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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUL 24 2014

David Pendell
Project Manager
Pilot Construction, Inc.
24 Ladd Street
Portsmouth, NH 03801

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Parkside Apartments site located at 59 Waters Avenue, Everett MA 02149, Middlesex County; Authorization # MAG910630

Dear Mr. Pendell:

Based on the review of a Notice of Intent (NOI) submitted by Fatima Babic-Konjic from McPhail Associates, LLC on behalf of Wellington Parkside LP represented by Mr. Gary Hendren 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 which you marked "Believed Present". In addition EPA requires monitoring for polycyclic aromatic hydrocarbons based on the history of petroleum contamination at the site and also total metals because the notice of intent reported filtered metals as opposed to total metals as required by the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to discharge limitations based on a dilution factor range (DFR). Because of the limited dilution (4.18) at the Malden River location where the discharge enters in, EPA determined that the DFR for each parameter is in the one and five (1-5)

range. (See the RGP Appendix IV for Massachusetts facilities) Therefore, the limit for antimony of 23.4 ug/L, arsenic of 41.8 ug/L, cadmium of 0.84 ug/L, trivalent chromium of 204.0 ug/L, hexavalent chromium of 47.6 ug/L, copper of 21.7 ug/L, lead of 5.4 ug/L, mercury 3.8 ug/L, nickel of 121.2 ug/L, selenium of 20.9 ug/L, silver of 5.02 ug/L, zinc of 278.4 ug/L, and iron of 4,180 ug/L, are required to achieve permit compliance at your site. Please note that these metal limitations have increased above the 0-5 dilution factor range. The reason for the increase has to do with the new RGP regulations which allows for a limit increase based on the metal limit times the available dilution of the receiving stream not to exceed 5. The available dilution in this case is 4.18. 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 February 1, 2015. 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
Jay Marcotte, City Services, Everett MPA Director
Fatima Babic-Konjic, McPhail Associates

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910630**
Authorization Issued:	July, 2014
Facility/Site Name:	Parkside Apartments
Facility/Site Address:	59 Waters Avenue, Everett, MA 02149, Middlesex County
	Email address of owner: smc@smcmgtco.com
Legal Name of Operator:	Pilot Construction, Inc.
Operator contact name, title, and Address:	David Pendell, 24 Ladd Street, Portsmouth NH 03801
	Email:davidp@pilotconstructioninc.com
Estimated date of The Project Completion:	February 1, 2015
Category and Sub-Category:	Category III. Contaminated Construction Dewatering. Subcategory B. Known Contaminated Sites
RGP Termination Date:	September 2015
Receiving Water:	Malden River

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

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
√	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
√	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
√	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
√	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
√	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene [5]	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
√	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
√	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

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

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12] Freshwater		Minimum level=ML	
√	39. Antimony	23.4		ML	10
√	40. Arsenic **	41.8		ML	20

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12] Freshwater		Minimum level=ML	
√	41. Cadmium **	0.84		ML	10
√	42. Chromium III (trivalent) **	204.0		ML	15
√	43. Chromium VI (hexavalent) **	47.6		ML	10
√	44. Copper **	21.7		ML	15
√	45. Lead **	5.4		ML	20
√	46. Mercury **	3.8		ML	0.2
√	47. Nickel **	121.2		ML	20
√	48. Selenium **	20.9		ML	20
√	49. Silver	5.06		ML	10
√	50. Zinc **	278.4		ML	15
√	51. Iron	4,180		ML	20
√	52. Barium	Monitoring only		No limit	

	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

59 WATERS AVENUE

EVERETT MASSACHUSETTS

to

U.S. Environmental Protection Agency

July 9, 2014

Project No. 4194

McPHAIL ASSOCIATES, LLC

July 9, 2014

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: 59 Waters Avenue; Everett, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under Massachusetts
Remedial General Discharge 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 permission from the U.S. Environmental Protection Agency (EPA) for the temporary discharge of groundwater into the Malden River via the City of Everett storm drain system during construction at the above referenced site. Refer to **Figure 1** Project Location Plan for the general site locus.

This permit application was prepared in accordance with our proposal dated June 26, 2014 and the subsequent authorization by Mr. Gary Hendren who represents Wellington Parkside LP. These services are subject to the limitations contained in **Attachment A**.

Existing Conditions

Currently, the subject site is an active construction site which fronts onto Waters Avenue to the south and is bounded by a recently constructed bike path to the west, residential property and Valley Street to the east, and Elton Street to the north. Previously, the majority of the site was occupied by several 1- to 3-story commercial buildings housing Town and Country Moving and Storage, Tillotson Rubber Co. and Rainbow Balloons. The exterior site grades range from about Elevation +16 at the western side of the site to about Elevation +20 on the eastern side of the site. The subject site is shown on **Figure 2**, Site Plan.

Site and Regulatory History

According to reports prepared by others for the subject site, the site has been utilized for industrial purposes since 1800s. Water's Governor Works and O.J. Faxon and Company, the initial occupants of the subject site, had a machine operating shop and a foundry, respectively. In 1892, O.J. Faxon and Company expended the foundry at the site, and by 1903, operations of the foundry included drilling, nickel plating, and polishing. By 1910, Everett Foundry Company acquired O.J. Faxon replaced the foundry with a machine shop.

In 1950, E.I. Dupont De Nemours and Company, Inc. acquired and developed the rear of the property as a paint and varnish factory. In addition, five 35,000-gallon above ground storage tanks (AST) were constructed at the northwest and southwest portions of the site. It is understood that the ASTs contained #2 fuel oil. Six additional spare 10,000-gallon of ASTs for containment of paints and varnishes were constructed at the southwest portion of the property. In the period between 1950 and 1955, Water's

Governor Works machine shop razed one of three 35,000-gallons ASTs at the northwest portion of the property. In the 1970s, Tillotson Rubber Co. acquired the paint and varnish factory and re-developed the property with the construction of a 90 by 74-foot brick addition to one of the existing building at the property. Tillotson Rubber Company, also known as Heveatex, manufactured latex and acoustical products at the property.

Just prior to site redevelopment activities, the subject site was occupied by several 1- to 3-story commercial buildings housing Town and Country Moving and Storage, Tillotson Rubber Co. and Rainbow Balloons. Additionally, historical usage of the subject site included the storage of significant volumes of fuel oil in above ground storage tanks located along the western boundary of the subject site.

The subject site is listed with the Massachusetts Department of Environmental (DEP) under Release Tracking Number (RTN) 3-18293 due to a release of petroleum hydrocarbons in soil and groundwater and a release of lead in soil. From 1999 through 2006, response actions were performed by others to remove elevated levels of petroleum and lead contamination in soil and to remove free-phase oil that was encountered on the surface of groundwater. Groundwater samples obtained by others from the monitoring wells installed at the site between 2000 and 2004 were tested for VPHs, EPHs, VOCs, and metals. According to the Phase IV Completion Statement and Class A-2 Response Action Outcome (RAO) Statement prepared by CEA, Inc. dated February 15, 2007, petroleum and lead contamination was reduced to levels of No Significant Risk to human health and the environment, and concluded that a Permanent Solution had been achieved for the RTN 3-18293 site.

Recently, on June 20, 2014, excavation for proposed building footings encountered petroleum contamination on the surface of the exposed groundwater at the southwestern portion of the subject site. The area of the approximate excavation indicated on **Figure 2**, Site Plan. At the time, the level of petroleum contamination did not trigger a reporting condition to the DEP.

On June 25, 2014, an additional excavation was performed to assess whether the observed petroleum contamination was consistent with the residual levels of contamination previously assessed in the above referenced RAO Statement or if the observed contamination was a new release condition. During the excavation, free-phase product was observed on the surface of groundwater at a thickness which exceeded 1/2-inch. Pursuant to the provisions of 310 CMR 40.0317 of the Massachusetts Contingency Plan, the encountered thickness of free-phase liquid triggered a 72 hour reporting condition to the DEP. The DEP was notified of the 72-hour release condition on June 25, 2014, and a new release tracking number (RTN) 3-32259 was assigned to the site. In accordance with Section 40.0412 (2) of the MCP, a 72-hour release condition requires that an Immediate Response Action (IRA) be performed at the site. The Immediate Response Action approved for the site includes the off-site removal and disposal of petroleum-impacted soil and groundwater in addition to assessment of the release.

Proposed Development

It is understood that redevelopment of the subject site will include construction of a 5-story residential apartment building, the lowest level of which will consist of an at-grade open air parking garage. The project site is generally blanketed by fill and organic deposits which range approximately from 2 to 10 feet below the existing ground surface at the site and are directly underlain by a natural marine clay deposit or glacial outwash deposit. Therefore, the proposed structure will be supported by a foundation system consisting of spread footings deriving their support directly on to the marine clay deposit or glacial outwash deposit which underlies the project site, or on lean concrete directly overlying the clay or glacial outwash deposits.

Construction Dewatering

Groundwater levels observed at the site vary from about 5 to 9 feet below the existing ground surface, or between about Elevation +13.3 and Elevation +8.1. In consideration of the observed depth of the groundwater level below the existing ground surface, it is necessary to perform the construction dewatering during foundation construction activities and to discharge the water off-site to the dedicated storm drain during the construction period, specifically during the overexcavation at footing and utility locations. It is estimated that intermittent groundwater discharge required during the excavation phase of construction will be on the order of 50 to 100 gallons per minute. This rate of groundwater discharge during construction is based on the relatively pervious nature of the existing fill material, the impervious nature of the underlying natural soils, and the depth of excavation below the surface of groundwater. Dewatering activities described in this application do not include groundwater that is impacted by NAPL to which the DEP has assigned RTN 3-32259. Approximate area of soil and groundwater impacted by free-phase product is shown on **Figure 2**, Site Plan.

Construction dewatering will require the discharge of collected groundwater into the storm drain system under the requested Remedial General Permit. A review of relevant sewer and drainage plans provided by the City of Everett indicates that storm water lines near the construction area at the intersection of Tremont Street and Prescott Street flow to the northeast before they connect to into the Malden River. The locations of relevant drain manhole with relation to the subject property are indicated on **Figure 3A**. **Figure 3B** shows the storm drains along Tremont Street to the Malden River.

Groundwater Treatment

Based upon previous use of the subject site, it may be necessary to treat groundwater that is pumped from excavations activities at the subject site prior to off-site discharge. Although recent groundwater testing has not detected petroleum constituents in excess of the EPA effluent limits, residual petroleum contamination may be encountered during temporary construction dewatering at the subject property. Groundwater pumped from the excavation will be discharged to the Malden River via the City of Everett storm water system under the requested U.S. EPA Remediation General Permit (RGP).

However, based upon the detected presence of petroleum contamination in soil at the western portion of the subject site, dewatered groundwater may be affected by elevated levels of petroleum hydrocarbons, BTEX and polynuclear aromatic hydrocarbons (PAHs). Therefore, the proposed dewatering system will include a settling tank and a granular activated carbon filter in series will to reduce potential levels of

petroleum constituents in the water to meet allowable BTEX, total petroleum hydrocarbon and PAH discharge limits established by the US EPA prior to discharge. A schematic of the treatment system is shown on **Figure 4**.

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

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the Malden River via the City of Everett 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 (**Attachment E**); and
- Best Management Practice Plan (**Appendix F)**

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

Very truly yours,

McPHAIL ASSOCIATES, LLC

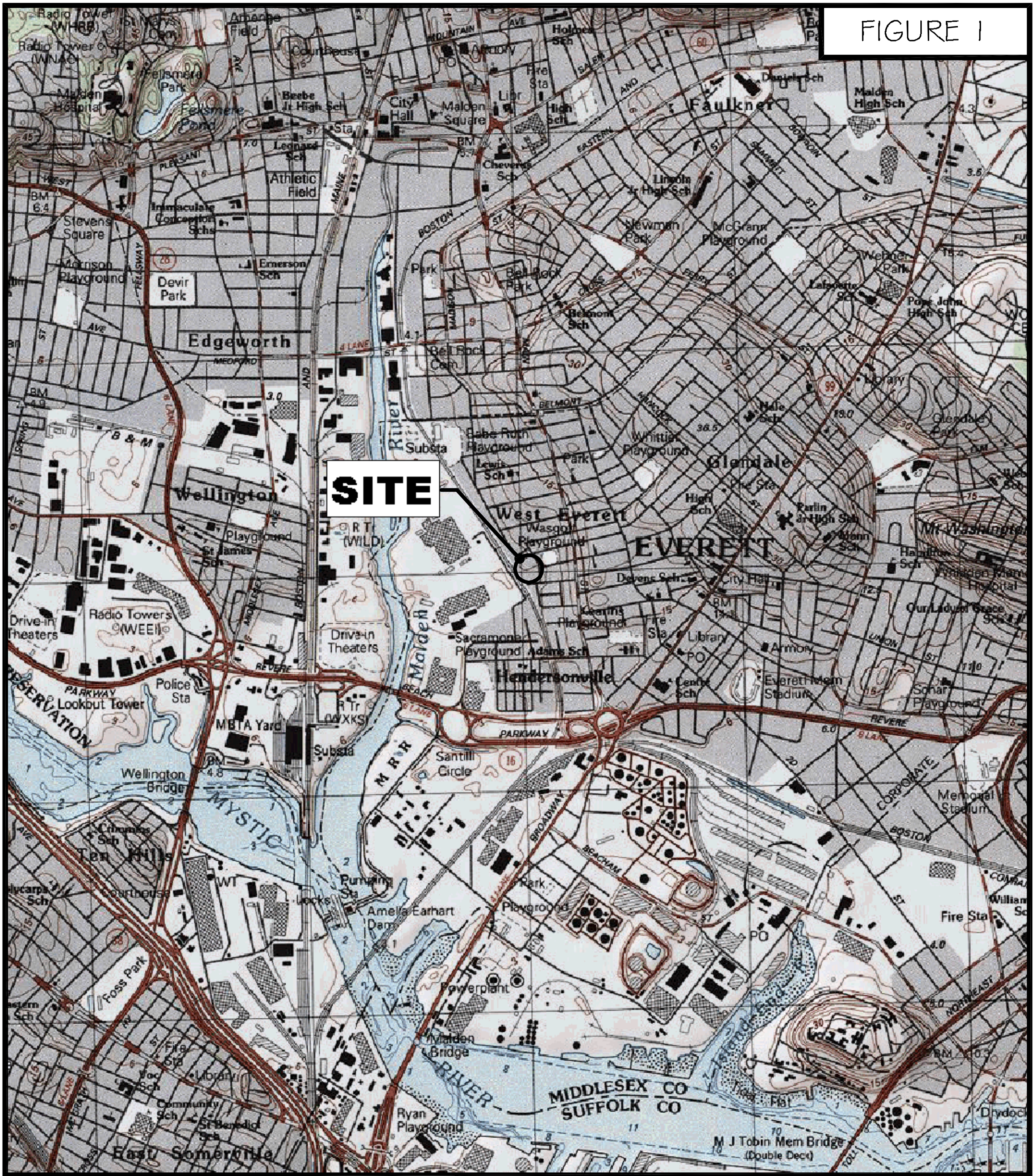
Fatima Babic-Konjic

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

Enclosures

F:\WP5\REPORTS\4194 RGP 070914.wpd
FBK/ajd

FIGURE 1



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

N

SCALE 1:25,000

PROJECT LOCATION PLAN

59 WATERS AVENUE

EVERETT MASSACHUSETTS

FIGURE 2

NORTH

APPROXIMATE LIMIT OF SUBJECT SITE

APPROXIMATE LIMIT OF PROPOSED BUILDING

APPROXIMATE AREA OF SOIL AND GROUNDWATER THAT WILL BE MANAGED UNDER IMMEDIATE RESPONSE ACTION (IRA) APPROVED FOR RTN 3-32259

VALLEY (PUBLIC – 40' WIDE) STREET

WINSLOW (PUBLIC – 40' WIDE) STREET

BALDWIN (PUBLIC – 40' WIDE) STREET

WATERS (PUBLIC – 40' WIDE) AVENUE

ELTON (PUBLIC – 40' WIDE) STREET

TREMONT (PUBLIC – 50' WIDE) STREET

ELM (PUBLIC – 41' WIDE) WAY

#48 VALLEY ST. LOCATED TOP BRICK AT CORNER; HELD FOR RECORD OFFSET TO 3' LINE OF ELTON STREET AND HELD FOR RECORD OFFSET TO STREET LINE VALLEY STREET

#42–44 VALLEY ST. TOP BRICK FOUNDATION CORNER LOCATED

#38 MAP D – SECTION 3 N/F MARY E. MULLEDY BOOK 11799 PAGE 423

#34 MAP D – SECTION 3 N/F EVELYN BONACETO BOOK 13649 PAGE 501

#30–32 MAP D – SECTION 3 N/F FILLIPO VESPA BOOK 21240 PAGE 188

#26–28 MAP D – SECTION 3 N/F MICHAEL FRONGILLO BOOK 8724 PAGE 65

#24 MAP D – SECTION 3 N/F DE HUYNH & VAN CHUNG BOOK 19213 PAGE 64

#9 VALLEY ST. 19TH BRICK AT BUILDING CORNER LOCATED

#30A MAP D – SECTION 3 N/F CITY OF EVERETT L.C.B. #1254 PAGE 66

#39–41 TREMONT ST. LOCATED 3RD BRICK DOWN ON CORNER

#44–46 WATERS AVE. 2ND BRICK DOWN FROM CORNER BOARD LOCATED

N/F BOSTON & MAINE RAILROAD (SAUGUS BRANCH – 40.50' WIDE) NO LONGER ACTIVE

NON-RECORDED LEAD PLUGS AND PINS FOUND IN GRANITE CURBING

NON-RECORDED LEAD PLUG

CONCRETE CORNER OF BUILDING WATER TABLE HELD ON LINE OF STREET (AS SHOWN ON LAND COURT PLAN)

GRAPHIC SCALE

60 0 60 120

REFERENCE: THIS PLAN WAS PREPARED FROM AN UNTITLED 20-SCALE PROGRESS DRAWING DATED APRIL 2, 2004

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

59 WATERS AVENUE

EVERETT MASSACHUSETTS

SITE PLAN

FOR

WELLINGTON PARKSIDE LP

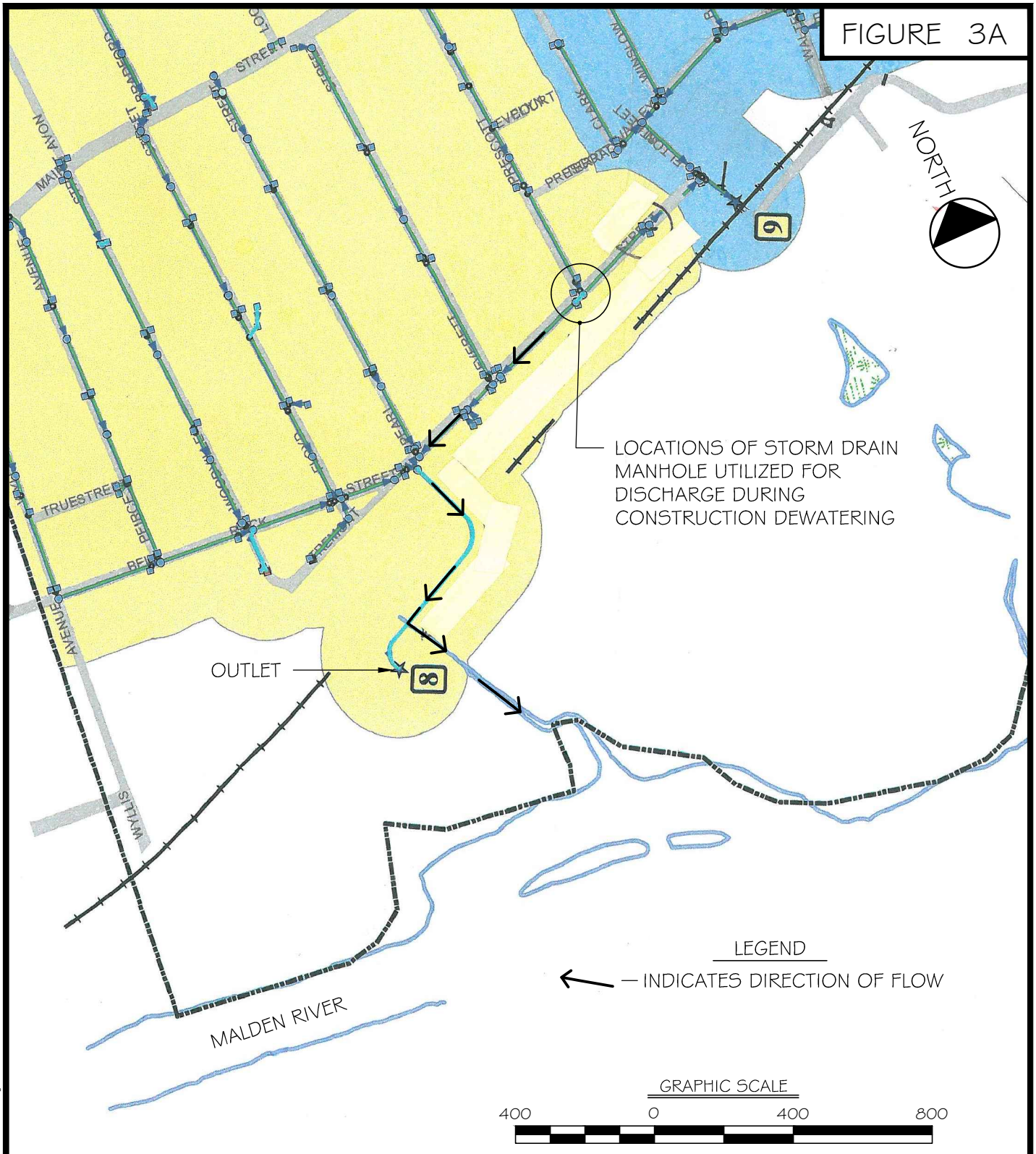
BY

McPHAIL ASSOCIATES, LLC

Date: JUNE 2014	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 60'
Project No: 4194			

FILE NAME: H:\Acad\JOBS\4194\RGR4194-F02.dwg

FIGURE 3A



REFERENCE: CITY OF EVERETT MA DRAINAGE SYSTEM MAP.

McPHAIL ASSOCIATES, LLC
Geo- hnical and Geoenvironmen-al -ngineers
2269 Massachuse - nue
Cambridge, M-
/868-1420
617/868-1423 (-ax)
www.mcphailgeo.com

59 WATERS AVENUE
EVERETT MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PLAN

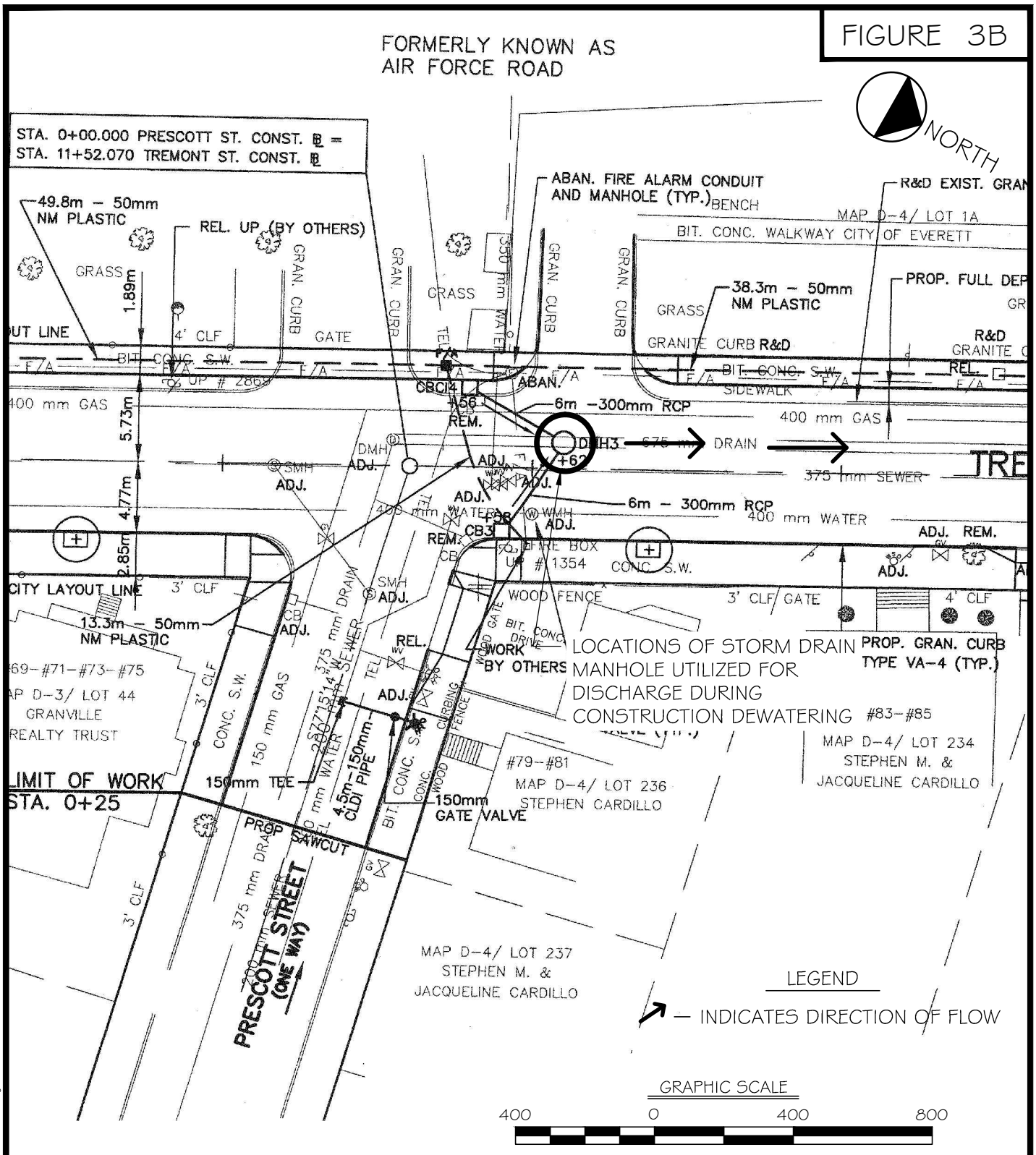
FOR
WELLINGTON PARKSIDE LP

BY
McPHAIL ASSOCIATES, LLC

Da- : JUNE 2014	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 400'
Projec- : 4194			

FILE NAME: H:\Cad\JOBS\4194\RGP\4194-F03A.dwg

FIGURE 3B



REFERENCE: THIS PLAN WAS PREPARED FROM A UNTITLED CONSTRUCTION PLAN PROJECT FILE No. 60288 PROVIDED BY THE CITY OF EVERETT, MA

McPHAIL ASSOCIATES, LLC
Geo- hnical and
Geoenvironmental ngineers
2269 Massachuse - nue
Cambridge, M-
/868-1420
617/868-1423 (-ax)
www.mcphailgeo.com

59 WATERS AVENUE
EVERETT MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PLAN

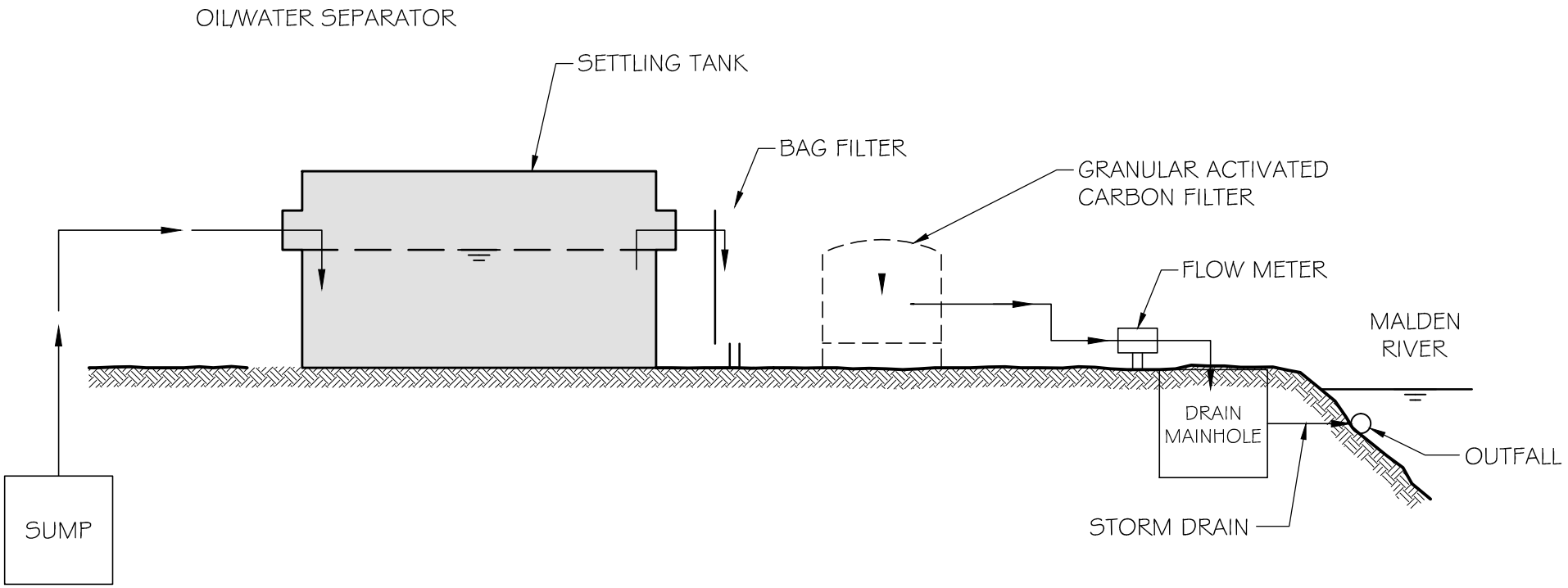
FOR
WELLINGTON PARKSIDE LP
BY
McPHAIL ASSOCIATES, LLC

Da- : JUNE 2014	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 40'
Projec- : 4194			

FILE NAME: H:\Cad\JOBS\4194\RGP\4194-F03B.dwg

FILE NAME: H:\Acad\JOBS\4194\RGP\4194-F04.dwg

FIGURE 4



McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (fax)
www.mcphailgeo.com

59 WATERS AVENUE
EVERETT MASSACHUSETTS

SCHEMATIC OF WATER FLOW

FOR
WELLINGTON PARKSIDE LP
BY
McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS

Date: JUNE 2014	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 400'
Project: 4194			

McPHAIL ASSOCIATES, LLC

ATTACHMENT A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater sample obtained from the trench located at 59 Waters Avenue in Everett, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under 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 at the site become evident in the future, it will 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 chemical test data obtained from analysis of 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.

Chemical 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 chemical 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 Wellington Parkside LP. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party nor used in whole or in part by any other party without 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**: Parkside Apartments at Wellington S.		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.067723 latitude: 42.408707	Facility SIC code(s):	Street: 59 Waters Avenue		
b) Name of **facility/site owner:** Wellington Parkside LP		Town: Everett		
Email address of facility/site owner: smc@smcmgtco.com		State: MA	Zip: 02149	County: Middlesex
Telephone no. of facility/site **owner**: 6179238933				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 100 Galen Street, Suite 301				
Town: Watertown	State: MA	Zip: 02472	County: Middlesex	
c) Legal name of **operator**:	**Operator** telephone no: 603-436-2510			
Pilot Construction, Inc.	**Operator** fax no.:	**Operator** email: davidp@pilotconstructioninc.co		
Operator contact name and title: David Pendell				
Address of **operator** (if different from owner):	Street: 24 Ladd Street			
Town: Portsmouth	State: NH	Zip: 03801	County:	

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

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

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

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

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

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

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

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

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

Temporary Construction Dewatering

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.2228 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 60 gpm Is average flow a design value or estimate? estimate

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

pt.1: lat	42.408707	long	-71.067723	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 Aug 1, 2014 end Feb 1, 2015

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)		☐	☒	0							
2. Total Residual Chlorine (TRC)		☒	☐	0							
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	0							
4. Cyanide (CN)	57125	☒	☐	0							
5. Benzene (B)	71432	☐	☒	1	grab	5,624	1	ND	0		
6. Toluene (T)	108883	☐	☒	1	grab	5,624	1	ND	0		
7. Ethylbenzene (E)	100414	☐	☒	1	grab	5,624	1	ND	0		
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☒	1	grab	5,624	1	ND	0		
9. Total BTEX [2]	n/a	☐	☒	1	grab	5,624'	1	ND	0		
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	grab	14,504.1	0.01	ND	0		
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	5,624	10	ND	0		
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	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	☒	☐	0	grab	5,624					
14. Naphthalene	91203	☒	☐	1	grab	1,8270D-SIM	0.2	ND	0		
15. Carbon Tetrachloride	56235	☒	☐	1	grab	5,624	1	ND	0		
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	5,624	5	ND	0		
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	5,624	5	ND	0		
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	5,624	5	ND	0		
18a. Total dichlorobenzene		☒	☐	1	grab	5,624	5	ND	0		
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	5,624	1.5	ND	0		
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	5,624	1.5	ND	0		
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	5,624	1	ND	0		
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	5,624	1	ND	0		
23. Methylene Chloride	75092	☒	☐	1	grab	5,624	5	ND	0		
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	5,624	1.5	ND	0		
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	5,624	2	ND	0		
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	5,624	1.5	ND	0		
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	5,624	1	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	5,624	2	ND	0		
29. Acetone	67641	☒	☐	1	grab	5,624	10	ND	0		
30. 1,4 Dioxane	123911	☒	☐	1	grab	5,624	2000	ND	0		
31. Total Phenols	108952	☐	☒	0							
32. Pentachlorophenol (PCP)	87865	☒	☐	0							
33. Total Phthalates (Phthalate esters) [4]		☒	☐	0							
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	0							
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	0							
a. Benzo(a) Anthracene	56553	☒	☐	0							
b. Benzo(a) Pyrene	50328	☒	☐	0							
c. Benzo(b)Fluoranthene	205992	☒	☐	0							
d. Benzo(k)Fluoranthene	207089	☒	☐	0							
e. Chrysene	21801	☒	☐	0							
f. Dibenzo(a,h)anthracene	53703	☒	☐	0							
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	0							
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	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	☒	☐	0							
i. Acenaphthylene	208968	☒	☐	0							
j. Anthracene	120127	☒	☐	0							
k. Benzo(ghi) Perylene	191242	☒	☐	0							
l. Fluoranthene	206440	☒	☐	0							
m. Fluorene	86737	☒	☐	0							
n. Naphthalene	91203	☒	☐	1							
o. Phenanthrene	85018	☒	☐	0							
p. Pyrene	129000	☒	☐	0							
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	0							
38. Chloride	16887006	☒	☐	0							
39. Antimony	7440360	☒	☐	0							
40. Arsenic	7440382	☒	☐	1	grab	1,6020A	5	ND			
41. Cadmium	7440439	☒	☐	1	grab	1,6020A	2	ND			
42. Chromium III (trivalent)	16065831	☒	☐	1	grab	1,6020A	10	ND			
43. Chromium VI (hexavalent)	18540299	☒	☐	0							
44. Copper	7440508	☐	☐	0							
45. Lead	7439921	☐	☒	1	grab	1,6020A	5	ND			
46. Mercury	7439976	☒	☐	1	grab	3,245.1	0.2	ND			
47. Nickel	7440020	☒	☐	0							
48. Selenium	7782492	☒	☐	1	grab	1,6020A	50	ND			
49. Silver	7440224	☒	☐	1	grab	1,6020A	4	ND			
50. Zinc	7440666	☒	☐	0							
51. Iron	7439896	☒	☐	0							
Other (describe): Barium	7440393	☐	☒	1	grab		50	37	0.0977	37	0.0977

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:

A settling tank, with bag filter(s) and granular activated carbon filter 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):			

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

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

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 via the City of Everett storm drain located near along Tremont Street to the Malden River.

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.73 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)? Pesticides, Priority Organics, Organic Enrichment, Pathogens, Oiland Grease, Taste, odor andColor, Susp. Solids

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:	Wellington Parkside LP
Operator signature:	
Printed Name &Title:	David Pendell Project Manager
Date:	7/9/14

McPHAIL ASSOCIATES, LLC

APPENDIX C

RESULTS OF GROUNDWATER ANALYSIS

On May 19 2014, a sample of groundwater was obtained from the open excavation (trench) and analyzed for the presence of dissolved metals Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver, extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), and volatile organic compounds (VOCs). The purpose of this analysis was to pre-characterize groundwater in anticipation of off-site discharge.

In summary, the results of the analysis did not detect the presence of the compounds analyzed in excess of the applicable EPA discharge effluent limits and/or MCP RCGW-2 reporting thresholds. The results of the analysis are summarized in **Table 1** and the laboratory data is included in **Appendix C**.

As indicated previously in this application, non-aqueous phase liquid (NAPL) has been detected at the one portion of the subject property. Specifically, free-phase product was observed on the surface of groundwater at a thickness which exceeded 1/2-inch. However, off-site discharge described in this application does not include groundwater that is impacted by free-phase product that was observed on the surface of groundwater at the site. The groundwater impacted with free-phase product will be placed in drums and disposed the off-site under an Immediate Response Action (IRA) which will be performed at the site.

Although the analysis of groundwater at the site has not detected the presence of petroleum constituents in excess of the applicable EPA effluent limits, dissolved petroleum contamination may be present in groundwater at the western portion of the subject property. From 1999 through 2006, response actions were performed at the site by others to remove elevated levels of petroleum and lead contamination in soil and to remove free-phase oil that was encountered on the surface of groundwater. Groundwater analytical data obtained by others from the monitoring wells installed at the site between 2000 and 2004 were tested for VPHs, EPHs, VOCs, and metals. According to the Phase IV Completion Statement and Class A-2 Response Action Outcome (RAO) Statement prepared by CEA, Inc. dated February 15, 2007, petroleum and lead contamination was reduced to levels of No Significant Risk to human health and the environment and that a Permanent Solution was achieved for the RTN 3-18293 site. Further, residual levels of NAPL were not detected in monitoring wells. However, a treatment system is recommended to remove NAPL and potentially dissolved petroleum constituents if encountered prior to off-site discharge during construction dewatering activities.

As indicated in the letter portion of this report, the influent will be passed through an oil/water separator, settling tank and a granular activated carbon (GAC) filtration system to reduce elevated levels of dissolved petroleum constituents in the water if encountered to meet allowable limits established by the US EPA prior to discharge.

TABLE 1
ANALYTICAL RESULTS - GROUNDWATER
RGP CHARACTERIZATION
(Results reported in ug/l unless otherwise noted)

59 Waters Avenue; Everett, MA
Project No. 4194

LOCATION	**RGP**	**GW-TRENCH 1**
SAMPLING DATE	**Eflluent**	**5/19/2014**
LAB SAMPLE ID	**Criteria**	**L1410717-01**
General Chemistry		
Benzene	Total BTEX	ND(0.5)
Toluene	Total BTEX	ND(1)
Ethylbenzene	Total BTEX	ND(1)
p/m-Xylene	Total BTEX	ND(2)
o-Xylene	Total BTEX	ND(1)
Xylenes, Total	Total BTEX	ND (1)
Total BTEX	100	ND
1,2-Dibromoethane	0.05	ND(2)
Methyl tert butyl ether	70	ND(2)
Tertiary-Amyl Methyl Ether	Monitor Only	ND(2)
Naphthalene	20	ND(2)
Carbon tetrachloride	4.4	ND(1)
1,2-Dichlorobenzene	600	ND(1)
1,3-Dichlorobenzene	320	ND(1)
1,4-Dichlorobenzene	5	ND(1)
Total Dichlorobenzene		ND
1,1-Dichloroethane	70	ND(1)
1,2-Dichloroethane	5	ND(1)
1,1-Dichloroethene	3.2	ND(1)
cis-1,2-Dichloroethene	70	ND(1)
Methylene chloride	4.6	ND(2)
Tetrachloroethene	5	ND(1)
1,1,1-Trichloroethane	200	ND(1)
1,1,2-Trichloroethane	5	ND(1)
Trichloroethene	5	ND(1)
Vinyl chloride	2	ND(1)
Acetone	Monitor Only	ND(5)
1,4-Dioxane		ND(3)
Dissolved Metals (ug/l)		
Arsenic (Dissolved)	10	ND(5)
Barium (Dissolved)		37
Cadmium (Dissolved)	0.2	ND(4)
Chromium (Dissolved)	48.8	ND(10)
Lead (Dissolved)	1.3	ND(10)
Mercury (Dissolved)	0.9	ND(0.2)
Selenium (Dissolved)	5	ND(10)
Silver (Dissolved)	1.2	ND(7)

ND-not detected in excess of the laboratory
method detection limits in ()
Bold-exceeds RGP Effluent Standard

ANALYTICAL REPORT

Lab Number:	L1410717
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	59 WATERS AVE.
Project Number:	4194.9.02
Report Date:	05/21/14

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: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1410717-01	GW-TRENCH 1	EVERETT, MA	05/19/14 13:00

Project Name: 59 WATERS AVE. **Lab Number:** L1410717

Project Number: 4194.9.02 **Report Date:** 05/21/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	59 WATERS AVE.	**Lab Number:**	L1410717
Project Number:	4194.9.02	**Report Date:**	05/21/14

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1410717-01, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00230), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1410717-01, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

VPH

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

EPH

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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: 05/21/14

ORGANICS

VOLATILES

Project Name: 59 WATERS AVE.
Lab Number: L1410717
Project Number: 4194.9.02
Report Date: 05/21/14

SAMPLE RESULTS

Lab ID: L1410717-01
Client ID: GW-TRENCH 1
Sample Location: EVERETT, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 05/21/14 11:50
Analyst: PP

Date Collected: 05/19/14 13:00
Date Received: 05/19/14
Field Prep: Not Specified

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

Project Name: 59 WATERS AVE. **Lab Number:** L1410717

Project Number: 4194.9.02 **Report Date:** 05/21/14

SAMPLE RESULTS

Lab ID: L1410717-01 Date Collected: 05/19/14 13:00

Client ID: GW-TRENCH 1 Date Received: 05/19/14

Sample Location: EVERETT, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: 59 WATERS AVE. **Lab Number:** L1410717

Project Number: 4194.9.02 **Report Date:** 05/21/14

SAMPLE RESULTS

Lab ID: L1410717-01 Date Collected: 05/19/14 13:00

Client ID: GW-TRENCH 1 Date Received: 05/19/14

Sample Location: EVERETT, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	103		70-130

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 05/21/14 11:15
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG691405-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 05/21/14 11:15
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG691405-3					
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--

Project Name: 59 WATERS AVE. **Lab Number:** L1410717

Project Number: 4194.9.02 **Report Date:** 05/21/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 05/21/14 11:15
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG691405-3					
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG691405-1 WG691405-2								
Methylene chloride	113		109		70-130	4		20
1,1-Dichloroethane	105		101		70-130	4		20
Chloroform	106		103		70-130	3		20
Carbon tetrachloride	90		86		70-130	5		20
1,2-Dichloropropane	107		103		70-130	4		20
Dibromochloromethane	104		104		70-130	0		20
1,1,2-Trichloroethane	113		114		70-130	1		20
Tetrachloroethene	104		96		70-130	8		20
Chlorobenzene	112		107		70-130	5		20
Trichlorofluoromethane	104		92		70-130	12		20
1,2-Dichloroethane	111		111		70-130	0		20
1,1,1-Trichloroethane	99		93		70-130	6		20
Bromodichloromethane	102		101		70-130	1		20
trans-1,3-Dichloropropene	92		93		70-130	1		20
cis-1,3-Dichloropropene	101		99		70-130	2		20
1,1-Dichloropropene	100		94		70-130	6		20
Bromoform	92		97		70-130	5		20
1,1,2,2-Tetrachloroethane	103		109		70-130	6		20
Benzene	111		105		70-130	6		20
Toluene	108		103		70-130	5		20
Ethylbenzene	112		105		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG691405-1 WG691405-2								
Chloromethane	91		80		70-130	13		20
Bromomethane	74		71		70-130	4		20
Vinyl chloride	95		83		70-130	13		20
Chloroethane	95		86		70-130	10		20
1,1-Dichloroethene	99		92		70-130	7		20
trans-1,2-Dichloroethene	102		97		70-130	5		20
Trichloroethene	104		100		70-130	4		20
1,2-Dichlorobenzene	110		109		70-130	1		20
1,3-Dichlorobenzene	108		105		70-130	3		20
1,4-Dichlorobenzene	110		107		70-130	3		20
Methyl tert butyl ether	81		85		70-130	5		20
p/m-Xylene	115		108		70-130	6		20
o-Xylene	115		109		70-130	5		20
cis-1,2-Dichloroethene	108		102		70-130	6		20
Dibromomethane	112		113		70-130	1		20
1,2,3-Trichloropropane	106		112		70-130	6		20
Styrene	119		113		70-130	5		20
Dichlorodifluoromethane	89		79		70-130	12		20
Acetone	102		116		70-130	13		20
Carbon disulfide	94		89		70-130	5		20
2-Butanone	109		111		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG691405-1 WG691405-2								
4-Methyl-2-pentanone	95		101		70-130	6		20
2-Hexanone	103		112		70-130	8		20
Bromochloromethane	105		107		70-130	2		20
Tetrahydrofuran	97		104		70-130	7		20
2,2-Dichloropropane	78		75		70-130	4		20
1,2-Dibromoethane	110		111		70-130	1		20
1,3-Dichloropropane	110		111		70-130	1		20
1,1,1,2-Tetrachloroethane	112		107		70-130	5		20
Bromobenzene	106		103		70-130	3		20
n-Butylbenzene	103		98		70-130	5		20
sec-Butylbenzene	99		94		70-130	5		20
tert-Butylbenzene	99		96		70-130	3		20
o-Chlorotoluene	105		102		70-130	3		20
p-Chlorotoluene	108		104		70-130	4		20
1,2-Dibromo-3-chloropropane	96		104		70-130	8		20
Hexachlorobutadiene	90		88		70-130	2		20
Isopropylbenzene	107		100		70-130	7		20
p-Isopropyltoluene	106		101		70-130	5		20
Naphthalene	106		105		70-130	1		20
n-Propylbenzene	105		101		70-130	4		20
1,2,3-Trichlorobenzene	108		103		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG691405-1 WG691405-2								
1,2,4-Trichlorobenzene	103		99		70-130	4		20
1,3,5-Trimethylbenzene	107		103		70-130	4		20
1,2,4-Trimethylbenzene	109		104		70-130	5		20
Ethyl ether	95		96		70-130	1		20
Isopropyl Ether	104		102		70-130	2		20
Ethyl-Tert-Butyl-Ether	91		93		70-130	2		20
Tertiary-Amyl Methyl Ether	83		86		70-130	4		20
1,4-Dioxane	110		122		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		108		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	101		102		70-130

PETROLEUM HYDROCARBONS

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02
Lab Number: L1410717
Report Date: 05/21/14

SAMPLE RESULTS

Lab ID:	L1410717-01	Date Collected:	05/19/14 13:00
Client ID:	GW-TRENCH 1	Date Received:	05/19/14
Sample Location:	EVERETT, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	100,VPH-04-1.1		
Analytical Date:	05/20/14 18:17		
Analyst:	BS		

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	98		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02
Lab Number: L1410717
Report Date: 05/21/14

SAMPLE RESULTS

Lab ID:	L1410717-01	Date Collected:	05/19/14 13:00
Client ID:	GW-TRENCH 1	Date Received:	05/19/14
Sample Location:	EVERETT, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	05/19/14 23:39
Analytical Date:	05/20/14 17:35	Cleanup Method1:	EPH-04-1
Analyst:	AR	Cleanup Date1:	05/20/14

Quality Control Information

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

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	54		40-140
o-Terphenyl	80		40-140
2-Fluorobiphenyl	85		40-140
2-Bromonaphthalene	78		40-140

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 05/20/14 15:58
Analyst: AR

Extraction Method: EPA 3510C
Extraction Date: 05/19/14 23:39
Cleanup Method1: EPH-04-1
Cleanup Date1: 05/20/14

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG690826-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	70		40-140

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 100,VPH-04-1.1
Analytical Date: 05/20/14 15:38
Analyst: BS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG691388-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	96		70-130
2,5-Dibromotoluene-FID	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG690826-2 WG690826-3								
C9-C18 Aliphatics	56		64		40-140	13		25
C19-C36 Aliphatics	77		87		40-140	12		25
C11-C22 Aromatics	83		85		40-140	2		25
Naphthalene	68		67		40-140	1		25
2-Methylnaphthalene	74		74		40-140	0		25
Acenaphthylene	63		68		40-140	8		25
Acenaphthene	75		77		40-140	3		25
Fluorene	74		78		40-140	5		25
Phenanthrene	77		82		40-140	6		25
Anthracene	89		90		40-140	1		25
Fluoranthene	80		85		40-140	6		25
Pyrene	81		87		40-140	7		25
Benzo(a)anthracene	74		80		40-140	8		25
Chrysene	78		82		40-140	5		25
Benzo(b)fluoranthene	79		84		40-140	6		25
Benzo(k)fluoranthene	94		95		40-140	1		25
Benzo(a)pyrene	71		80		40-140	12		25
Indeno(1,2,3-cd)Pyrene	70		78		40-140	11		25
Dibenzo(a,h)anthracene	74		81		40-140	9		25
Benzo(ghi)perylene	70		78		40-140	11		25
Nonane (C9)	43		50		30-140	15		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG690826-2 WG690826-3								
Decane (C10)	53		59		40-140	11		25
Dodecane (C12)	62		68		40-140	9		25
Tetradecane (C14)	66		76		40-140	14		25
Hexadecane (C16)	69		80		40-140	15		25
Octadecane (C18)	72		83		40-140	14		25
Nonadecane (C19)	74		85		40-140	14		25
Eicosane (C20)	74		85		40-140	14		25
Docosane (C22)	76		87		40-140	13		25
Tetracosane (C24)	78		89		40-140	13		25
Hexacosane (C26)	78		89		40-140	13		25
Octacosane (C28)	77		87		40-140	12		25
Triacontane (C30)	79		90		40-140	13		25
Hexatriacontane (C36)	76		88		40-140	15		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	47		53		40-140
o-Terphenyl	110		102		40-140
2-Fluorobiphenyl	76		78		40-140
2-Bromonaphthalene	75		78		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG691388-1 WG691388-2								
C5-C8 Aliphatics	103		96		70-130	7		25
C9-C12 Aliphatics	98		86		70-130	13		25
C9-C10 Aromatics	96		90		70-130	6		25
Benzene	98		90		70-130	8		25
Toluene	97		90		70-130	7		25
Ethylbenzene	97		90		70-130	7		25
p/m-Xylene	98		90		70-130	8		25
o-Xylene	97		90		70-130	7		25
Methyl tert butyl ether	94		89		70-130	5		25
Naphthalene	84		83		70-130	1		25
1,2,4-Trimethylbenzene	96		90		70-130	6		25
Pentane	102		101		70-130	1		25
2-Methylpentane	103		98		70-130	5		25
2,2,4-Trimethylpentane	99		92		70-130	7		25
n-Nonane	100		87		30-130	14		25
n-Decane	98		85		70-130	14		25
n-Butylcyclohexane	99		88		70-130	11		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG691388-1 WG691388-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	91		87		70-130
2,5-Dibromotoluene-FID	93		89		70-130

METALS

Project Name: 59 WATERS AVE.
Lab Number: L1410717
Project Number: 4194.9.02
Report Date: 05/21/14

SAMPLE RESULTS

Lab ID: L1410717-01
Client ID: GW-TRENCH 1
Sample Location: EVERETT, MA
Matrix: Water

Date Collected: 05/19/14 13:00
Date Received: 05/19/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Barium, Dissolved	0.037		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Cadmium, Dissolved	ND		mg/l	0.004	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Chromium, Dissolved	ND		mg/l	0.01	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Lead, Dissolved	ND		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Mercury, Dissolved	ND		mg/l	0.0002	--	1	05/21/14 10:30	05/21/14 12:49	EPA 7470A	97,7470A	AK
Selenium, Dissolved	ND		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT
Silver, Dissolved	ND		mg/l	0.007	--	1	05/19/14 23:15	05/20/14 15:58	NA	97,6010C	TT

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02
Lab Number: L1410717
Report Date: 05/21/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG691012-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Barium, Dissolved	ND		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Cadmium, Dissolved	ND		mg/l	0.004	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Chromium, Dissolved	ND		mg/l	0.01	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Lead, Dissolved	ND		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Selenium, Dissolved	ND		mg/l	0.010	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT
Silver, Dissolved	ND		mg/l	0.007	--	1	05/19/14 23:15	05/20/14 14:34	97,6010C	TT

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG691316-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	05/21/14 10:30	05/21/14 12:42	97,7470A	AK

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 59 WATERS AVE.

Project Number: 4194.9.02

Lab Number: L1410717

Report Date: 05/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG691012-2 WG691012-3								
Arsenic, Dissolved	96		94		80-120	2		20
Barium, Dissolved	92		93		80-120	1		20
Cadmium, Dissolved	96		96		80-120	0		20
Chromium, Dissolved	90		90		80-120	0		20
Lead, Dissolved	95		95		80-120	0		20
Selenium, Dissolved	98		97		80-120	1		20
Silver, Dissolved	89		89		80-120	0		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG691316-2 WG691316-3								
Mercury, Dissolved	116		120		80-120	3		20

Project Name: 59 WATERS AVE.
Project Number: 4194.9.02

Lab Number: L1410717
Report Date: 05/21/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1410717-01A	Vial HCl preserved	A	N/A	4.2	Y	Absent	MCP-8260-10(14)
L1410717-01B	Vial HCl preserved	A	N/A	4.2	Y	Absent	MCP-8260-10(14)
L1410717-01C	Vial HCl preserved	A	N/A	4.2	Y	Absent	VPH-10(14)
L1410717-01D	Vial HCl preserved	A	N/A	4.2	Y	Absent	VPH-10(14)
L1410717-01E	Plastic 250ml unpreserved	A	7	4.2	Y	Absent	FILTER-MET(1)
L1410717-01F	Amber 1000ml HCl preserved	A	<2	4.2	Y	Absent	EPH-10(14)
L1410717-01G	Amber 1000ml HCl preserved	A	<2	4.2	Y	Absent	EPH-10(14)
L1410717-01X	Plastic 250ml HNO3 preserved spl	A	<2	4.2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

Container Comments

L1410717-01X

*Values in parentheses indicate holding time in days

Project Name:	59 WATERS AVE.	**Lab Number:**	L1410717
Project Number:	4194.9.02	**Report Date:**	05/21/14

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

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

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 ten times (10x) 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.

Report Format: Data Usability Report

Project Name:	59 WATERS AVE.	**Lab Number:**	L1410717
Project Number:	4194.9.02	**Report Date:**	05/21/14

Data Qualifiers

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.

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	59 WATERS AVE.	**Lab Number:**	L1410717
Project Number:	4194.9.02	**Report Date:**	05/21/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
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 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: 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
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 5/19/14

ALPHA Job #: L1407/7

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

Client Information

Client: McPhail Associates, LLC
Address: 2269 MASS AVE
Phone: 617-868-1420
Email: fbk@mcphailgeo.com

Project Information

Project Name: 59 WATERS AVE
Project Location: EVERETT, MA
Project #: 4194.9.02
Project Manager: Fatima Babic-Konjic/A. Donovan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 5/21/14

Additional Project Information:

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 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 MCP
☐ Yes ☒ No CT RCP Analytical Methods

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☒ 8260 ☐ 624	SVOC: ☐ 8270 ☐ 625	METALS: ☐ MCP 13 ☐ RCRA5	METALS: ☐ MCP 14 ☐ RCRA8	EPH: ☐ Ranges & Targets ☐ RCP 15 ☐ PP13	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	DISSOLVED RCRA-8 METALS	Sample Comments	TOTAL # BOTTLES
1071 7-01	GW-TRENCH 1	5/19	1:00 PM	GW	MJG	X				X	X			X		7
Container Type						V				A	V			P		
Preservative						B				B	B			A		

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

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	5/19/14 2:00 PM	AAL	5/19/14 1600
	5/19/14 1715		5/19/14 1715

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

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

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1410717

Instrument ID: Quimby.i Calibration Date: 21-MAY-2014 Time: 09:40

Lab File ID: 0521A02 Init. Calib. Date(s): 24-MAR-2 24-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 06:07 13:28

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.37755	.33733	.1	-11	20	
chloromethane	.55134	.49927	.1	-9	20	
vinyl chloride	.41894	.39822	.1	-5	20	
bromomethane	.2956	.22013	.1	-26	20	F
chloroethane	.32297	.30724	.1	-5	20	
trichlorofluoromethane	.69441	.72023	.1	4	20	
ethyl ether	.19311	.18292	.05	-5	20	
acetone	100	102	.1	2	20	
1,1,-dichloroethene	.42433	.41848	.1	-1	20	
methylene chloride	.4706	.53062	.1	13	20	
carbon disulfide	1.0746	1.0053	.1	-6	20	
methyl tert butyl ether	.83635	.67862	.1	-19	20	
trans-1,2-dichloroethene	.46727	.47754	.1	2	20	
Diisopropyl Ether	1.7593	1.8237	.05	4	20	
1,1-dichloroethane	.97574	1.0268	.2	5	20	
Ethyl-Tert-Butyl-Ether	1.3260	1.2069	.05	-9	20	
2-butanone	.13501	.14672	.1	9	20	
2,2-dichloropropane	100	78.006	.05	-22	20	F
cis-1,2-dichloroethene	.50063	.54289	.1	8	20	
chloroform	.81007	.85993	.2	6	20	
bromochloromethane	.20718	.21788	.05	5	20	
tetrahydrofuran	.08878	.08624	.05	-3	20	
1,1,1-trichloroethane	.67564	.66909	.1	-1	20	
1,1-dichloropropene	.69545	.69582	.05	0	20	
carbontetrachloride	100	90.323	.1	-10	20	
Tertiary-Amyl Methyl Ether	.87246	.72383	.05	-17	20	
1,2-dichloroethane	.63126	.70208	.1	11	20	
benzene	1.8091	2.0080	.5	11	20	
trichloroethene	.49594	.51665	.2	4	20	
1,2-dichloropropane	.55529	.59361	.1	7	20	
bromodichloromethane	.57605	.58551	.2	2	20	
1,4-dioxane	.00242	.00266	.05	10	20	F
dibromomethane	.2212	.2481	.05	12	20	
4-methyl-2-pentanone	.13235	.12586	.1	-5	20	
cis-1,3-dichloropropene	.61107	.61647	.2	1	20	
toluene	1.5027	1.6227	.4	8	20	
trans-1,3-dichloropropene	100	92.301	.1	-8	20	
1,1,2-trichloroethane	.33156	.37518	.1	13	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1410717

Instrument ID: Quimby.i Calibration Date: 21-MAY-2014 Time: 09:40

Lab File ID: 0521A02 Init. Calib. Date(s): 24-MAR-2 24-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 06:07 13:28

Compound	RRF	RRF	MIN RRF	%D	MAX %D
2-hexanone	.24277	.25009	.1	3	20
1,3-dichloropropane	.72477	.79881	.05	10	20
tetrachloroethene	.65863	.68777	.2	4	20
chlorodibromomethane	.43466	.4504	.1	4	20
1,2-dibromoethane	.3744	.4113	.1	10	20
chlorobenzene	1.6152	1.8054	.5	12	20
1,1,1,2-tetrachloroethane	.4734	.52914	.05	12	20
ethyl benzene	2.8947	3.2377	.1	12	20
p/m xylene	1.1089	1.2793	.1	15	20
o xylene	1.0425	1.2012	.3	15	20
styrene	1.6584	1.9726	.31	19	20
isopropylbenzene	2.9108	3.1139	.1	7	20
bromoform	.46063	.42455	.1	-8	20
1,1,2,2,-tetrachloroethane	.86592	.89371	.3	3	20
1,2,3-trichloropropane	.67315	.71681	.05	6	20
n-propylbenzene	6.3297	6.6735	.05	5	20
bromobenzene	1.2513	1.3310	.05	6	20
1,3,5-trimethybenzene	4.5406	4.8569	.05	7	20
2-chlorotoluene	4.4212	4.6618	.05	5	20
4-chorotoluene	4.0192	4.3344	.05	8	20
tert-butylbenzene	3.9705	3.9294	.05	-1	20
1,2,4-trimethylbenzene	4.534	4.9242	.05	9	20
sec-butylbenzene	5.7122	5.6699	.05	-1	20
p-isopropyltoluene	4.6145	4.8830	.05	6	20
1,3-dichlorobenzene	2.4376	2.6441	.6	8	20
1,4-dichlorobenzene	2.4145	2.6489	.5	10	20
n-butylbenzene	4.7802	4.9349	.05	3	20
1,2-dichlorobenzene	2.1445	2.3716	.4	11	20
1,2-dibromo-3-chloropropane	100	96.088	.05	-4	20
1,2,4-trichlorobenzene	1.2023	1.2376	.2	3	20
hexachlorobutadiene	.57952	.51971	.05	-10	20
naphthalene	1.8973	2.0096	.05	6	20
1,2,3-trichlorobenzene	.92302	.99555	.05	8	20
dibromofluoromethane	.23494	.2373	.05	1	20
1,2-dichloroethane-d4	.28131	.29355	.05	4	20
toluene-d8	1.2871	1.2831	.05	0	20
4-bromofluorobenzene	1.0179	.93416	.05	-8	20

FORM VII MCP-8260-10

McPHAIL ASSOCIATES, LLC

ATTACHMENT D

AREAS OF CRITICAL CONCERN,
ENDANGERED AND THREATENED SPECIES

The 59 Waters Avenue property is located in Everett, Massachusetts that is an active construction site. Based on a review of Massachusetts Geographic Information Systems DEP Priority Resources' Map, there are no drinking water supplies, no Areas of Critical Environmental Concern, no Sole Source Aquifers, no fish habitats, and no habitats of Species of Special Concern or Threatened or Endangered Species at or within 500-feet of the subject site. Protected Open Space is indicated within 500-feet of the subject property. In addition, Non Potential Water Source Area is located within 500-feet of the subject site.

There are no surface water bodies located within the site boundaries. The Malden River, the nearest surface water body, is located approximately 0.38 miles to the site.

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

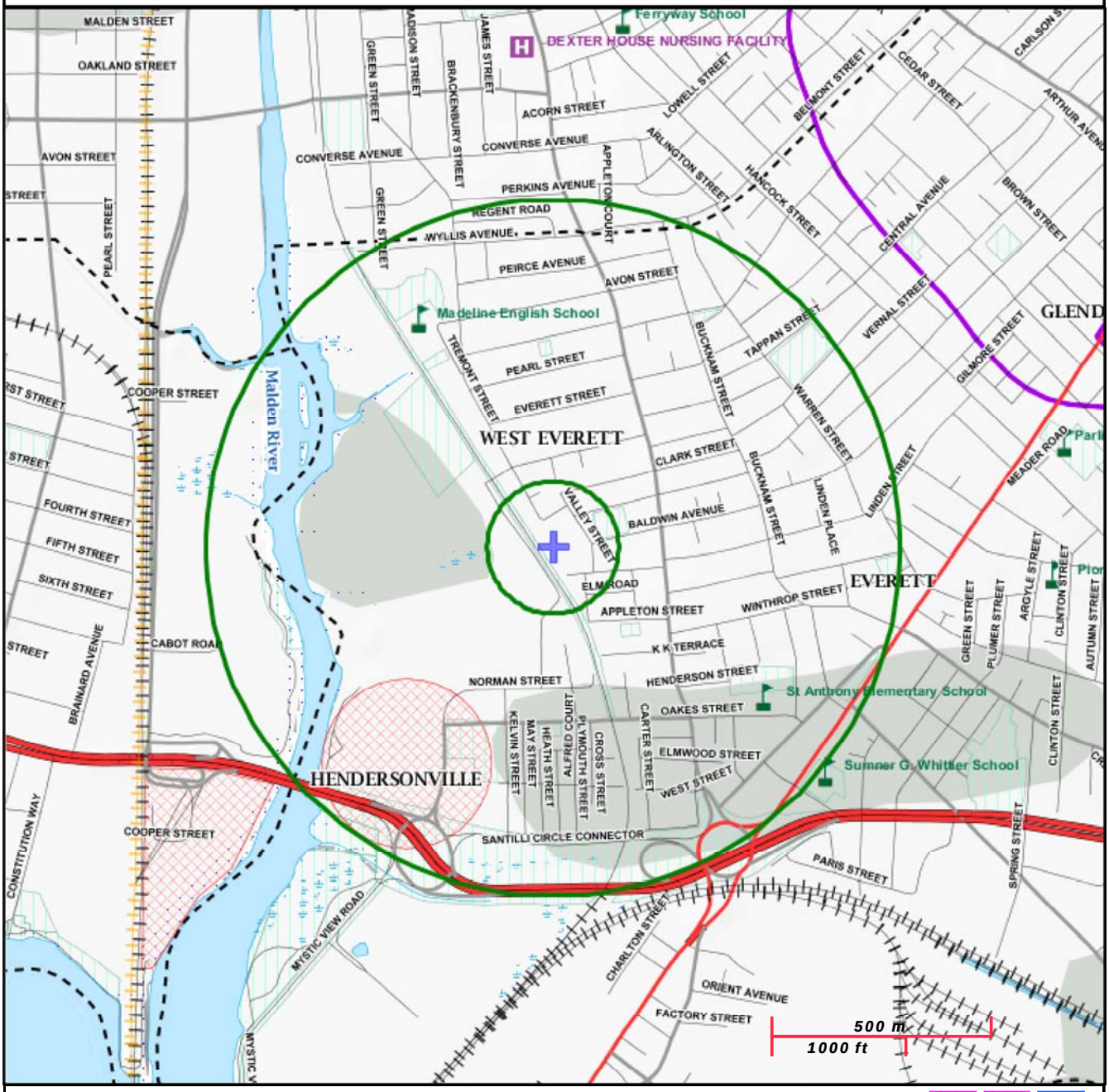
MassDEP - Bureau of Waste Site Cleanup

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

Site Information:
59 WATERS AVENUE
59 WATERS AVENUE EVERETT, MA
3-000018293
NAD83 UTM Meters:
5222409mN , -7910955mE (Zone: 18)
July 1, 2014

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.

McPHAIL ASSOCIATES, LLC

ATTACHMENT 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 Everett, 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 subject site and/or outfall location.

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

McPHAIL ASSOCIATES, LLC

APPENDIX F

Best Management Practice Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that may occur at the 59 Waters property located in Everett, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation and directly into a treatment system consisting of an oil/water separator, settling tank, an organo clay media vessel, and granular activated carbon filter. The effluent will be discharged through hoses into a storm water drain manhole located at the located at the intersection of Tremont and Prospect Streets. Based upon a review of the City of Everett Drainage System Map, the stormwater drain beneath Tremont Street ultimately discharges into the Malden River.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes chemical testing required within days 1and 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, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

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

Monthly monitoring reports will be compiled and maintained at the site

McPHAIL ASSOCIATES, LLC

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the oil/water separator, settling tank, organo clay media vessel, GAC filter, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

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

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse affects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Malden River which is located 0.38 miles to the subject site. Groundwater will be pumped through a treatment system consisting of an oil/water separator, settling tank, organo clay media vessel, and GAC filter in series prior to discharge into the City of Everett storm drain system.

Management of Treatment System Materials

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

Sediment and settling 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. Carbon resin will be recycled and/or removed from the site to an appropriate receiving facility as necessary.