanthrene	92		85		40-140	8		40
Dibenzo(a,h)anthracene	88		80		40-140	10		40
Indeno(1,2,3-cd)Pyrene	101		91		40-140	10		40
Pyrene	104		97		26-127	7		40
1-Methylnaphthalene	75		67		40-140	11		40
2-Methylnaphthalene	74		66		40-140	11		40
Pentachlorophenol	95		88		9-103	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG573576-2 WG573576-3								
Hexachlorobenzene	92		85		40-140	8		40
Hexachloroethane	56		51		40-140	9		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		64		21-120
Phenol-d6	52		46		10-120
Nitrobenzene-d5	111		98		23-120
2-Fluorobiphenyl	96		85		15-120
2,4,6-Tribromophenol	114		102		10-120
4-Terphenyl-d14	108		99		41-149

PCBS

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-01	Date Collected:	11/13/12 11:45
Client ID:	M3 (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	11/14/12 07:49
Analytical Date:	11/16/12 02:53	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	11/14/12
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/14/12

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	50		30-150

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

SAMPLE RESULTS

Lab ID:	L1220588-02	Date Collected:	11/13/12 13:20
Client ID:	M5A (OW)	Date Received:	11/13/12
Sample Location:	BOSTON, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	11/14/12 07:49
Analytical Date:	11/16/12 03:06	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	11/14/12
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/14/12

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	94		30-150
Decachlorobiphenyl	64		30-150

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 11/16/12 03:58
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 11/14/12 07:49
Cleanup Method1: EPA 3665A
Cleanup Date1: 11/14/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 11/14/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG573577-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	41		30-150
Decachlorobiphenyl	50		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

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): 01-02 QC Batch ID: WG573577-3 QC Sample: L1220588-01 Client ID: M3 (OW)												
Aroclor 1016	ND	1	0.858	86		-	-		40-140	-		50
Aroclor 1260	ND	1	0.631	63		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78				30-150
Decachlorobiphenyl	56				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG573577-2								
Aroclor 1016	65		-		40-140	-		50
Aroclor 1260	60		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66				30-150
Decachlorobiphenyl	75				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab (OW)	Associated sample(s): 01-02	QC Batch ID: WG573577-4	QC Sample: L1220588-02	Client ID: M5A		
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	94		89		30-150
Decachlorobiphenyl	64		84		30-150

METALS

Project Name: 525 HUNTINGTON AVE.
Lab Number: L1220588
Project Number: 5419.9.01
Report Date: 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-01
Client ID: M3 (OW)
Sample Location: BOSTON, MA
Matrix: Water
Date Collected: 11/13/12 11:45
Date Received: 11/13/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0005		mg/l	0.0005	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Arsenic, Total	0.0109		mg/l	0.0060	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Chromium, Total	0.0013		mg/l	0.0010	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Copper, Total	0.0017		mg/l	0.0010	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Iron, Total	29		mg/l	0.05	--	1	11/14/12 09:21	11/14/12 18:36	EPA 3005A	19,200.7	BM
Lead, Total	0.0045		mg/l	0.0005	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	11/14/12 15:17	11/14/12 19:24	EPA 245.1	3,245.1	JH
Nickel, Total	0.0017		mg/l	0.0005	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK
Zinc, Total	0.0139		mg/l	0.0100	--	1	11/14/12 09:21	11/15/12 12:16	EPA 3005A	1,6020A	AK

Project Name: 525 HUNTINGTON AVE.
Lab Number: L1220588
Project Number: 5419.9.01
Report Date: 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-02
Client ID: M5A (OW)
Sample Location: BOSTON, MA
Matrix: Water
Date Collected: 11/13/12 13:20
Date Received: 11/13/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0017		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Arsenic, Total	0.0166		mg/l	0.0060	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Chromium, Total	0.0022		mg/l	0.0010	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Copper, Total	ND		mg/l	0.0010	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Iron, Total	0.57		mg/l	0.05	--	1	11/14/12 09:21	11/14/12 18:24	EPA 3005A	19,200.7	BM
Lead, Total	0.0025		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	11/14/12 15:17	11/14/12 19:26	EPA 245.1	3,245.1	JH
Nickel, Total	0.0011		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Selenium, Total	0.063		mg/l	0.005	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	11/14/12 09:21	11/15/12 11:43	EPA 3005A	1,6020A	AK
Zinc, Total	0.0135		mg/l	0.0100	--	1	11/14/12 09:21	11/14/12 16:09	EPA 3005A	1,6020A	AK

Project Name: 525 HUNTINGTON AVE. **Lab Number:** L1220588

Project Number: 5419.9.01 **Report Date:** 11/26/12

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): 01-02 Batch: WG573612-1										
Antimony, Total	ND		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Arsenic, Total	ND		mg/l	0.0060	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Chromium, Total	ND		mg/l	0.0010	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Copper, Total	ND		mg/l	0.0010	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Lead, Total	ND		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Nickel, Total	ND		mg/l	0.0005	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	11/14/12 09:21	11/14/12 15:49	1,6020A	AK
Zinc, Total	ND		mg/l	0.0100	--	1	11/14/12 09:21	11/14/12 15:49	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): 01-02 Batch: WG573619-1										
Iron, Total	ND		mg/l	0.05	--	1	11/14/12 09:21	11/14/12 18:17	19,200.7	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG573711-1										
Mercury, Total	ND		mg/l	0.0002	--	1	11/14/12 15:17	11/14/12 18:58	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG573612-2								
Antimony, Total	88		-		80-120	-		
Arsenic, Total	111		-		80-120	-		
Cadmium, Total	114		-		80-120	-		
Chromium, Total	96		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	105		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Selenium, Total	109		-		80-120	-		
Silver, Total	104		-		80-120	-		
Zinc, Total	114		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG573619-2								
Iron, Total	110		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG573711-2								
Mercury, Total	92		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

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): 01-02 QC Batch ID: WG573612-4 QC Sample: L1220588-02 Client ID: M5A (OW)												
Antimony, Total	0.0017	0.5	0.4956	99		-	-		80-120	-		20
Arsenic, Total	0.0166	0.12	0.1301	94		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0568	111		-	-		80-120	-		20
Chromium, Total	0.0022	0.2	0.1950	96		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2246	90		-	-		80-120	-		20
Lead, Total	0.0025	0.51	0.5482	107		-	-		80-120	-		20
Nickel, Total	0.0011	0.5	0.5101	102		-	-		80-120	-		20
Selenium, Total	0.063	0.12	ND	**0**	Q	-	-		80-120	-		20
Silver, Total	ND	0.05	0.0349	**70**	Q	-	-		80-120	-		20
Zinc, Total	0.0135	0.5	0.5522	108		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573619-4 QC Sample: L1220588-02 Client ID: M5A (OW)												
Iron, Total	0.57	1	1.6	103		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573711-4 QC Sample: L1220552-11 Client ID: MS Sample												
Mercury, Total	0.0002	0.001	0.0016	**138**	Q	-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573612-3 QC Sample: L1220588-02 Client ID: M5A (OW)						
Antimony, Total	0.0017	0.0015	mg/l	15		20
Arsenic, Total	0.0166	0.0170	mg/l	3		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0022	0.0021	mg/l	6		20
Copper, Total	ND	0.0014	mg/l	NC		20
Lead, Total	0.0025	0.0028	mg/l	11		20
Nickel, Total	0.0011	0.0009	mg/l	15		20
Selenium, Total	0.063	0.034	mg/l	**61**	Q	20
Zinc, Total	0.0135	0.0143	mg/l	5		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573612-3 QC Sample: L1220588-02 Client ID: M5A (OW)						
Silver, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573619-3 QC Sample: L1220588-02 Client ID: M5A (OW)						
Iron, Total	0.57	0.59	mg/l	3		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573711-3 QC Sample: L1220552-11 Client ID: DUP Sample						
Mercury, Total	0.0002	0.0002	mg/l	9		20

INORGANICS
&
MISCELLANEOUS

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01
Lab Number: L1220588
Report Date: 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-01
Client ID: M3 (OW)
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 11/13/12 11:45
Date Received: 11/13/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	97		mg/l	10	NA	2	-	11/16/12 12:20	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	11/14/12 12:02	11/15/12 15:04	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/13/12 21:35	30,4500CL-D	EL
pH (H)	6.8		SU	-	NA	1	-	11/14/12 00:13	30,4500H+-B	EL
TPH	ND		mg/l	4.40	--	1.1	11/14/12 08:00	11/19/12 14:15	74,1664A	JO
Phenolics, Total	0.04		mg/l	0.03	--	1	11/14/12 10:45	11/14/12 13:18	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/13/12 23:00	11/13/12 23:24	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	650		mg/l	50	--	100	-	11/14/12 18:57	44,300.0	AU

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

SAMPLE RESULTS

Lab ID: L1220588-02
Client ID: M5A (OW)
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 11/13/12 13:20
Date Received: 11/13/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	11		mg/l	5.0	NA	1	-	11/16/12 12:20	30,2540D	DW
Cyanide, Total	0.006		mg/l	0.005	--	1	11/14/12 12:02	11/15/12 15:05	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/13/12 21:35	30,4500CL-D	EL
pH (H)	6.7		SU	-	NA	1	-	11/14/12 00:13	30,4500H+-B	EL
TPH	ND		mg/l	4.40	--	1.1	11/14/12 08:00	11/19/12 14:15	74,1664A	JO
Phenolics, Total	0.42		mg/l	0.03	--	1	11/14/12 10:45	11/14/12 13:18	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/13/12 23:00	11/13/12 23:24	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	1800		mg/l	50	--	100	-	11/14/12 18:45	44,300.0	AU

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01
Lab Number: L1220588
Report Date: 11/26/12

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): 01-02 Batch: WG573516-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/13/12 21:35	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG573525-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/13/12 23:00	11/13/12 23:21	30,3500CR-D	DE
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG573616-1										
TPH	ND		mg/l	4.00	--	1	11/14/12 08:00	11/19/12 14:15	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG573618-1										
Phenolics, Total	ND		mg/l	0.03	--	1	11/14/12 10:45	11/14/12 13:16	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG573633-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/14/12 12:02	11/15/12 14:30	30,4500CN-CE	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG573818-1										
Chloride	ND		mg/l	0.50	--	1	-	11/14/12 17:09	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG574144-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/16/12 12:20	30,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE.

Project Number: 5419.9.01

Lab Number: L1220588

Report Date: 11/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573516-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573525-2								
Chromium, Hexavalent	99		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573541-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573616-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573618-2								
Phenolics, Total	100		-		82-111	-		12
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG573633-2								
Cyanide, Total	110		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG573818-2								
Chloride	108		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

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): 01-02 QC Batch ID: WG573525-4 QC Sample: L1220588-01 Client ID: M3 (OW)												
Chromium, Hexavalent	ND	0.1	0.100	100		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573616-4 QC Sample: L1220585-02 Client ID: MS Sample												
TPH	ND	22.2	19.0	86		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573618-4 QC Sample: L1220580-01 Client ID: MS Sample												
Phenolics, Total	0.06	0.8	0.86	100		-	-		77-124	-		12
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573633-4 QC Sample: L1220580-01 Client ID: MS Sample												
Cyanide, Total	0.035	0.2	0.248	106		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573818-3 QC Sample: L1219714-37 Client ID: MS Sample												
Chloride	4.3	4	8.6	108		-	-		40-151	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573525-3 QC Sample: L1220588-01 Client ID: M3 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573541-2 QC Sample: L1220516-01 Client ID: DUP Sample						
pH	7.7	7.7	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573616-3 QC Sample: L1220585-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573618-3 QC Sample: L1220598-01 Client ID: DUP Sample						
Phenolics, Total	0.33	0.37	mg/l	11		12
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573633-3 QC Sample: L1220580-01 Client ID: DUP Sample						
Cyanide, Total	0.035	0.036	mg/l	2		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG573818-4 QC Sample: L1219714-37 Client ID: DUP Sample						
Chloride	4.3	4.4	mg/l	2		18
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG574144-2 QC Sample: L1220676-01 Client ID: DUP Sample						
Solids, Total Suspended	99	84	mg/l	16		20

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

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
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1220588-01A	Vial Na2S2O3 preserved	B	N/A	2.3	Y	Absent	624(3)
L1220588-01B	Vial Na2S2O3 preserved	B	N/A	2.3	Y	Absent	624(3)
L1220588-01C	Vial Na2S2O3 preserved	B	N/A	2.3	Y	Absent	504(14)
L1220588-01D	Vial Na2S2O3 preserved	B	N/A	2.3	Y	Absent	504(14)
L1220588-01E	Amber 1000ml unpreserved	B	7	2.3	Y	Absent	8270TCL(7)
L1220588-01F	Amber 1000ml unpreserved	B	7	2.3	Y	Absent	8270TCL(7)
L1220588-01G	Amber 1000ml Na2S2O3	B	7	2.3	Y	Absent	PCB-608(7)
L1220588-01H	Amber 1000ml Na2S2O3	B	7	2.3	Y	Absent	PCB-608(7)
L1220588-01I	Amber 1000ml HCl preserved	B	<2	2.3	Y	Absent	TPH-1664(28)
L1220588-01J	Amber 1000ml HCl preserved	B	<2	2.3	Y	Absent	TPH-1664(28)
L1220588-01K	Amber 1000ml H2SO4 preserved	B	<2	2.3	Y	Absent	TPHENOL-420(28)
L1220588-01L	Plastic 1000ml unpreserved	B	7	2.3	Y	Absent	TSS-2540(7)
L1220588-01M	Plastic 500ml unpreserved	B	7	2.3	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1220588-01N	Plastic 250ml unpreserved	B	7	2.3	Y	Absent	CL-300(28),PH-4500(.01)
L1220588-01O	Plastic 250ml HNO3 preserved	B	<2	2.3	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)
L1220588-01X	Amber 1000ml unpreserved	B	7	2.3	Y	Absent	8270TCL-SIM(7)
L1220588-01Y	Amber 1000ml unpreserved	B	7	2.3	Y	Absent	8270TCL-SIM(7)
L1220588-01Z	Plastic 250ml NaOH preserved spl	B	>12	2.3	Y	Absent	TCN-4500(14)
L1220588-02A	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	624(3)
L1220588-02B	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	624(3)
L1220588-02C	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	504(14)
L1220588-02D	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	504(14)

*Values in parentheses indicate holding time in days

Project Name: 525 HUNTINGTON AVE.
Project Number: 5419.9.01

Lab Number: L1220588
Report Date: 11/26/12

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1220588-02E	Amber 1000ml unpreserved	A	7	3.0	Y	Absent	8270TCL(7)
L1220588-02F	Amber 1000ml unpreserved	A	7	3.0	Y	Absent	8270TCL(7)
L1220588-02G	Amber 1000ml Na2S2O3	A	7	3.0	Y	Absent	PCB-608(7)
L1220588-02H	Amber 1000ml Na2S2O3	A	7	3.0	Y	Absent	PCB-608(7)
L1220588-02I	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	TPH-1664(28)
L1220588-02J	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	TPH-1664(28)
L1220588-02K	Amber 1000ml H2SO4 preserved	A	<2	3.0	Y	Absent	TPHENOL-420(28)
L1220588-02L	Plastic 1000ml unpreserved	A	7	3.0	Y	Absent	TSS-2540(7)
L1220588-02M	Plastic 500ml unpreserved	A	7	3.0	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1220588-02N	Plastic 250ml unpreserved	A	7	3.0	Y	Absent	CL-300(28),PH-4500(.01)
L1220588-02O	Plastic 250ml HNO3 preserved	A	<2	3.0	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)
L1220588-02X	Amber 1000ml unpreserved	A	7	3.0	Y	Absent	8270TCL-SIM(7)
L1220588-02Y	Amber 1000ml unpreserved	A	7	3.0	Y	Absent	8270TCL-SIM(7)
L1220588-02Z	Plastic 250ml NaOH preserved spl	A	>12	3.0	Y	Absent	TCN-4500(14)

*Values in parentheses indicate holding time in days

Project Name:	525 HUNTINGTON AVE.	**Lab Number:**	L1220588
Project Number:	5419.9.01	**Report Date:**	11/26/12

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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	525 HUNTINGTON AVE.	**Lab Number:**	L1220588
Project Number:	5419.9.01	**Report Date:**	11/26/12

Data Qualifiers

due to obvious interference.

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

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:	525 HUNTINGTON AVE.	**Lab Number:**	L1220588
Project Number:	5419.9.01	**Report Date:**	11/26/12

REFERENCES

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

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

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

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

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

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

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

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

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

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 August 16, 2012 - 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).)

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

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

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

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7

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

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 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 6010B, 6010C, 6020, 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, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

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

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, 2540G, EPA 120.1, SM2510B, SM2520B, 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, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 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, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 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, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 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, 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, 7471A, 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, 245.2, 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, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 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: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

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

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, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 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, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 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. 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 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 11/13/12

ALPHA Job #: L1220588

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: McPhial Associates, LLC
Address: 2269 Massachusetts Avenue
Cambridge, MA 02140
Phone: 617-868-1420
Fax: 617-868-1423
Email:

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: 525 Huntington Ave
Project Location: Boston, MA
Project #: 5419.9.01
Project Manager: JWP
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 11/19/12 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Report Information — Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program: EPA NPDES RGP
Criteria:

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

ANALYSIS

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

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	pH, Cl	624	504 (EDB Only)	TSS	8270	8270-SIM	PCB_608	TPH_1664	TPhenol	TCN and TRC	HexCr	Total HgFeAgAsCdCrCuNiPbSbSeZn	Sample Specific Comments	TOTAL # BOTTLES
20588-1	M3 (OW)	11/13/12	11:45	GW	RLT	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑		17
2	M5A (OW)	11/13/12	1:20	GW	RLT	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		17
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Container Type	P	V	V	P	A	A	A	A	A	-	P	P	
Preservative	A	H	H	A	A	A	H	B	D	-	A	C	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
	11/13/12 3:15		11/13/12 1700
	11/13/12 18:40		11/13/12 18:40

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

ANALYTICAL REPORT

Lab Number:	L1222738
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	525 HUNTINGTON AVE
Project Number:	5419.9.01
Report Date:	12/19/12

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: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1222738-01	M5A (OW)	BOSTON, MA	12/14/12 10:00

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

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:	525 HUNTINGTON AVE	**Lab Number:**	L1222738
Project Number:	5419.9.01	**Report Date:**	12/19/12

Case Narrative (continued)

Sample Receipt

The sample was received below the appropriate pH for the Cyanide analysis. The laboratory added additional NaOH to a pH >12.

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: 12/19/12

INORGANICS
&
MISCELLANEOUS

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

SAMPLE RESULTS

Lab ID: L1222738-01
Client ID: M5A (OW)
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 12/14/12 10:00
Date Received: 12/14/12
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	12/18/12 10:42	12/18/12 15:02	30,4500CN-CE	JO

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01
Lab Number: L1222738
Report Date: 12/19/12

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: WG580085-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/18/12 10:42	12/18/12 14:50	30,4500CN-CE	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: 525 HUNTINGTON AVE

Project Number: 5419.9.01

Lab Number: L1222738

Report Date: 12/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG580085-2								
Cyanide, Total	106		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

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: WG580085-4 QC Sample: L1222731-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.210	105		-	-		90-110	-		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG580085-3 QC Sample: L1222731-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30

Project Name: 525 HUNTINGTON AVE
Project Number: 5419.9.01

Lab Number: L1222738
Report Date: 12/19/12

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(*)
L1222738-01A	Plastic 250ml NaOH preserved	A	>12	2.4	Y	Absent	TCN-4500(14)

*Values in parentheses indicate holding time in days

Project Name:	525 HUNTINGTON AVE	**Lab Number:**	L1222738
Project Number:	5419.9.01	**Report Date:**	12/19/12

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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	525 HUNTINGTON AVE	**Lab Number:**	L1222738
Project Number:	5419.9.01	**Report Date:**	12/19/12

Data Qualifiers

due to obvious interference.

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

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:	525 HUNTINGTON AVE	**Lab Number:**	L1222738
Project Number:	5419.9.01	**Report Date:**	12/19/12

REFERENCES

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

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 August 16, 2012 - 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).)

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

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

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

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7

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

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 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 6010B, 6010C, 6020, 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, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

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

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, 2540G, EPA 120.1, SM2510B, SM2520B, 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, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 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, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 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, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 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, 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, 7471A, 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, 245.2, 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, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 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: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

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

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, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 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, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 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. 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 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. **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: 12/14/12

ALPHA Job #: L1222738

Client Information

Client: McPhail Associates
Address: 2269 Massachusetts Ave
Cambridge, MA 02140
Phone: 617-868-1420
Fax: -1423
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 525 Huntington Ave
Project Location: Boston, MA
Project #: 5419.9.01
Project Manager: BED
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 12/19 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 ~~MA MCP~~ Criteria EPA NPDES RGP

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)

72 Hour TAT

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: TCN	SAMPLE HANDLING	TOTAL # BOTTLES
2738.1	MSA (OW)	12/14	10:00	OW	BRB	X		1

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

Sample Specific Comments

Container Type	P
Preservative	E

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	12/14/12 1PM		12/14/12 1600
	12/14/12 1730	Richard Scott	12/14/12 1730

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

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

McPHAIL ASSOCIATES, LLC

APPENDIX D

AREAS OF CRITICAL CONCERN,
ENDANGERED AND THREATENED SPECIES

The subject site located at 525 Huntington Avenue is located south of the Muddy River, in the Fenway area of Boston, Massachusetts. Based on a review of Massachusetts Geographic Information Systems DEP Priority Resources' Map, there are no drinking water supplies, no Areas of Critical Environmental Concern, no Sole Source Aquifers, no fish habitats, and no habitats of Species of Special Concern or Threatened or Endangered Species at or within 500 feet of the subject site. Protected Open Space is located approximately 500 feet to the northwest of the subject property, along the Muddy River. A 100-year flood zone is also indicated along the Muddy River to the north and northwest of the property.

There are no surface water bodies located within the site boundaries. The Muddy River is located approximately 500 feet to the northwest of the subject site.

A review of the federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service identified no threatened and/or endangered species or critical habitats at or in the vicinity of the discharge location and/or discharge outfall. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database identified no threatened or endangered species at the point of discharge and/or the discharge outfall.

Based upon the above, the site is considered criterion A pursuant to Appendix VII of the RGP.

MassDEP - Bureau of Waste Site Cleanup

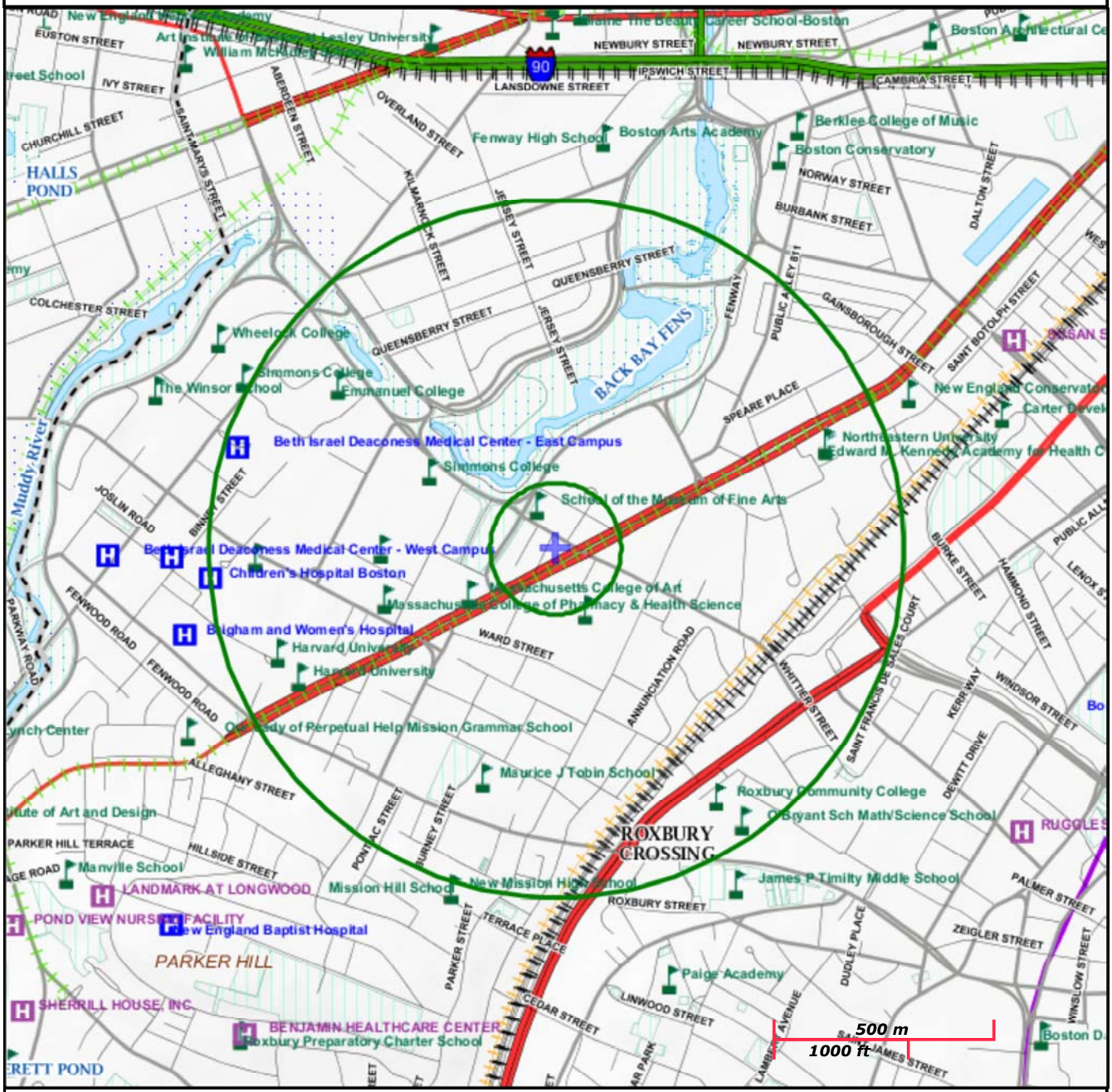
Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

525 HUNTINGTON AVENUE BOSTON, MA
3-000011149
NAD83 UTM Meters:
5211705mN , -7914409mE (Zone: 18)

November 26, 2012

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
June 2009

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.

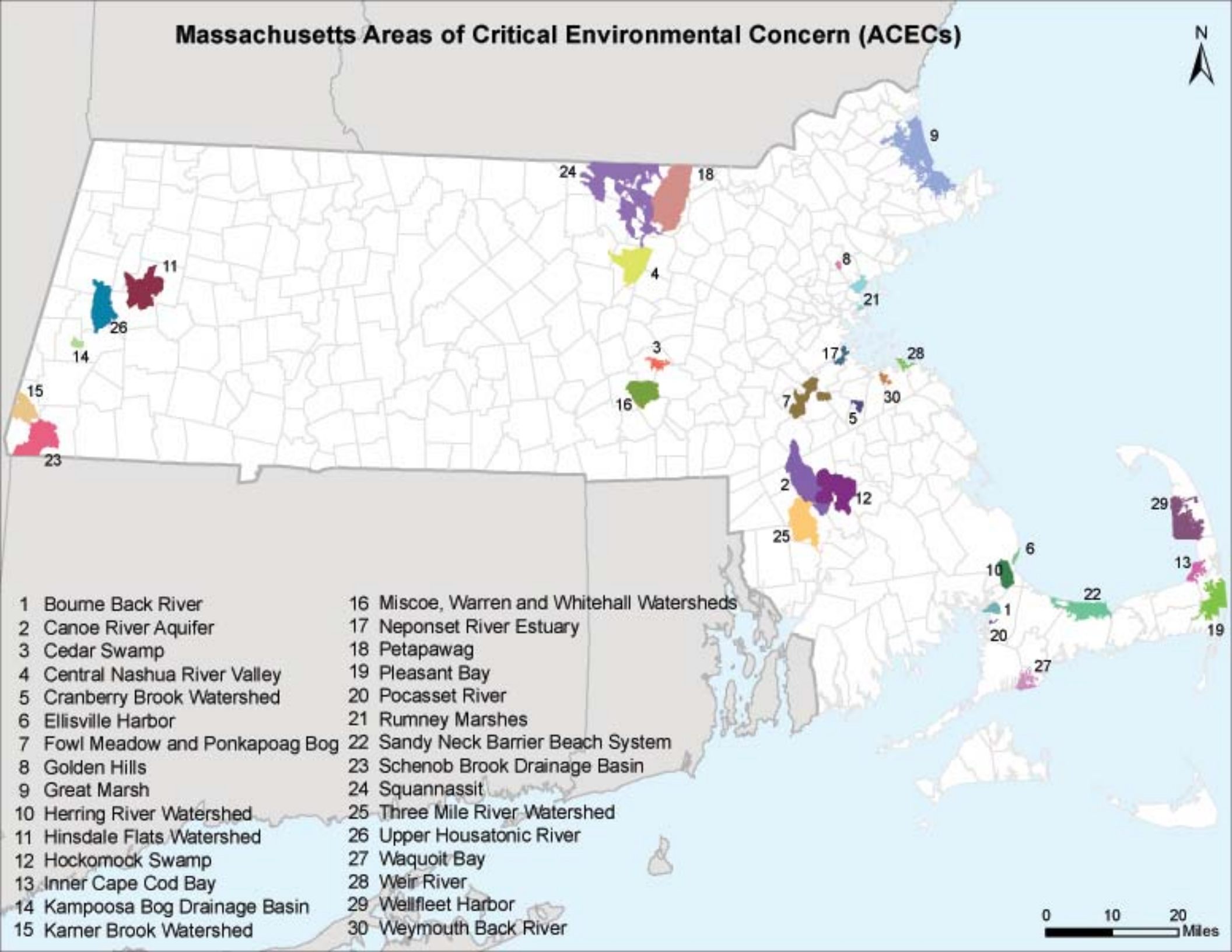
Towns with ACECs within their Boundaries June 2009

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

TOWN	ACEC
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)



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	Raynham and 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	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	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.

7/31/2008

McPHAIL ASSOCIATES, LLC

APPENDIX E

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places on-line database was reviewed for listings located within the immediate vicinity of the subject site in Boston, Massachusetts. A review of the most recent National Register of Historical Places for Suffolk County, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the outfall location. The nearest listing of a National Historic Place to the subject site is the Isabella Stewart Gardner Museum located approximately 500 feet to the northwest of the subject site. We do not anticipate that dewatering activities at the subject site will affect the Isabella Stewart Gardner Museum National Historic Place.

Based upon the above, the site is considered criterion 2 pursuant to Appendix IV of the RGP.

McPHAIL ASSOCIATES, LLC

APPENDIX F

Best Management Practice 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 525 Huntington Avenue development site located in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation and directly into a settling tank. The effluent will then flow through any necessary treatment systems and discharge through hoses into City of Boston storm water drain lines which discharge into the Muddy River. Dewatering effluent treatment will consist of bag filters and GAC, 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 analytical testing required within days 1 and 3 of initial discharge 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, and observing and recording daily flow rates and discharge quantities.

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.

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System Maintenance

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 settling tanks, bag filters, GAC unit filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues and for unscheduled maintenance requirements.

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

Miscellaneous Items

It is anticipated that discharge into the City of Boston storm water drain line will minimize potential runoff to or from the site. Site security for the treatment system will be covered within the overall site security plan.

Management of Treatment System Materials

Dewatering effluent will be pumped directly to the treatment system from the excavation with the 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 that will be located away from any dewatering activities, to the extent practicable.

Sediment from the 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. The GAC resin may be recycled and/or removed from the site to an appropriate receiving facility. Bag filters will be disposed of as necessary.