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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

NOV 15 2013

Robert Tierney
General Superintendent
Tocci Building Companies
660 Main Street
Woburn, MA 01801

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Beharrell Street construction site located at 50 Beharrell Street, Concord, MA 01742, Middlesex County; Authorization # MAG910602

Dear Mr. Tierney:

Based on the review of a Notice of Intent (NOI) submitted by Scott S. Smith from McPhail Associates, LLC on behalf of Beharrell Square, LLC for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters you have marked "Believed Present." The checklist also includes total petroleum hydrocarbons, total group I polycyclic aromatic hydrocarbons and BTX due to historic site contamination.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to Fort Pond Brook in Concord, MA, EPA determined that the DFR for each parameter is in the one to five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for nickel of 34.22 ug/L and iron of 1,180 ug/L, are required to achieve permit compliance at your site. Also please note that the

metal limitations have increased. The reason for the increase has to do with the new RGP regulations which allows for a limit increase for metals discharged within the 1-5 DFR. The increase is determined by multiplying the metal limit times the available dilution of the receiving stream. The available dilution in this case is 1.18. See footnote eleven at the end of the "Summary of Monitoring Parameters" listed below for further explanation.

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 November 1, 2014. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Richard K. Reine, Concord PWD
Scott S. Smith, McPhail Associates LLC

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910602**
Authorization Issued:	November 7, 2013
Facility/Site Name:	Beharrell Street Building Construction
Facility/Site Address:	50 beharrell Street, Concord, MA 01742, Middlesex County
	Email address of owner: gnoyes@oakdev.com
Legal Name of Operator:	Tocci Buildings Company
Operator contact name, title, and Address:	Robert Tierney, General Superintendent, 660 Main Street Woburn, MA 01801
	Email: btierney@tocci.com
Estimated date of Completion:	November 1, 2001
Category and Sub-Category:	Category Construction Dewatering. Subcategory B.Known Contaminated sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Fort Pond Brook

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

	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)
√	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (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

	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)
	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
√	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 MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)] Freshwater Limts		Minimum level=ML	
	39. Antimony	5.6		ML	10
	40. Arsenic **	10		ML	20
	41. Cadmium **	0.2		ML	10
	42. Chromium III (trivalent) **	48.8		ML	15
	43. Chromium VI (hexavalent) **	11.4		ML	10
	44. Copper **	5.2		ML	15
	45. Lead **	1.3		ML	20
	46. Mercury **	0.9		ML	02
√	47. Nickel **	34.22		ML	20
	48. Selenium **	5		ML	20
	49. Silver	1.2		ML	10
	50. Zinc **	66.6		ML	15
√	51. Iron	1,180		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

50 BEHARRELL STREET

CONCORD MASSACHUSETTS

to

U.S. Environmental Protection Agency

November 1, 2013

Project No. 5588

McPHAIL ASSOCIATES, LLC

November 1, 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: 50 Beharrell Street; Concord, 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 Nashoba Brook 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 our proposal dated June 12, 2013 and the subsequent authorization of Oaktree Greenline. These services are subject to the limitations contained in **Appendix A**.

Existing Conditions

Bounded by Nashoba Brook to the north and commercial properties on the remaining sides, the subject site is located at the northern end of Beharrell Street within an industrial park. Currently, a 1-story, multi-unit, block and metal-framed warehouse building (Main Building) is located within the center of the subject site. Additionally, another 1-story, metal building (former Butler Building) is located within the western portion of the subject site.

Outside the footprint of the existing buildings, the ground surface consists of paved and gravel parking/driveway areas and landscaped areas. The ground surface across the majority of the subject site is relatively level ranging from about Elevation +124 to Elevation +125. Within the northern portion of the property the ground surface slopes downward from south to north ranging from about Elevation +124 adjacent to the existing building to about Elevation +113 adjacent to Nashoba Brook.

Site and Regulatory History

It is understood that the site was previously undeveloped until about the 1940s or 1950s when an outdoor furniture and equipment manufacturing facility was constructed, including the existing Main Building. It is further understood that the existing Butler Building, located within the western portion of the site, was constructed around 1979. Based upon the information provided to us, the Main Building was formerly used to manufacture wood products and included painting, dipping and drying rooms. The existing Butler Building was formerly used as part of the wood manufacturing facility.

Located within the northwestern portion of the site there is a former MCP release site categorized under Release Tracking Number (RTN) 3-0294. The historic information indicates that the extent of the contamination at the 50 Beharrell Street site extended about 80 east of the western property line and 80

feet north of the existing Butler Building. Remedial action, including test pits, chemical analysis of soil samples, and excavation of up to 3,542 tons of soil impacted by a release of hydraulic oil and "debris" was performed in 1986. Groundwater was not indicated to have been impacted. Additionally, the contractor constructed a below-grade concrete barrier along the property line measuring 3 feet thick and extending about 7 feet below ground surface to the underlying natural sand. In 1986, the DEP made a written determination that no further actions were required at the site since the soil exposure point concentrations were below the remedial objective of less than 5,000 mg/kg of oil and grease established in 1985.

On July 12, 2013, the top of a 1,000-gallon underground storage tank (UST) was encountered during drilling operations at the site. The DEP was notified of the release on August 20, 2013 as a 72-hour reporting condition to which Release Tracking Number (RTN) 3-31645 was assigned. Contaminants of concern include volatile petroleum hydrocarbons (VPH) in soil. As part of the initial immediate response actions, the fluids were pumped from the tank on July 12, 2013 and the UST and it contents were removed from the site on August 20, 2013. Additionally, on September 18, 2013, about 30 tons of the petroleum impacted soil excavated from the UST excavation was removed and disposed of off-site under a Bill of Lading (BOL). Response actions are ongoing.

Proposed Site Development

It is understood that the proposed construction will consist of demolition of the both of the existing buildings followed by construction of a 3-story, mixed-use building that will be located within and beyond the footprint of the existing Main Building, as shown on **Figure 2**. The proposed building is planned to consist of two residential levels, above at-grade commercial space, over a below-grade parking/storage level. Based on the information provided to us, the below-grade parking level will be located below the northern and central portions of the building and is planned to have a footprint of about 31,700 square feet. The ground floor level is planned to have a footprint of about 39,900 square feet. It is understood the parking level and ground floor level slabs will be at about Elevation +116 and Elevation +126, respectively.

Subsurface Conditions

Subsurface explorations conducted at the site indicate that the ground surface is underlain by a deposit of granular fill generally extending to depths ranging from about 4 to 10 feet below the existing ground surface. Underlying the fill deposit, an alluvial deposit was encountered to at least the bottom of the borings at depths ranging from about 12 to 22 feet below the existing ground surface.

Stabilized groundwater levels in groundwater observation wells at the site were observed at depths ranging from about 6 to 8.5 feet below the existing ground surface, or from Elevation +117.5 to Elevation +114.7. Based on our observations of the stabilized groundwater levels in the observation wells, the groundwater appears to flow south to north across the site toward Nashoba Brook.

Construction Dewatering

Excavations for preparation of the basement foundations of the proposed building are anticipated to extend to depths in the range of about 3.5 to 5.5 feet below the observed groundwater level. In order to achieve an undisturbed bearing surface for the proposed foundations groundwater control using predrainage methods, such as with well points, is anticipated to be required to lower the groundwater to below the foundation subgrade prior to excavation below the current groundwater level.

It is estimated that the typical continuous groundwater discharge required during the initial stages of the excavation phase of the construction will be on the order of 100 to 200 gallons per minute (GPM). A reduction in the rate of discharge is anticipated to occur as the discharge approaches steady state. 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 a drawing entitled, "Demolition Plan" prepared by Bohler Engineering indicates that a dedicated 10-inch diameter reinforced concrete drainage pipe runs below the eastern portion of the site. The drainage pipe flows south to north across the site and discharges into Nashoba Brook. The locations of relevant catch basins within the property limits and the flow path are indicated on **Figure 2**.

Groundwater Treatment

In our opinion, treatment of groundwater across a majority of the subject site will require two 10,000-gallon settling tanks and bag filters in series to remove particulate matter in the effluent to meet allowable total suspended solids (TSS) discharge limits established by the US EPA. Based on the results of groundwater testing from monitoring well B-2 (OW), an additive may also be required to raise the pH of the effluent from 6 Standard Units (SU) to at least 6.5 SU. Although groundwater has not been indicated to have been impacted by the MCP release sites adjacent to the proposed dewatering area, construction activities may disturb soil that could impact the discharged groundwater. In the event that elevated levels of petroleum hydrocarbons are detected in groundwater above allowable EPA established discharge limits, a granular activated carbon (GAC) filtration system would be used, as necessary. A schematic of the treatment system is shown on **Figure 3**.

To document the effectiveness of the treatment system, samples of the discharge water will be obtained and tested for the presence of TSS and total petroleum hydrocarbons 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 Nashoba Brook via the storm drain system under a Remedial General Permit. Sampling and analysis of the 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 (**Appendix E**); and

McPHAIL ASSOCIATES, LLC

- 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

Scott S. Smith, P.E.

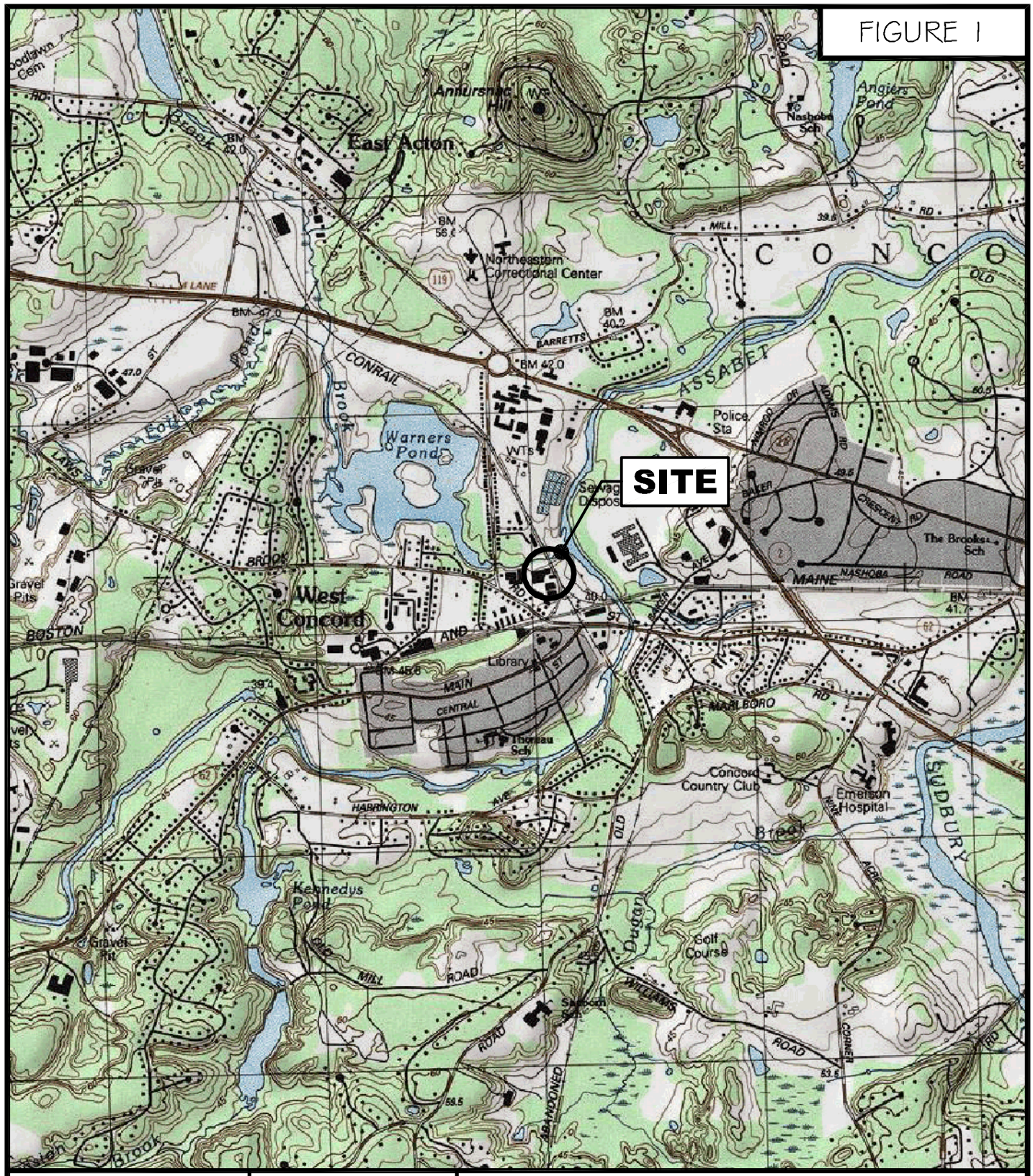
Ambrose J. Donovan, P.E., L.S.P.

Enclosures

F:\WP5\REPORTS\5588_RGP.wpd

SSS/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

50 BEHARRELL STREET

CONCORD MASSACHUSETTS

FIGURE 2

NORTH

DISCHARGE POINT TO NASHOBA BROOK

APPROXIMATE LIMITS OF PROPOSED BUILDING

GARAGE LEVEL SLAB AT APPROXIMATE EL. +116 (SHADED)

GROUND FLOOR SLAB AT APPROXIMATE EL. +126

BUTLER BUILDING

MAIN BUILDING

APPROXIMATE LOCATION OF CATCH BASINS FOR DISCHARGE

B-1
B-2 (OW)
B-3
B-4
B-5
B-6
B-7
B-8
B-9
B-10
EW-1
EW-2
EW-3
EW-4

GRAPHIC SCALE
40 0 40 80

LEGEND

⊕ — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON JULY 11 THOUGH 15, 2013 FOR McPHAIL ASSOCIATES, LLC

● — APPROXIMATE LOCATION OF EXISTING OBSERVATION WELL INSTALLED BY OTHERS

(OW) — DENOTES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE

REFERENCE: THIS PLAN WAS PREPARED FROM AN UNDATED 30-SCALE DRAWING ENTITLED "DEMOLITION PLAN" BY BOHLER ENGINEERING TRANSMITED TO McPHAIL ASSOCIATES, LLC ON JULY 16, 2013.

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

50 BEHARRELL STREET
CONCORD MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

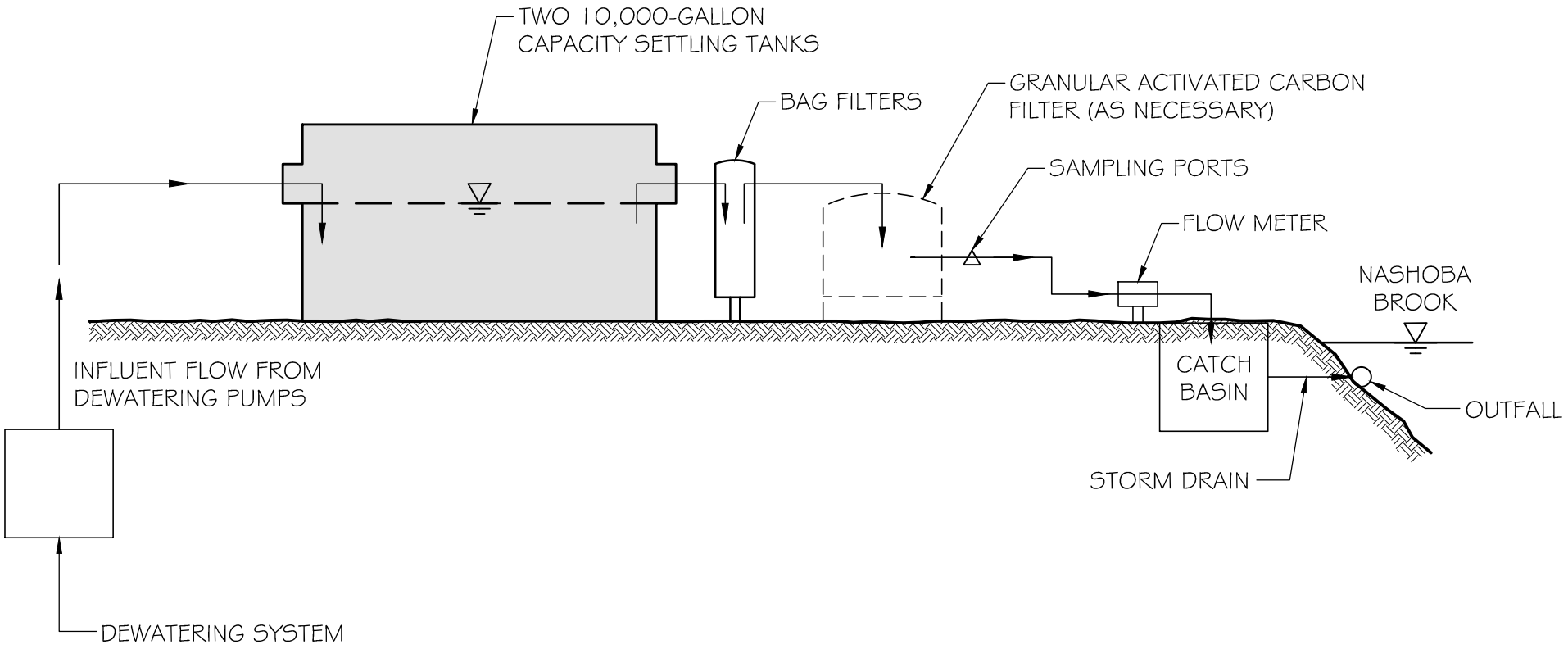
FOR
OAKTREE GREENLINE
BY
McPHAIL ASSOCIATES, LLC

Date: SEPTEMBER 2013	Dwn: M.B.S.	Chkd: S.S.S.	Scale: 1" = 40'
Project No: 5588			

FILE NAME: H:\Acad\JOBS\5588\5588-F02_Dewater.dwg

FILE NAME: H:\Acad\JOBS\5588\5588-F03.dwg

FIGURE 3



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

50 BEHARRELL STREET

CONCORD MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR

OAKTREE GREENLINE

BY

McPHAIL ASSOCIATES, LLC

CONSULTING GEOTECHNICAL ENGINEERS

Date: SEPTEMBER 2013	Dwn: M.B.S.	Chkd: S.S.S.	Scale: N.T.S.
Project No: 5588			

McPHAIL ASSOCIATES, LLC

APPENDIX A

LIMITATIONS

The purpose of this report is to present the results of testing of a groundwater sample obtained from a groundwater monitoring well located at 50 Beharrell Street in Concord, 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 a groundwater sample 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 Oaktree Greenline and Beharrell Square, LLC. 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**: 50 Beharrell Street		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.394844 latitude: 42.458569	Facility SIC code(s):	Street: 50 Beharrell Street		
b) Name of **facility/site owner:** Beharrell Square, LLC c/o Oaktree FX, LLC		Town: Concord		
Email address of facility/site owner: gnoyes@oakdev.com		State: Massachusetts	Zip: 01742	County: Middlesex
Telephone no. of facility/site **owner**: 617-491-9100				
Fax no. of facility/site **owner**: 617-491-6004		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 84 Sherman Street				
Town: Cambridge	State: MA	Zip: 02140	County: Middlesex	
c) Legal name of **operator**:	**Operator** telephone no: 781.935.5500			
Tocci Building Companies	**Operator** fax no.: 781.935.1888	**Operator** email:		
Operator contact name and title:				
Address of **operator** (if different from owner):	Street: 660 Main Street			
Town: Woburn	State: MA	Zip: 01801	County: Middlesex	

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 0.668 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 250 gpm Is average flow a design value or estimate? estimate

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

pt.1: lat 42.458157	long -71.394663	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 Nov 1, 2013 end Nov 1, 2014

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). Refer to Figure 3 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)		☐	☒	1	grab	2540D		6700	11.0		
2. Total Residual Chlorine (TRC)		☒	☐	1	grab	4500-CLD	20	ND	0		
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	1664A	4000	ND	0		
4. Cyanide (CN)	57125	☒	☐	1	grab	4500CN-CE	5	ND	0		
5. Benzene (B)	71432	☒	☐	1	grab	8260C	0.5	ND	0		
6. Toluene (T)	108883	☒	☐	1	grab	8260C	0.75	ND	0		
7. Ethylbenzene (E)	100414	☒	☐	1	grab	8260C	0.5	ND	0		
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	8260C	1	ND	0		
9. Total BTEX [2]	n/a	☒	☐	1	grab	8260C	1	ND	0		
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	grab	504.1	0.01	ND	0		
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	8260C	1	ND	0		
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	8260C	10	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	☒	☐	1	grab	8260C	2	ND	0		
14. Naphthalene	91203	☒	☐	1	grab	8260C	2.5	ND	0		
15. Carbon Tetrachloride	56235	☒	☐	1	grab	1,8260C	0.5	ND	0		
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	8260C	2.5	ND	0		
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	8260C	2.5	ND	0		
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	8260C	2.5	ND	0		
18a. Total dichlorobenzene		☒	☐	1	grab	8260C	2.5	ND	0		
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	1,8260C	0.75	ND	0		
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	8260C	0.5	ND	0		
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	8260C	0.5	ND	0		
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	8260C	0.5	ND	0		
23. Methylene Chloride	75092	☒	☐	1	grab	8260C	3	ND	0		
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	8260C	0.5	ND	0		
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	8260C	0.5	ND	0		
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	1,8260C	0.75	ND	0		
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	8260C	0.5	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	☒	☐	1	grab	8260C	1	ND	0		
29. Acetone	67641	☒	☐	1	grab	8260C	5	ND	0		
30. 1,4 Dioxane	123911	☒	☐	1	grab	8260C-SIM(M)	3	ND	0		
31. Total Phenols	108952	☒	☐	1	grab	420.1	30	ND	0		
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab	8270D-SIM	0.8	ND	0		
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	grab	8270D	5	ND	0		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab	8270D	3	ND	0		
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270D-SIM	0.2	ND	0		
a. Benzo(a) Anthracene	56553	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
b. Benzo(a) Pyrene	50328	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
c. Benzo(b)Fluoranthene	205992	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
d. Benzo(k)Fluoranthene	207089	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
e. Chrysene	21801	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270D-SIM	0.2	ND	0		

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
i. Acenaphthylene	208968	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
j. Anthracene	120127	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
k. Benzo(ghi) Perylene	191242	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
l. Fluoranthene	206440	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
m. Fluorene	86737	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
n. Naphthalene	91203	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
o. Phenanthrene	85018	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
p. Pyrene	129000	☒	☐	1	grab	8270D-SIM	0.2	ND	0		
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	grab	608	0.25	ND	0		
38. Chloride	16887006	☐	☒	1	grab	300.0		211000	345.0		
39. Antimony	7440360	☒	☐	1	grab	6020A	0.5	ND	0		
40. Arsenic	7440382	☒	☐	1	grab	6020A	0.5	ND	0		
41. Cadmium	7440439	☒	☐	1	grab	6020A	0.29	ND	0		
42. Chromium III (trivalent)	16065831	☒	☐	1	grab	107	10	ND	0		
43. Chromium VI (hexavalent)	18540299	☒	☐	1	grab	3500CR-D	10	ND	0		
44. Copper	7440508	☒	☐	1	grab	6020A	1	ND	0		
45. Lead	7439921	☒	☐	1	grab	6020A	1	ND	0		
46. Mercury	7439976	☒	☐	1	grab	245.1	0.2	ND	0		
47. Nickel	7440020	☐	☒	1	grab	6020A		6.76	0.011		
48. Selenium	7782492	☒	☐	1	grab	6020A	5	ND	0		
49. Silver	7440224	☒	☐	1	grab	6020A	0.4	ND	0		
50. Zinc	7440666	☒	☐	1	grab	6020A	10	ND	0		
51. Iron	7439896	☐	☒	1	grab	200.7		60	0.098		
Other (describe):		☐	☐								

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

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ○ N ◉	If yes, which metals?
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: DF: Metal: DF: Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ○ N ○ If Y, list which metals:

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

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

two, 10,000 gallon settling tanks with bag filters, GAC filters (as necessary) 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):	GAC filter as necessary if elevated levels of petroleum hydrocarbons are detected		

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 100 gpm Maximum flow rate of treatment system 200 gpm
Design flow rate of treatment system 200 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 on-site storm drain that discharges into Nashoba Brook. 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 0.12 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)? Phosphorus

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:	50 Beharrell Street
Operator signature:	Robert Tierney
Printed Name &Title:	ROBERT TIERNEY GENERAL SUPT
Date:	11/1/2013

McPHAIL ASSOCIATES, LLC

APPENDIX C

RESULTS OF RECENT GROUNDWATER ANALYSIS

On April 18, 2013, McPhail Associates, LLC obtained a sample of groundwater from on-site monitoring well B-2(OW) and submitted the sample for analytical testing 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 a pH level of 6 Standard Units (S.U.) which is just below the recommended range of 6.5 to 8.3 S.U. for discharge into freshwater.

2. **TSS**: Laboratory testing indicated a concentration of 6700 micrograms per liter (ug/l) of TSS, which is below the upper limit of 30000 ug/l established by the EPA for discharge into surface water. Additionally, groundwater will be pre-treated by passing the water through sediment tanks and bag filters prior to discharge in order to reduce the concentration of TSS in the effluent.

3. **VOC, TPH, PAH, PCB, Total Residual Chlorine, Total Cyanide and Total Phenolics**: Laboratory analysis of the groundwater samples did not indicate concentrations of VOC, TPH, PAH, PCB, Total Residual Chlorine, Total Cyanide and Total Phenolics above the applicable laboratory method detection limits, which are below the applicable limits established by the EPA for discharge into surface water.

4. **Total Metals**: Laboratory analysis of the groundwater samples did not indicate concentrations of antimony, arsenic, cadmium, chromium III, chromium VI, copper, lead, mercury, selenium, silver, and zinc above the applicable laboratory method detection limits, which are below the applicable limits established by the EPA for discharge into surface water. Nickel and iron were detected at concentrations of 6.76 ug/l and 60 ug/l, respectively, which are below the applicable discharge EPA discharge limits.

TABLE 1

ANALYTICAL TEST RESULTS - GROUNDWATER JULY 2013

50 Beharrell Street
Concord, Massachusetts
Project No. 5588

LOCATION SAMPLING DATE LAB SAMPLE ID		RGP Limits	Units	B-2 (OW) 7/18/2013 L1313549-01
1	Solids, Total Suspended	30000	ug/l	6700
	pH (H)	6.5-8.3	SU	6
2	Total Residual Chlorine	11	ug/l	ND(20)
3	TPH	5000	ug/l	ND(4000)
4	Total Cyanide	5.2	ug/l	ND(5)
5	Benzene	5	ug/l	ND(0.5)
6	Toluene	Total BTEX	ug/l	ND(0.75)
7	Ethylbenzene	Total BTEX	ug/l	ND(0.5)
8	Xylene (Total)	Total BTEX	ug/l	ND(1)
9	Total BTEX	100	ug/l	ND
10	1,2-Dibromoethane	0.05	ug/l	ND(0.01)
11	Methyl tert butyl ether	70	ug/l	ND(1)
12	Tert-Butyl Alcohol	Monitor Only	ug/l	ND(10)
13	Tertiary-Amyl Methyl Ether	Monitor Only	ug/l	ND(2)
14	Naphthalene	20	ug/l	ND(2.5)
15	Carbon tetrachloride	4.4	ug/l	ND(0.5)
16	1,2-Dichlorobenzene	600	ug/l	ND(2.5)
17	1,3-Dichlorobenzene	320	ug/l	ND(2.5)
18	1,4-Dichlorobenzene	5	ug/l	ND(2.5)
19	1,1-Dichloroethane	70	ug/l	ND(0.75)
20	1,2-Dichloroethane	5	ug/l	ND(0.5)
21	1,1-Dichloroethene	3.2	ug/l	ND(0.5)
22	cis-1,2-Dichloroethene	70	ug/l	ND(0.5)
23	Methylene chloride	4.6	ug/l	ND(3)
24	Tetrachloroethene	5	ug/l	ND(0.5)
25	1,1,1-Trichloroethane	200	ug/l	ND(0.5)
26	1,1,2-Trichloroethane	5	ug/l	ND(0.75)
27	Trichloroethene	5	ug/l	ND(0.5)
28	Vinyl chloride	2	ug/l	ND(1)
29	Acetone	Monitor Only	ug/l	ND(5)
30	1,4-Dioxane	Monitor Only	ug/l	ND(3)
31	Total Phenolics	300	ug/l	ND(30)
32	Pentachlorophenol	1	ug/l	ND(0.8)
33	Total Phthalates	3	ug/l	ND
a	Butyl benzyl phthalate	Total Phthalates	ug/l	ND(5)
b	Di-n-butylphthalate	Total Phthalates	ug/l	ND(5)
c	Diethyl phthalate	Total Phthalates	ug/l	ND(5)
d	Dimethyl phthalate	Total Phthalates	ug/l	ND(5)
e	Di-n-octylphthalate	Total Phthalates	ug/l	ND(5)
34	Bis(2-ethylhexyl)phthalate	6	ug/l	ND(3)
35	Total Group I PAHs	10	ug/l	ND

Shading indicates an exceedence of the RGP Standards
ND - not detected above laboratory detection limit
( ) - Laboratory Method Detection Limit

TABLE 1

ANALYTICAL TEST RESULTS - GROUNDWATER JULY 2013

50 Beharrell Street
Concord, Massachusetts
Project No. 5588

LOCATION SAMPLING DATE LAB SAMPLE ID		RGP Limits	Units	B-2 (OW) 7/18/2013 L1313549-01
a	Benzo(a)anthracene	0.0038	ug/l	ND(0.2)
b	Benzo(a)pyrene	0.0038	ug/l	ND(0.2)
c	Benzo(b)fluoranthene	0.0038	ug/l	ND(0.2)
d	Benzo(k)fluoranthene	0.0038	ug/l	ND(0.2)
e	Chrysene	0.0038	ug/l	ND(0.2)
f	Dibenzo(a,h)anthracene	0.0038	ug/l	ND(0.2)
g	Indeno(1,2,3-cd)Pyrene	0.0038	ug/l	ND(0.2)
36	Total Group II PAHs	100	ug/l	ND
h	Acenaphthene	Total Group II PAH	ug/l	ND(0.2)
i	Acenaphthylene	Total Group II PAH	ug/l	ND(0.2)
j	Anthracene	Total Group II PAH	ug/l	ND(0.2)
k	Benzo(ghi)perylene	Total Group II PAH	ug/l	ND(0.2)
l	Fluoranthene	Total Group II PAH	ug/l	ND(0.2)
m	Fluorene	Total Group II PAH	ug/l	ND(0.2)
n	Naphthalene	20	ug/l	ND(0.2)
o	Phenanthrene	Total Group II PAH	ug/l	ND(0.2)
p	Pyrene	Total Group II PAH	ug/l	ND(0.2)
37	Total PCBs	0.000046	ug/l	ND
38	Chloride	Monitor Only	ug/l	211000
39	Antimony, Total	5.6	ug/l	ND(0.5)
40	Arsenic, Total	10	ug/l	ND(0.5)
41	Cadmium, Total	0.2	ug/l	ND(0.29)
42	Chromium, Trivalent	48.8	ug/l	ND(10)
43	Chromium, Hexavanlent	11.4	ug/l	ND(10)
44	Copper, Total	5.2	ug/l	ND(1)
45	Lead, Total	1.3	ug/l	ND(1)
46	Mercury, Total	0.9	ug/l	ND(0.2)
47	Nickel, Total	29	ug/l	6.76
48	Selenium, Total	5	ug/l	ND(5)
49	Silver, Total	1.2	ug/l	ND(0.4)
50	Zinc, Total	66.6	ug/l	ND(10)
51	Iron, Total	1000	ug/l	60

Shading indicates an exceedence of the RGP Standards
ND - not detected above laboratory detection limit
( ) - Laboratory Method Detection Limit

ANALYTICAL REPORT

Lab Number:	L1313549
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	50 BEHARRELL STREET
Project Number:	5588
Report Date:	07/26/13

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

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

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1313549-01	B-2 (OW)	CONCORD, MA	07/18/13 14:00
L1313549-02	TRIP BLANK	CONCORD, MA	07/18/13 14:00

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	50 BEHARRELL STREET	**Lab Number:**	L1313549
Project Number:	5588	**Report Date:**	07/26/13

Case Narrative (continued)

Sample Receipt

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

Microextractables by GC

The WG623455-2 LCS recovery, associated with L1313549-01, is above the acceptance criteria for 1,2-Dibromoethane (138%); however, the associated sample is non-detect for this target compound. The results of the original analysis are reported.

The WG623455-3 MS recovery, performed on L1313549-01, is above the acceptance criteria for 1,2-Dibromoethane (136%)

TPH

A laboratory matrix spike could not be performed due to insufficient sample volume available for analysis.

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

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative Date: 07/26/13

ORGANICS

VOLATILES

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	07/26/13 08:01		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Acetone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	106		70-130

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	07/26/13 08:01		
Analyst:	MM		

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

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	07/24/13 09:30
Analytical Date:	07/24/13 07:01		
Analyst:	SR		

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

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 07/24/13 06:15
Analyst: SR

Extraction Date: 07/24/13 09:30

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG623455-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 07/26/13 06:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG624497-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/26/13 06:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG624498-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Vinyl chloride	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Acetone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/26/13 06:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG624498-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG623455-2								
1,2-Dibromoethane	**138**	Q	-		70-130	-		20
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG624497-1 WG624497-2								
1,4-Dioxane	85		77		70-130	10		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG624498-1 WG624498-2								
Methylene chloride	88		90		70-130	2		20
1,1-Dichloroethane	86		80		70-130	7		20
Chloroform	99		98		70-130	1		20
Carbon tetrachloride	93		93		63-132	0		20
1,2-Dichloropropane	95		98		70-130	3		20
Dibromochloromethane	86		88		63-130	2		20
1,1,2-Trichloroethane	94		96		70-130	2		20
2-Chloroethylvinyl ether	**223**	Q	**229**	Q	70-130	3		20
Tetrachloroethene	89		87		70-130	2		20
Chlorobenzene	96		95		75-130	1		25
Trichlorofluoromethane	74		74		62-150	0		20
1,2-Dichloroethane	100		101		70-130	1		20
1,1,1-Trichloroethane	95		94		67-130	1		20
Bromodichloromethane	96		95		67-130	1		20
trans-1,3-Dichloropropene	88		88		70-130	0		20
cis-1,3-Dichloropropene	92		94		70-130	2		20
1,1-Dichloropropene	89		90		70-130	1		20
Bromoform	82		85		54-136	4		20
1,1,2,2-Tetrachloroethane	93		97		67-130	4		20
Benzene	95		97		70-130	2		25
Toluene	92		90		70-130	2		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG624498-1 WG624498-2								
Ethylbenzene	91		90		70-130	1		20
Chloromethane	71		70		64-130	1		20
Bromomethane	81		80		39-139	1		20
Vinyl chloride	76		77		55-140	1		20
Chloroethane	80		78		55-138	3		20
1,1-Dichloroethene	77		79		61-145	3		25
trans-1,2-Dichloroethene	83		85		70-130	2		20
Trichloroethene	95		96		70-130	1		25
1,2-Dichlorobenzene	92		92		70-130	0		20
1,3-Dichlorobenzene	92		92		70-130	0		20
1,4-Dichlorobenzene	90		90		70-130	0		20
Methyl tert butyl ether	79		80		63-130	1		20
p/m-Xylene	95		92		70-130	3		20
o-Xylene	97		95		70-130	2		20
cis-1,2-Dichloroethene	104		101		70-130	3		20
Dibromomethane	102		105		70-130	3		20
1,4-Dichlorobutane	87		85		70-130	2		20
1,2,3-Trichloropropane	93		94		64-130	1		20
Styrene	100		98		70-130	2		20
Dichlorodifluoromethane	88		87		36-147	1		20
Acetone	90		84		58-148	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG624498-1 WG624498-2								
Carbon disulfide	72		73		51-130	1		20
2-Butanone	115		104		63-138	10		20
Vinyl acetate	93		96		70-130	3		20
4-Methyl-2-pentanone	94		98		59-130	4		20
2-Hexanone	92		91		57-130	1		20
Ethyl methacrylate	89		91		70-130	2		20
Acrylonitrile	94		86		70-130	9		20
Bromochloromethane	107		111		70-130	4		20
Tetrahydrofuran	106		104		58-130	2		20
2,2-Dichloropropane	88		88		63-133	0		20
1,2-Dibromoethane	96		96		70-130	0		20
1,3-Dichloropropane	95		96		70-130	1		20
1,1,1,2-Tetrachloroethane	97		100		64-130	3		20
Bromobenzene	90		88		70-130	2		20
n-Butylbenzene	78		78		53-136	0		20
sec-Butylbenzene	79		78		70-130	1		20
tert-Butylbenzene	81		81		70-130	0		20
o-Chlorotoluene	84		83		70-130	1		20
p-Chlorotoluene	84		86		70-130	2		20
1,2-Dibromo-3-chloropropane	76		76		41-144	0		20
Hexachlorobutadiene	81		82		63-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG624498-1 WG624498-2								
Isopropylbenzene	82		81		70-130	1		20
p-Isopropyltoluene	83		81		70-130	2		20
Naphthalene	82		86		70-130	5		20
n-Propylbenzene	81		80		69-130	1		20
1,2,3-Trichlorobenzene	88		89		70-130	1		20
1,2,4-Trichlorobenzene	82		81		70-130	1		20
1,3,5-Trimethylbenzene	82		82		64-130	0		20
1,3,5-Trichlorobenzene	82		82		70-130	0		20
1,2,4-Trimethylbenzene	84		84		70-130	0		20
trans-1,4-Dichloro-2-butene	77		78		70-130	1		20
Ethyl ether	80		79		59-134	1		20
Methyl Acetate	88		85		70-130	3		20
Ethyl Acetate	98		96		70-130	2		20
Isopropyl Ether	83		84		70-130	1		20
Cyclohexane	82		82		70-130	0		20
Tert-Butyl Alcohol	**144**	Q	**135**	Q	70-130	6		20
Ethyl-Tert-Butyl-Ether	96		96		70-130	0		20
Tertiary-Amyl Methyl Ether	94		96		66-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	76		76		70-130	0		20
Methyl cyclohexane	75		76		70-130	1		20
1,4-Diethylbenzene	84		82		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG624498-1 WG624498-2								
4-Ethyltoluene	85		83		70-130	2		20
1,2,4,5-Tetramethylbenzene	80		80		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	95		95		70-130
4-Bromofluorobenzene	92		94		70-130
Dibromofluoromethane	104		104		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623455-3 QC Sample: L1313549-01 Client ID: B-2 (OW)												
1,2-Dibromoethane	ND	0.254	0.344	**136**	Q	-	-		70-130	-		20

SEMIVOLATILES

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	07/19/13 00:49
Analytical Date:	07/24/13 03:48		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	86		41-149

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	07/19/13 00:49
Analytical Date:	07/23/13 15:09		
Analyst:	AS		

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	80		41-149

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/23/13 20:04
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 07/19/13 00:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG622744-1					
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	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	18		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	78		41-149

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/22/13 11:35
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 07/19/13 00:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG622745-1					
Acenaphthene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
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	--
Pentachlorophenol	ND		ug/l	0.80	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	70		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG622744-2 WG622744-3								
Acenaphthene	76		85		37-111	11		30
Benzidine	12		11		10-75	9		30
1,2,4-Trichlorobenzene	53		61		39-98	14		30
Hexachlorobenzene	89		96		40-140	8		30
Bis(2-chloroethyl)ether	68		70		40-140	3		30
2-Chloronaphthalene	70		82		40-140	16		30
1,2-Dichlorobenzene	52		59		40-140	13		30
1,3-Dichlorobenzene	50		56		40-140	11		30
1,4-Dichlorobenzene	49		55		36-97	12		30
3,3'-Dichlorobenzidine	78		82		40-140	5		30
2,4-Dinitrotoluene	86		92		24-96	7		30
2,6-Dinitrotoluene	85		94		40-140	10		30
Azobenzene	89		99		40-140	11		30
Fluoranthene	88		101		40-140	14		30
4-Chlorophenyl phenyl ether	79		89		40-140	12		30
4-Bromophenyl phenyl ether	80		90		40-140	12		30
Bis(2-chloroisopropyl)ether	72		74		40-140	3		30
Bis(2-chloroethoxy)methane	77		81		40-140	5		30
Hexachlorobutadiene	49		58		40-140	17		30
Hexachlorocyclopentadiene	**17**	Q	**23**	Q	40-140	30		30
Hexachloroethane	49		54		40-140	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG622744-2 WG622744-3								
Isophorone	80		82		40-140	2		30
Naphthalene	63		70		40-140	11		30
Nitrobenzene	76		79		40-140	4		30
NitrosoDiPhenylAmine(NDPA)/DPA	81		90		40-140	11		30
n-Nitrosodi-n-propylamine	79		78		29-132	1		30
Bis(2-ethylhexyl)phthalate	103		108		40-140	5		30
Butyl benzyl phthalate	91		103		40-140	12		30
Di-n-butylphthalate	97		112		40-140	14		30
Di-n-octylphthalate	105		116		40-140	10		30
Diethyl phthalate	89		98		40-140	10		30
Dimethyl phthalate	86		94		40-140	9		30
Benzo(a)anthracene	91		100		40-140	9		30
Benzo(a)pyrene	86		97		40-140	12		30
Benzo(b)fluoranthene	82		87		40-140	6		30
Benzo(k)fluoranthene	97		109		40-140	12		30
Chrysene	92		100		40-140	8		30
Acenaphthylene	76		86		45-123	12		30
Anthracene	90		105		40-140	15		30
Benzo(ghi)perylene	95		100		40-140	5		30
Fluorene	79		90		40-140	13		30
Phenanthrene	87		101		40-140	15		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG622744-2 WG622744-3								
Dibenzo(a,h)anthracene	84		89		40-140	6		30
Indeno(1,2,3-cd)Pyrene	86		90		40-140	5		30
Pyrene	88		100		26-127	13		30
Biphenyl	72		84		40-140	15		30
Aniline	48		51		40-140	6		30
4-Chloroaniline	65		69		40-140	6		30
1-Methylnaphthalene	69		82		41-103	17		30
2-Nitroaniline	86		95		52-143	10		30
3-Nitroaniline	53		56		25-145	6		30
4-Nitroaniline	76		82		51-143	8		30
Dibenzofuran	79		88		40-140	11		30
2-Methylnaphthalene	59		68		40-140	14		30
n-Nitrosodimethylamine	41		42		22-74	2		30
2,4,6-Trichlorophenol	80		89		30-130	11		30
P-Chloro-M-Cresol	81		87		23-97	7		30
2-Chlorophenol	73		73		27-123	0		30
2,4-Dichlorophenol	80		88		30-130	10		30
2,4-Dimethylphenol	75		80		30-130	6		30
2-Nitrophenol	76		77		30-130	1		30
4-Nitrophenol	28		30		10-80	7		30
2,4-Dinitrophenol	58		66		20-130	13		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG622744-2 WG622744-3								
4,6-Dinitro-o-cresol	76		80		20-164	5		30
Pentachlorophenol	72		86		9-103	18		30
Phenol	30		32		12-110	6		30
2-Methylphenol	63		65		30-130	3		30
3-Methylphenol/4-Methylphenol	59		62		30-130	5		30
2,4,5-Trichlorophenol	83		85		30-130	2		30
Benzoic Acid	14		18		10-164	25		30
Benzyl Alcohol	66		68		26-116	3		30
Carbazole	89		99		55-144	11		30
Pyridine	32		32		10-66	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		47		21-120
Phenol-d6	27		29		10-120
Nitrobenzene-d5	74		79		23-120
2-Fluorobiphenyl	74		84		15-120
2,4,6-Tribromophenol	95		114		10-120
4-Terphenyl-d14	73		84		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG622745-2 WG622745-3								
Acenaphthene	60		64		37-111	6		40
2-Chloronaphthalene	59		60		40-140	2		40
Fluoranthene	72		73		40-140	1		40
Hexachlorobutadiene	45		46		40-140	2		40
Naphthalene	56		58		40-140	4		40
Benzo(a)anthracene	79		81		40-140	3		40
Benzo(a)pyrene	66		66		40-140	0		40
Benzo(b)fluoranthene	78		80		40-140	3		40
Benzo(k)fluoranthene	77		78		40-140	1		40
Chrysene	71		73		40-140	3		40
Acenaphthylene	60		64		40-140	6		40
Anthracene	69		71		40-140	3		40
Benzo(ghi)perylene	76		76		40-140	0		40
Fluorene	68		73		40-140	7		40
Phenanthrene	69		66		40-140	4		40
Dibenzo(a,h)anthracene	70		71		40-140	1		40
Indeno(1,2,3-cd)pyrene	74		75		40-140	1		40
Pyrene	68		68		26-127	0		40
1-Methylnaphthalene	59		61		40-140	3		40
2-Methylnaphthalene	54		57		40-140	5		40
Pentachlorophenol	81		87		9-103	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG622745-2 WG622745-3								
Hexachlorobenzene	55		56		40-140	2		40
Hexachloroethane	52		52		40-140	0		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54		58		21-120
Phenol-d6	39		41		10-120
Nitrobenzene-d5	97		106		23-120
2-Fluorobiphenyl	71		76		15-120
2,4,6-Tribromophenol	84		89		10-120
4-Terphenyl-d14	69		70		41-149

PCBS

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

SAMPLE RESULTS

Lab ID:	L1313549-01	Date Collected:	07/18/13 14:00
Client ID:	B-2 (OW)	Date Received:	07/18/13
Sample Location:	CONCORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	07/20/13 15:47
Analytical Date:	07/22/13 12:01	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/21/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/21/13

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	57		30-150
Decachlorobiphenyl	63		30-150

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 07/22/13 12:38
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 07/20/13 15:47
Cleanup Method1: EPA 3665A
Cleanup Date1: 07/21/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 07/21/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG623126-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	54		30-150
Decachlorobiphenyl	71		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623126-3 QC Sample: L1313549-01 Client ID: B-2 (OW)												
Aroclor 1016	ND	1.02	0.855	84		-	-		40-140	-		50
Aroclor 1260	ND	1.02	0.951	93		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	62				30-150
Decachlorobiphenyl	68				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG623126-2								
Aroclor 1016	83		-		40-140	-		50
Aroclor 1260	95		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61				30-150
Decachlorobiphenyl	80				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623126-4 QC Sample: L1313521-01 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		56		30-150
Decachlorobiphenyl	67		67		30-150

METALS

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

SAMPLE RESULTS

Lab ID: L1313549-01
Client ID: B-2 (OW)
Sample Location: CONCORD, MA
Matrix: Water
Date Collected: 07/18/13 14:00
Date Received: 07/18/13
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	ND		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Arsenic, Total	ND		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Cadmium, Total	0.00029		mg/l	0.00020	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Chromium, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Copper, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Iron, Total	0.06		mg/l	0.05	--	1	07/22/13 10:02	07/22/13 14:50	EPA 3005A	19,200.7	TT
Lead, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Mercury, Total	ND		mg/l	0.0002	--	1	07/19/13 14:48	07/23/13 15:14	EPA 245.1	3,245.1	DR
Nickel, Total	0.00676		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Selenium, Total	ND		mg/l	0.00500	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Silver, Total	ND		mg/l	0.00040	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM
Zinc, Total	ND		mg/l	0.01000	--	1	07/22/13 10:02	07/23/13 18:48	EPA 3005A	1,6020A	BM

Project Name: 50 BEHARRELL STREET **Lab Number:** L1313549

Project Number: 5588 **Report Date:** 07/26/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG622840-1										
Mercury, Total	ND		mg/l	0.0002	--	1	07/19/13 14:48	07/23/13 14:39	3,245.1	DR

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG623249-1										
Iron, Total	ND		mg/l	0.05	--	1	07/22/13 10:02	07/22/13 14:42	19,200.7	TT

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG623251-1										
Antimony, Total	ND		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Arsenic, Total	ND		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00020	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Chromium, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Copper, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Lead, Total	ND		mg/l	0.00100	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Nickel, Total	ND		mg/l	0.00050	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Selenium, Total	ND		mg/l	0.00500	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Silver, Total	ND		mg/l	0.00040	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM
Zinc, Total	ND		mg/l	0.01000	--	1	07/22/13 10:02	07/23/13 17:11	1,6020A	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET

Project Number: 5588

Lab Number: L1313549

Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG622840-2								
Mercury, Total	109		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG623249-2								
Iron, Total	110		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG623251-2								
Antimony, Total	83		-		80-120	-		
Arsenic, Total	109		-		80-120	-		
Cadmium, Total	114		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	97		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	97		-		80-120	-		
Selenium, Total	103		-		80-120	-		
Silver, Total	94		-		80-120	-		
Zinc, Total	102		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622840-4 QC Sample: L1313432-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.0052	105		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623249-4 QC Sample: L1313549-01 Client ID: B-2 (OW)												
Iron, Total	0.06	1	1.1	104		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623251-4 QC Sample: L1313549-01 Client ID: B-2 (OW)												
Antimony, Total	ND	0.5	0.4164	83		-	-		80-120	-		20
Arsenic, Total	ND	0.12	0.1318	110		-	-		80-120	-		20
Cadmium, Total	0.00029	0.051	0.05655	110		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1927	96		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2353	94		-	-		80-120	-		20
Lead, Total	ND	0.51	0.5183	102		-	-		80-120	-		20
Nickel, Total	0.00676	0.5	0.4740	93		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.120	100		-	-		80-120	-		20
Silver, Total	ND	0.05	0.04601	92		-	-		80-120	-		20
Zinc, Total	ND	0.5	0.5091	102		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622840-3 QC Sample: L1313432-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623249-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
Iron, Total	0.06	0.06	mg/l	2		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623251-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	ND	ND	mg/l	NC		20
Cadmium, Total	0.00029	0.00026	mg/l	11		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00676	0.00653	mg/l	3		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

SAMPLE RESULTS

Lab ID: L1313549-01
Client ID: B-2 (OW)
Sample Location: CONCORD, MA
Matrix: Water

Date Collected: 07/18/13 14:00
Date Received: 07/18/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	ND		mg/l	0.010	--	1	-	07/24/13 14:35	107,-	JO
Solids, Total Suspended	6.7		mg/l	5.0	NA	1	-	07/22/13 13:25	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	07/19/13 09:47	07/19/13 12:46	30,4500CN-CE	DE
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	07/18/13 23:44	30,4500CL-D	EL
pH (H)	6.0		SU	-	NA	1	-	07/19/13 02:40	30,4500H+-B	EL
TPH	ND		mg/l	4.00	--	1	07/23/13 12:03	07/24/13 10:00	74,1664A	ML
Phenolics, Total	ND		mg/l	0.03	--	1	07/22/13 18:00	07/22/13 21:00	4,420.1	TE
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/18/13 19:50	07/18/13 20:06	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	211.		mg/l	12.5	--	25	-	07/22/13 21:20	44,300.0	AU

Project Name: 50 BEHARRELL STREET
Project Number: 5588
Lab Number: L1313549
Report Date: 07/26/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG622709-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/18/13 19:50	07/18/13 20:05	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG622736-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	07/18/13 23:44	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG622856-1										
Cyanide, Total	ND		mg/l	0.005	--	1	07/19/13 09:47	07/19/13 12:31	30,4500CN-CE	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG623197-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	07/22/13 13:25	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG623364-1										
Phenolics, Total	ND		mg/l	0.03	--	1	07/22/13 18:00	07/22/13 20:57	4,420.1	TE
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG623408-1										
Chloride	ND		mg/l	0.500	--	1	-	07/22/13 17:20	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG623576-1										
TPH	ND		mg/l	4.00	--	1	07/23/13 12:03	07/24/13 10:00	74,1664A	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG622709-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG622736-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG622756-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG622856-2								
Cyanide, Total	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG623364-2								
Phenolics, Total	98		-		70-130	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG623408-2								
Chloride	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG623576-2								
TPH	80		-		64-132	-		34

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622709-4 QC Sample: L1313549-01 Client ID: B-2 (OW)												
Chromium, Hexavalent	ND	0.1	0.097	97		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622856-4 QC Sample: L1313533-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.205	102		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623364-4 QC Sample: L1313583-02 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.43	106		-	-		70-130	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623408-3 QC Sample: L1313583-01 Client ID: MS Sample												
Chloride	1.37	4	5.45	102		-	-		40-151	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622709-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622736-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622756-2 QC Sample: L1313549-01 Client ID: B-2 (OW)						
pH (H)	6.0	6.0	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG622856-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623197-2 QC Sample: L1313458-01 Client ID: DUP Sample						
Solids, Total Suspended	82	82.	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623364-3 QC Sample: L1313583-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623408-4 QC Sample: L1313583-01 Client ID: DUP Sample						
Chloride	1.37	1.37	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG623576-3 QC Sample: L1313549-01 Client ID: B-2 (OW)						
TPH	ND	ND	mg/l	NC		34

Project Name: 50 BEHARRELL STREET
Project Number: 5588

Lab Number: L1313549
Report Date: 07/26/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1313549-01A	Vial HCl preserved	B	N/A	4.2	Y	Absent	8260-SIM(14),8260(14)
L1313549-01B	Vial HCl preserved	B	N/A	4.2	Y	Absent	8260-SIM(14),8260(14)
L1313549-01C	Vial HCl preserved	B	N/A	4.2	Y	Absent	8260-SIM(14),8260(14)
L1313549-01D	Plastic 500ml unpreserved	B	7	4.2	Y	Absent	CL-300(28),HEXCR-3500(1)
L1313549-01E	Plastic 250ml HNO3 preserved	B	<2	4.2	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1313549-01F	Amber 1000ml Na2S2O3	B	7	4.2	Y	Absent	PCB-608(7)
L1313549-01G	Amber 1000ml Na2S2O3	B	7	4.2	Y	Absent	PCB-608(7)
L1313549-01H	Plastic 500ml unpreserved	B	7	4.2	Y	Absent	TRC-4500(1),PH-4500(.01)
L1313549-01I	Vial Na2S2O3 preserved	B	N/A	4.2	Y	Absent	504(14)
L1313549-01J	Vial Na2S2O3 preserved	B	N/A	4.2	Y	Absent	504(14)
L1313549-01K	Amber 1000ml HCl preserved	B	N/A	4.2	Y	Absent	TPH-1664(28)
L1313549-01L	Amber 1000ml HCl preserved	B	N/A	4.2	Y	Absent	TPH-1664(28)
L1313549-01M	Amber 1000ml unpreserved	B	7	4.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1313549-01N	Amber 1000ml unpreserved	B	7	4.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1313549-01O	Amber 1000ml unpreserved	B	7	4.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1313549-01P	Amber 1000ml unpreserved	B	7	4.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1313549-01Q	Amber 1000ml H2SO4 preserved	B	<2	4.2	Y	Absent	TPHENOL-420(28)
L1313549-01R	Plastic 250ml NaOH preserved	B	>12	4.2	Y	Absent	TCN-4500(14)
L1313549-01S	Plastic 1000ml unpreserved	B	7	4.2	Y	Absent	TSS-2540(7)
L1313549-01T	Vial Na2S2O3 preserved	B	N/A	4.2	Y	Absent	504(14)
L1313549-02A	Vial HCl preserved	B	N/A	4.2	Y	Absent	HOLD-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	50 BEHARRELL STREET	**Lab Number:**	L1313549
Project Number:	5588	**Report Date:**	07/26/13

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	50 BEHARRELL STREET	**Lab Number:**	L1313549
Project Number:	5588	**Report Date:**	07/26/13

Data Qualifiers

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

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:	50 BEHARRELL STREET	**Lab Number:**	L1313549
Project Number:	5588	**Report Date:**	07/26/13

REFERENCES

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

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

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.

107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

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

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

Certificate/Approval Program Summary

Last revised July 2, 2013 - Westboro Facility

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

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

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

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

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether. **EPA 8260B:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8260 Non-potable water matrix:** Iodomethane (methyl iodide), Methyl methacrylate. **EPA 8260 Soil matrix:** Tert-amyl methyl ether (TAME), Diisopropyl ether (DIPE), Azobenzene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine. **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

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ALPHA ANALYTICAL — World Class Chemistry

8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 7/18/13

ALPHA Job #: L1313549

Client Information

Client: McPhail Assoc LLC
Address: 2269 Mass Ave, Cambridge, MA
Phone: 617-868-1420
Email: SSJ@mcphailgeo.com

Project Information

Project Name: 50 Beharrell Street
Project Location: Concord, MA
Project #: 5588
Project Manager: SSJ
ALPHA Quote #:

Turn-Around Time

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

Date Due: 7/25/13 5:00

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods
☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

Additional Project Information:

* NPDES RGP PERMIT TESTING

Analysis

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☒ 8260 ☐ 624 ☐ 524.2	~~SVOC: ☐ ABN ☐ PAH~~ HexCr	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: TOTAL RP6 Metals (~~☐ RCRA5 ☐ RCRA8 ☐ PP13~~)	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☒ PCB ~~☐ PEST~~ 608	~~TPH: ☐ Quant Only ☐ Fingerprint~~ TRC	EDB/504	TPH-1664	SVOC-SIM 8270	SVOC-8270	Total Phenol	TCN	TSS	Sample Comments	Total # Bottles
13549-01	B-2 (OW)	7/18/13	14:00	H2O	[illegible]	8	1		1			2	1	2	2	2	2	1	1	1		19
	Container Type					V	P		P			A	P	V	A	A	A	A	P	P		
	Preservative					B	A		C			H	P	H	B	A	A	D	E	A		

SAMPLE INFO
Filtration: ☐ Field ☐ Lab to do
Preservation: ☐ Lab to do

Container Type	Preservative
P= Plastic	A= None
A= Amber glass	B= HCl
V= Vial	C= HNO_3
G= Glass	D= H_2SO_4
B= Bacteria cup	E= NaOH
C= Cube	F= MeOH
O= Other	G= $NaHSO_4$
E= Encore	H = $Na_2S_2O_3$
D= BOD Bottle	I= Ascorbic Acid
	J = NH_4Cl
	K= Zn Acetate
	O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7/18/13 1520	[signature]	7/18/13 1610
[signature]	7/18/13 1740	[signature]	7/18/13 17:40

FORM NO: 01-01 (rev. 12-Mar-2012)

McPHAIL ASSOCIATES, LLC

APPENDIX D

AREAS OF CRITICAL CONCERN,
ENDANGERED AND THREATENED SPECIES

The subject site located at 50 Beharrell Street in Concord, 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. A 100-year flood zone is located within the northern portion of the site adjacent to Nashoba Brook.

The subject site is bounded by Nashoba Brook to the north. Nashoba Brook flows into the Assabet River which is located about 500 feet to the northeast 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.

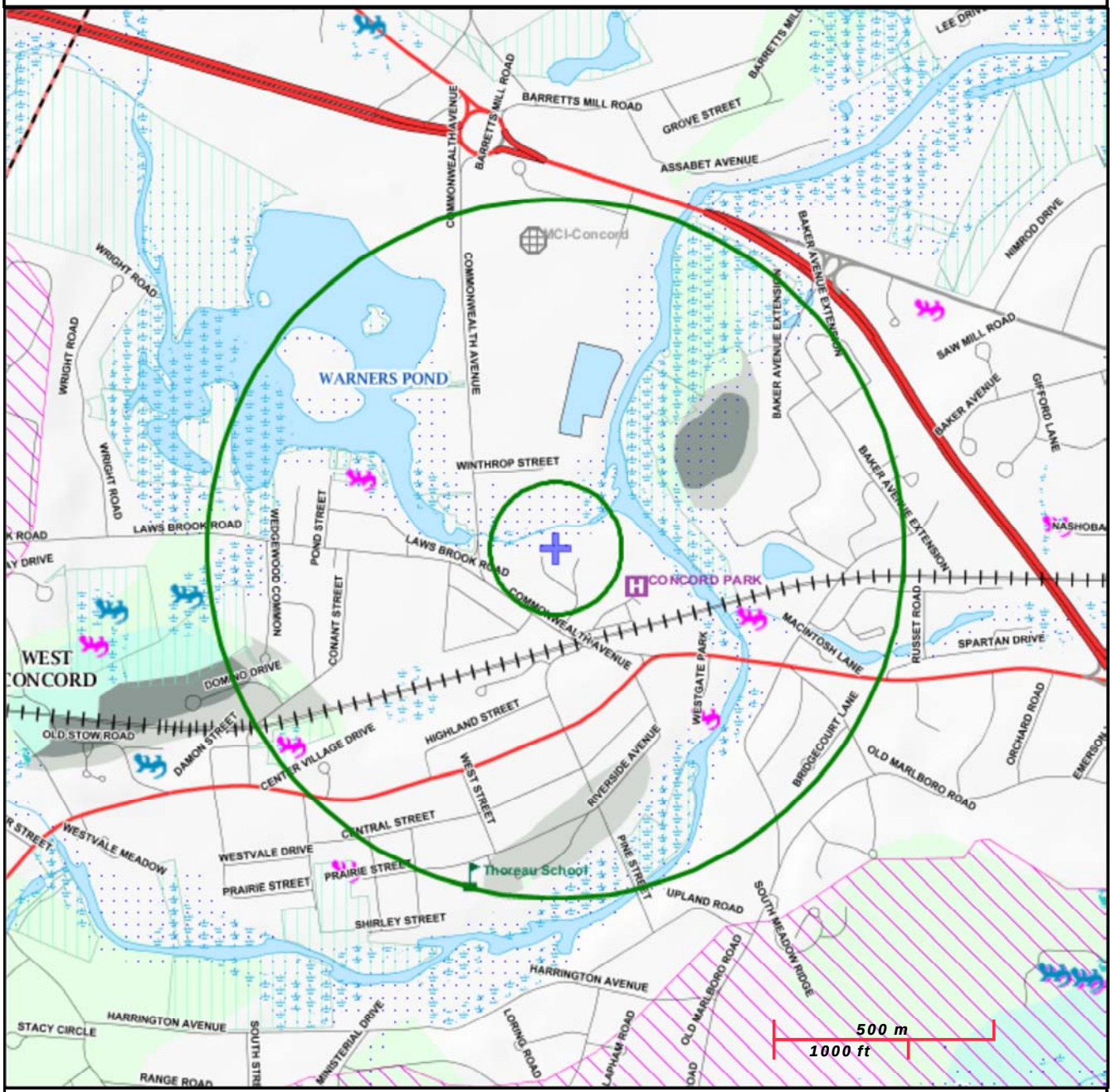
MassDEP - Bureau of Waste Site Cleanup

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

Site Information:
50 BEHARRELL STREET CONCORD, MA
NAD83 UTM Meters:
4703487mN , 303070mE (Zone: 19)
October 8, 2013

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major,PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg.,Non-Com.

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

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

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

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

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

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

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

Ellisville Harbor
(600 acres, 1980) Plymouth

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

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

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

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

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

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

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

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

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

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

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

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

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

Pocasset River
(160 acres, 1980) Bourne

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

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

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

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

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

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

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

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

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

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

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

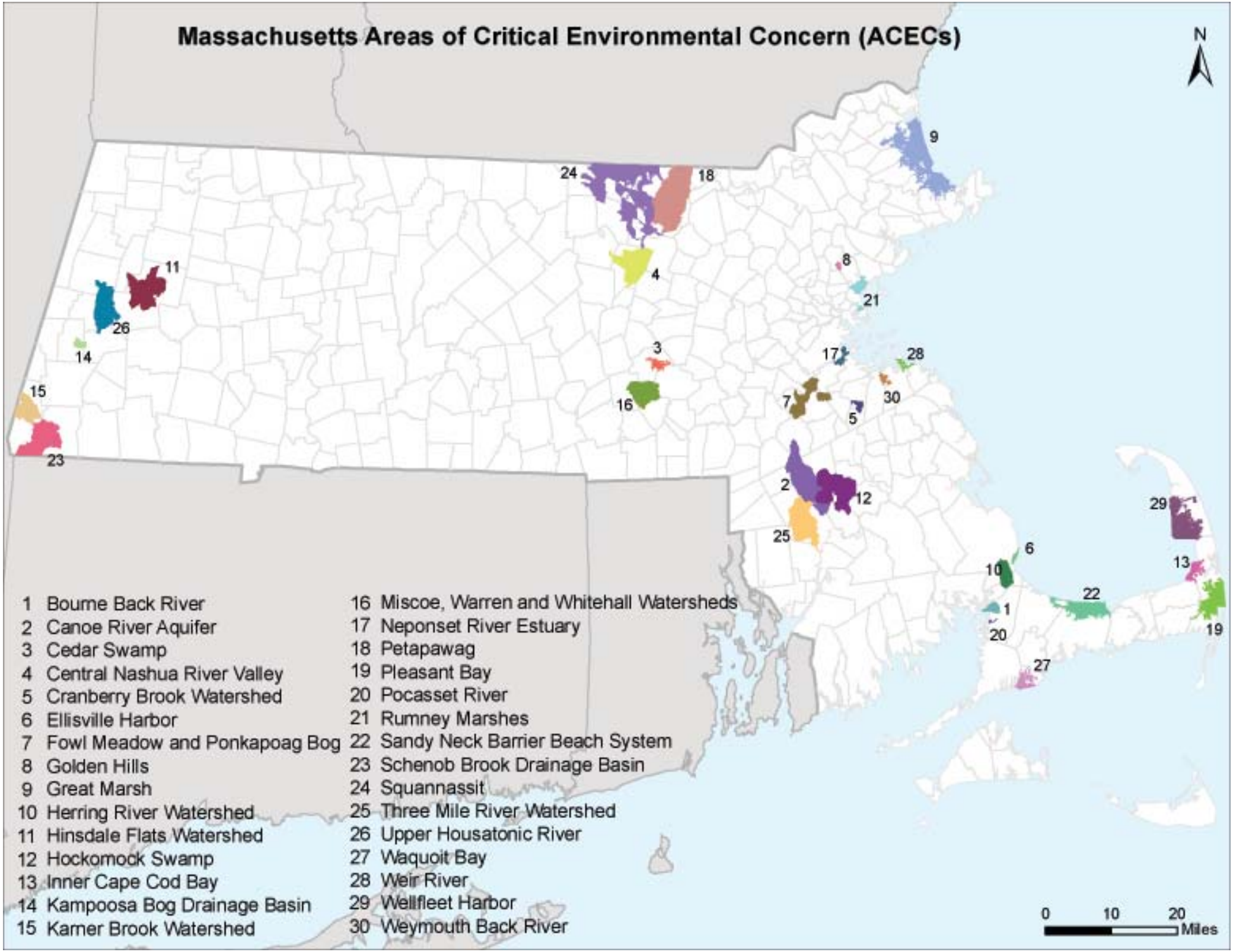
Towns with ACECs within their Boundaries November 2010

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
Hull	Weir River
Ipswich	Great Marsh
Lancaster	Central Nashua River Valley
	Squannassit
Lee	Kampoosa Bog Drainage Basin
	Upper Housatonic River
Lenox	Upper Housatonic River
Leominster	Central Nashua River Valley
Lunenburg	Squannassit
Lynn	Rumney Marshes
Mansfield	Canoe River Aquifer
Mashpee	Waquoit Bay
Melrose	Golden Hills
Milton	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary

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)



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

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	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

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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 Concord, Massachusetts. A review of the most recent National Register of Historical Places for Middlesex 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 Union Station located approximately 700 feet to the southeast of the subject site. We do not anticipate that dewatering activities at the subject site will affect the Union Station National Historic Place.

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

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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 50 Beharrell Street development site located in Concord, 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 a dewatering system that is anticipated to consist of well points and/or 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 on-site storm drainage which discharge into Nasoba Brook. Dewatering effluent treatment will consist of bag filter. GAC and additives to increase the pH will also be used, as necessary.

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 on-site storm drainage lines 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 well points and/or 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.