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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUL 11 2014

Gerald Topping
Senior Project Manager
Boston Medical Center
750 Albany Street
Boston, MA 02218

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Boston Medical Center- Menino Addition site located at 840 Harrison Avenue, Boston, MA 02218, Suffolk County; Authorization # MAG910629

Dear Mr. Topping:

Based on the review of a Notice of Intent (NOI) submitted by Lee Vanzler from Haley & Aldrich, Inc., on behalf of the Boston Medical Center, for the project referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that you have marked "Believed Present". In addition the check list includes polycyclic aromatic hydrocarbons (PAHs), lead and mercury due to historic contamination.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. With the absence of dilution of freshwater into tidal water, EPA determined that the Dilution Factor Range (DFR) for each parameter for this site is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 36 ug/L, nickel of 8.2 ug/L, lead of 1.3 ug/L, mercury

of 0.9 ug/L and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

Also, please note that based on Part I. Section C.7., of the RGP reissuance issued on September 9, 2010, dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI. Any other dilution factor based on estimated values such as the dilution factor of 4136 proposed in your NOI is no longer accepted by EPA.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on August 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
Stephen Shea, BWSC
Lee Vanzler, Haley & Aldrich

010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910629**
Authorization Issued:	July, 2014
Facility/Site Name:	Boston Medical Center- Menino Addition
Facility/Site Address:	840 Harrison Avenue, Boston, MA 02218, Suffolk County
	Email address of owner: geral.topping@bmc.org
Legal Name of Operator:	Suffolk Construction Company
Operator contact name, title, and Address:	Stephen O'Connor Senior Project Manager, 65 Allerton Street, Boston, MA 02119
	Email: Steve O'Conner@suffolk.com
Estimated date of the site's Completion:	August 1, 2015
Category and Sub-Category:	Category III. Subcategory A. General Urban Fill Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Boston Fort Point Channel

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

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

	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)
		ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene [5]	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
√	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
√	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

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

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

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

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

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com

HALEY&
ALDRICH

26 June 2014
File No. 27668-100

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912

Attention: Remediation General Permit NOI Processing

Subject: Notice of Intent (NOI)
Temporary Construction Dewatering
Boston Medical Center – Menino Addition
Boston, Massachusetts

Ladies & Gentlemen:

On behalf of our client, the Boston Medical Center, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary discharge of construction site dewatering effluent under the RGP. Temporary construction dewatering is necessary to facilitate the below-grade construction associated with a new two to five-story expansion to the Boston Medical Center Menino building, located as shown on Figure 1.

The proposed construction consists of a new infill building on the Boston Medical Center west campus at 840 Harrison Avenue. A portion of the new structure will have a single basement level which will extend approximately 18 feet below existing site grades and up to about 6-ft below site groundwater levels. It is anticipated that either a soldier pile and timber lagging or steel sheet pile support of excavation (SOE) system will be used to facilitate excavation for the below grade structure.

Various site improvements are also planned, including a new patient transport bridge which will provide the new building at 840 Harrison Avenue with direct access to a medical flight landing pad at the rear of the Power Plant building at 750 Albany Street. The bridge will terminate at an elevator tower which will provide access to an existing underground service tunnel approximately 20-ft below existing site grades. It is anticipated that an internally braced, interlocking steel sheet pile SOE system will be used to facilitate excavation for the elevator shaft.

Site History

According to Sanborn maps of the area, the portion of the Site located north of Albany Street has been used as hospital buildings (first called “Boston City Hospital”) since 1887. The portion of the Site located south of Albany Street was City of Boston property, occupied by the Water Department and a coal shed/power plant in the late 1800s and early 1900s. According to aerial photographs of the area

south of Albany Street, the current-day Power Plant located at 750 Albany Street was constructed in the 1970s.

Regulatory Background

Applicable Massachusetts Contingency Plan (MCP) Reportable Concentrations pursuant to the MCP 310 CMR 40.0000 for this site are RCS-1 for soil and RCGW-2 for groundwater (as site groundwater would not be considered to be, nor proximal to, a current or potential drinking water supply). The subject development parcel located to the south of Albany Street (i.e., near Power Plant) is contained within the limits of a previously reported "Disposal Site" (Site) that was assigned Release Tracking Number (RTN) 3-21864 in 2002 due to a release of No. 2 fuel oil. The RTN is currently in Phase V of the MCP and has attained Remedy Operation Status.

Results of a precharacterization program to the north of Albany Street in 2014 indicated the presence of polycyclic aromatic hydrocarbons (PAHs), lead, and mercury in the fill soils at levels above the applicable Massachusetts Contingency Plan (MCP) RCS-1 Reportable Concentrations. These exceedences of the RCS-1 standards constitute a new 120-day reporting condition under the MCP. A Release Notification Form was submitted to MassDEP on 20 June 2014, and MassDEP assigned RTN 3-32246 to the Site..

Temporary Construction Dewatering Notice of Intent

In support of the NOI, Haley & Aldrich, Inc. collected a composite water sample from observation well MW-8, located as shown on Figure 2. The sample was submitted in May 2014 to Alpha Analytical Laboratory of Westborough, Massachusetts for analysis for NPDES RGP permit parameters including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), total metals, total petroleum hydrocarbons (TPH), pesticides, polychlorinated biphenyls (PCBs), Total Suspended Solids (TSS), chloride, total cyanide, total phenolics and total residual chlorine. The analytical results for the May 2014 groundwater sample identified concentrations below applicable NPDES RGP Effluent Limits with the exception of total and dissolved iron, which slightly exceeded the effluent limits. The results of water quality testing conducted for this NOI are summarized in Table I.

On 16 January 2014, a groundwater sample was collected from observation well MW-8 in support of a Massachusetts Water Resources Authority (MWRA) Construction Dewatering Permit (note that the MWRA Permit was not issued as an alternate discharge route is available). The sample was submitted to a laboratory for analysis of the following compounds using methods required by the MWRA: total toxic organics (TTO) VOCs, TTO acid base neutrals (ABNs), TTO PCBs, TTO pesticides, , Petroleum Hydrocarbons (PHC; EPH carbon ranges and PAH analytes), corrosivity (pH), and total metals (cadmium, chromium, copper, lead, nickel, silver, zinc, arsenic, mercury, selenium, and antimony). The results of the analysis are consistent with the results collected in May 2014 and are provided on Table II for informational purposes only. The results were not included in Section 3 of the NOI since the analytical methods differ than those required by the NPDES RGP.

Dewatering is generally planned to be conducted from sumps or temporary dewatering wells located within the excavation limits. Dewatering is necessary to control groundwater, seepage, precipitation, surface water runoff and construction-generated water to enable construction in-the-dry. Construction dewatering is currently anticipated to begin in August 2014 and possibly extend until August 2015.

As part of the dewatering, an effluent treatment system will be designed by the Contractor to meet NPDES RGP discharge criteria. Prior to discharge, collected water will be routed through a sedimentation tank with an oil/water separator component and bag filters, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental effluent treatment may be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3.

Discharge of construction dewatering effluent under this RGP NOI will be to an existing 72-in. x 78-in. combined sewer located beneath Albany Street; see Figure 4. The effluent will flow to the Roxbury Conduit and ultimately will discharge to combined sewer outfall (CSO) BOS070 at the Fort Point Channel.

Dilution Factor Application for Metals

As noted previously, results from analytical testing on the water sample collected at the site indicate concentrations of total iron that exceed RGP discharge limits. Accordingly, a Dilution Factor (DF) was calculated for the detected levels of total iron greater than the applicable RGP Effluent Limits. The calculated DF was used to find the appropriate Dilution Range concentrations for iron. The DF was calculated using the following equation:

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

where Q_d is the maximum discharge flow rate, estimated to be 80 gallons per minute (GPM) or approximately 0.18 cubic feet per second (cfs), and Q_s is the receiving water flow rate, , assumed to be about 736 cfs based on calculation of tidal fluctuation within the Fort Point Channel. Using these assumed values, the DF is equal to 4136.

According to Appendix IV of the Remediation General Permit, the total recoverable metals limitation for the calculated dilution factor of 4,136 for total iron is 5,000 μg/L, which is well above the concentration measured in the on-site groundwater (1400 μg/L). Therefore, if testing of the dewatering effluent indicates concentrations greater than these limits, supplemental effluent treatment will be implemented.

Appendices

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The site operator is Suffolk Construction and will engage a subcontractor to conduct the Site work, including the dewatering activities. An Owner's Representative will monitor the Contractor's dewatering activities on behalf of the project owner. In accordance with the requirements for this NOI

submission, Boston Medical Center as the project owner and Suffolk Construction as the site operator are listed as co-permittees for this NPDES RGP, and therefore both have signed the NOI form.

Closing

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

Sincerely yours,
HALEY & ALDRICH, INC

Lee Vanzler, P.E.
Assistant Project Manager

Michael Cronan, LSP
Senior Project Manager | Vice President

Attachments:

Table I	Summary of Groundwater Quality Data (NPDES)
Table II	Summary of Groundwater Quality Data (MWRA)
Figure 1	Project Locus
Figure 2	Site and Subsurface Exploration Location Plan
Figure 3	Proposed Treatment System Schematic
Figures 4	Boston Water and Sewer Commission Sewer Plan
Appendix A	Suggested Notice of Intent (NOI) form for Remediation General Permit
Appendix B	Best Management Practices Plan (BMPP)
Appendix C	National Register of Historic Places and Massachusetts Historical Commission Documentation
Appendix D	Endangered Species Act Documentation
Appendix E	Boston Water and Sewer Commission Permit Application
Appendix F	Laboratory Data Reports for Groundwater Sampling/Testing

c: MADEP; Attn: Division of Watershed Management, Rober Kubit
Boston Water and Sewer Commission; Attn: Francis McLaughlin
Boston Medical Center; Attn: Gerald Topping
Suffolk Construction Company; Attn: Stephen O'Connor

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TABLE I - SUMMARY OF GROUNDWATER QUALITY DATA
BOSTON MEDICAL CENTER - MENINO ADDITION
BOSTON, MASSACHUSETTS
FILE NO. 27668-100

SAMPLE DESIGNATION SAMPLING DATE LAB SAMPLE ID	2014 MCP RCGW-2 Reportable Concentrations (ug/l)	NPDES RGP Effluent Limits (ug/l)	MW-8 5/29/2014 L1411561-01
VOCs by GC/MS (ug/l)			
Total VOCs	NA	NA	ND
VOCs by GC/MS-SIM (ug/l)			
1,4-Dioxane	6000	NA	ND(1.5)
SVOCs by GC/MS (ug/l)			
Total SVOCs	NA	NA	ND
SVOCs by GC/MS-SIM (ug/l)			
Total SVOCs	NA	NA	ND
Total Metals (ug/l)			
Antimony, Total	8000	5.6	ND(2.5)
Arsenic, Total	900	10	6.79
Cadmium, Total	4	0.2	ND(0.5)
Chromium, Total	300	48.8	ND(2.5)
Chromium, Hexavalent	300	11.4	ND(25)
Copper, Total	100000	5.2	ND(2.5)
Iron, Total	NA	1000	***1400***
Lead, Total	10	1.3	ND(1.25)
Mercury, Total	20	0.9	ND(0.1)
Nickel, Total	200	29	4.14
Selenium, Total	100	5	ND(12.5)
Silver, Total	7	1.2	ND(1)
Zinc, Total	900	66.6	ND(25)
Dissolved Metals (ug/l)			
Antimony, Dissolved	8000	5.6	ND(2.5)
Arsenic, Dissolved	900	10	6.14
Cadmium, Dissolved	4	0.2	ND(0.5)
Chromium, Dissolved	300	48.8	ND(2.5)
Copper, Dissolved	100000	5.2	ND(2.5)
Iron, Dissolved	NA	1000	***1200***
Lead, Dissolved	10	1.3	ND(1.25)
Mercury, Dissolved	20	0.9	ND(0.1)
Nickel, Dissolved	200	29	4.89
Selenium, Dissolved	100	5	ND(12.5)
Silver, Dissolved	7	1.2	ND(1)
Zinc, Dissolved	900	66.6	ND(25)
TPH (ug/l)	5000	5000	ND(2200)
Microextractables by GC (ug/l)			
1,2-Dibromoethane	2	0.05	ND(0.005)
PCBs by GC (ug/l)			
Total PCBs	5	0.000064	ND
Miscellaneous			
Chlorine, Total Residual (ug/l)	NA	11	ND(10)
Cyanide, Total (ug/l)	30	5.2	5
Phenolics, Total (ug/l)	NA	300	ND(15)
Solids, Total Suspended (ug/l)	NA	30000	ND(2500)
Chloride (ug/l)	NA	NA	3400000

NOTES & ABBREVIATIONS:

NA: Not Applicable

-: Not Analyzed

ND: Not Detected. Number in parentheses is one-half the laboratory reporting limit.

VOCs: Volatile Organic Compounds

SVOCs: Semivolatile Organic Compounds

TPH: Total Petroleum Hydrocarbons

PCBs: Polychlorinated Biphenyls

1. Only compounds detected are shown.

2. Bold italicized values indicate an exceedance of applicable NPDES RGP Effluent Limits.

TABLE II - MWRA GROUNDWATER SAMPLE
SUMMARY OF GROUNDWATER QUALITY DATA
BOSTON MEDICAL CENTER MENINO ADDITION
BOSTON, MASSACHUSETTS
FILE NO. 27668-100

SAMPLE DESIGNATION	360 CMR	MW-8
SAMPLE DATE	Daily	1/16/2014
LABORATORY ID		L1401586-01
SAMPLE TYPE	Maximum Limit	Groundwater
TTO VOCs (mg/L)		
Total VOCs	5	ND
TTO ABNs (mg/L)		
Total ABNs	5	ND
TTO PCBs (mg/L)		
Total PCBs	ND	ND
TTO Pesticides (mg/L)		
Total Pesticides	ND	ND
Oil & Grease (mg/L)	300	6.6
EPH by GC/FID (mg/L)	NA	ND
EPH PAHs by GC/FID (mg/L)		
Total EPH PAHs	5	ND
Corrosivity (pH) (standard units)	5.5-10.5	6.9
Total Metals (mg/L)		
Antimony	10	ND(0.025)
Arsenic	0.5	ND(0.0025)
Cadmium	0.1	ND(0.0025)
Chromium	1	ND(0.005)
Copper	1	ND(0.005)
Lead	0.2	ND(0.005)
Mercury	0.001	ND(0.0001)
Nickel	1	ND(0.0125)
Selenium	5	ND(0.005)
Silver	2	ND(0.0035)
Zinc	1	ND(0.025)

ABBREVIATIONS:
ND(2.5): Not detected; number in parentheses is one-half laboratory detection limit.
TTO VOCs: Total Toxic Organics Volatile Organic Fraction analyzed by EPA Method TTO 624.
TTO ABNs: Total Toxic Organics Acid/Base/Neutral Fraction analyzed by EPA Method TTO 625.
TTO PCBs: Total Toxic Organics Polychlorinated Biphenyl Fraction analyzed by EPA Method TTO 608.
TTO Pesticides: Total Toxic Organic Pesticide Fraction analyzed by EPA Method TTO 608.
EPH: Extractable Petroleum Hydrocarbons by MADEP EPH Method.
EPH PAHs: EPH Polynuclear Aromatic Hydrocarbons by MADEP EPH Method 8270C (Modified)
Total Metals analyzed by EPA Method 200.7 (Mercury by 245.1)
Corrosivity analyzed by Method 105.1.

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

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of **facility/site**: Boston Medical Center		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 42.3342 latitude: -71.0731	Facility SIC code(s): 8062	Street: 840 Harrison Avenue		
b) Name of **facility/site owner:**		Town: Boston		
Email address of facility/site owner: gerald.topping@bmc.org		State: MA	Zip: 02218	County: Suffolk
Telephone no. of facility/site **owner**: 617-646-9906				
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: 750 Albany Street				
Town: Boston	State: MA	Zip: 02218	County: Suffolk	
c) Legal name of **operator**: Suffolk Construction Company	**Operator** telephone no: 617-594-6482			
	Operator fax no.:	**Operator** email: SteveOConnor@suffolk.com		
Operator contact name and title: Stephen O'Connor; Senior Project Manager				
Address of **operator** (if different from owner):	Street: 65 Allerton Street			
Town: Boston	State: MA	Zip: 02119	County: Suffolk	

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 8

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 to facilitate construction of Boston Medical Center Menino Addition

b) Provide the following information about each discharge:

1) Number of discharge points: 3

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.178 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.056 Is average flow a design value or estimate? Estimate

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

pt.1: lat	42.3340612	long	-71.0729855	pt.2: lat.	42.3344164	long.	-71.0724623 ;
pt.3: lat	42.334270	long	-71.072191	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 8/1/2014 end 8/1/2015

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). See attached Figure 3- BWSC Sewer Map and Figure 4- Proposed Treatment System Schematic

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)		☒ 8	☐	1	GRAB	2540D	5000	ND			
2. Total Residual Chlorine (TRC)		☒	☐	1	GRAB	4500CL-D	20	ND			
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	GRAB	1664A	4400	ND			
4. Cyanide (CN)	57125	☐	☒ 8	1	GRAB	4500CN-CE	5	5			
5. Benzene (B)	71432	☒	☐	1	GRAB	8260 B	.5	ND			
6. Toluene (T)	108883	☒	☐	1	GRAB	8260 B	0.75	ND			
7. Ethylbenzene (E)	100414	☒	☐	1	GRAB	8260 B	1	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	GRAB	8260 B	1	ND			
9. Total BTEX [2]	n/a	☒	☐	1	GRAB	8260 B	–	ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	GRAB	8260 B	0.01	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	GRAB	8260 B	1	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	GRAB	8260 B	10	ND			

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

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	GRAB	8260 B	0.5	ND			
29. Acetone	67641	☒	☐	1	GRAB	8260 B	0.5	ND			
30. 1,4 Dioxane	123911	8	☐	1	GRAB	8260C	3.0	ND			
31. Total Phenols	108952	☒	☐	1	GRAB	8270 C	5	ND			
32. Pentachlorophenol (PCP)	87865	☒	☐	1	GRAB	8270 C	0.8	ND			
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	GRAB	8270 C	5	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	8	☐	1	GRAB	8270 C	3	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	GRAB	8270 C	0.2	ND			
a. Benzo(a) Anthracene	56553	☒	☐	1	GRAB	8270 C	0.2	ND			
b. Benzo(a) Pyrene	50328	☒	☐	1	GRAB	8270 C	0.2	ND			
c. Benzo(b)Fluoranthene	205992	☒	☐	1	GRAB	8270 C	0.2	ND			
d. Benzo(k)Fluoranthene	207089	☒	☐	1	GRAB	8270 C	0.2	ND			
e. Chrysene	21801	☒	☐	1	GRAB	8270 C	0.2	ND			
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	GRAB	8270 C	0.2	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	GRAB	8270 C	0.2	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	GRAB	8270 C	0.2	ND			

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	GRAB	8270 C	0.2	ND			
i. Acenaphthylene	208968	☒	☐	1	GRAB	8270 C	0.2	ND			
j. Anthracene	120127	☒	☐	1	GRAB	8270 C	0.2	ND			
k. Benzo(ghi) Perylene	191242	☒	☐	1	GRAB	8270 C	0.2	ND			
l. Fluoranthene	206440	☒	☐	1	GRAB	8270 C	0.2	ND			
m. Fluorene	86737	☒	☐	1	GRAB	8270 C	0.2	ND			
n. Naphthalene	91203	☒	☐	1	GRAB	8270 C	0.2	ND			
o. Phenanthrene	85018	☒	☐	1	GRAB	8270 C	0.2	ND			
p. Pyrene	129000	☒	☐	1	GRAB	8270 C	0.2	ND			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	GRAB	608	0.25	ND			
38. Chloride	16887006	☐	☒	1	GRAB	300.0	50000	3400000			
39. Antimony	7440360	☒	☐	1	GRAB	6020	5	ND			
40. Arsenic	7440382	☐	8	1	GRAB	6020	2.5	6.79			
41. Cadmium	7440439	8	☐	1	GRAB	6020	1	ND			
42. Chromium III (trivalent)	16065831	☒	☐	1	GRAB	6020	5	ND			
43. Chromium VI (hexavalent)	18540299	8	☐	1	GRAB	3500	50	ND			
44. Copper	7440508	☒	☐	1	GRAB	6020	5	ND			
45. Lead	7439921	☒	☐	1	GRAB	6020	2.5	ND			
46. Mercury	7439976	8	☐	1	GRAB	245.1	0.2	ND			
47. Nickel	7440020	☐	8	1	GRAB	6020	2.5	4.14			
48. Selenium	7782492	☒	☐	1	GRAB	6020	25	ND			
49. Silver	7440224	8	☐	1	GRAB	6020	1	ND			
50. Zinc	7440666	☒	☐	1	GRAB	6020	50	ND			
51. Iron	7439896	☐	8	1	GRAB	200.7	50	1400			
Other (describe):		☐	☐		GRAB						

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)
See Table 1 attached		☐	☐								
		☐	☐								

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? Total Iron
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Total Iron DF: 4136 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:

Collected dewatering effluent will be routed through a sedimentation tank and bag filters to remove suspended solids and undissolved chemical constituents (metals), as shown in the Proposed Treatment System Schematic included as Figure 3.

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 25 gpm Maximum flow rate of treatment system 80 gpm
Design flow rate of treatment system N/A gpm

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

Not applicable

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

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

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

Effluent will discharge to storm drain No. 195, No. 498, or No. 207, which discharges through a 72-in. x 78-in. combined sewer to CSO BOS070 at Fort Point Channel

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 736 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

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

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

6. ESA and NHPA Eligibility.

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

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

A ○ B ◉ C ○ D ○ E ○ F ○

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

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

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

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

1 ○ 2 ◉ 3 ○

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

7. Supplemental information.

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

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

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

Facility/Site Name:	Boston Medical Center
Operator signature:	Gerald J Topping
Printed Name &Title:	Gerald Topping, Senior Project Manager
Date:	6/27/14

HALEY& ALDRICH

Calculations

File No. 27668-100
Sheet 1 of 1
Client
Date 06/27/14
Project BOSTON MEDICAL CENTER
Computed By LSV
Subject DILUTION FACTOR CALCULATIONS
Checked By —

- DEWATERING EFFLUENT WILL DISCHARGE TO FORT POINT CHANNEL, 250 BOS 070
- PER HTTP://TIDESANDCURRENTS.NOAA.GOV, MEAN TIDAL RANGE WITHIN FORT POINT CHANNEL IS 9.49 FT (SEE ATTACHED) PER 12 HR TIDAL CYCLE
- AREA OF FORT POINT CHANNEL ≈ 3,350,975 SF (SEE ATTACHED)
- $Q_{\text{FORT POINT}}$ FROM TIDAL FLUCTUATION = (3,350,975 SF)(9.49 FT) = 31800753 FT^3/12 HR
  = 2650063 /HR = 736 CFS

DILUTION FACTOR: $DF = \frac{Q_D + Q_F}{Q_D}$, WHERE

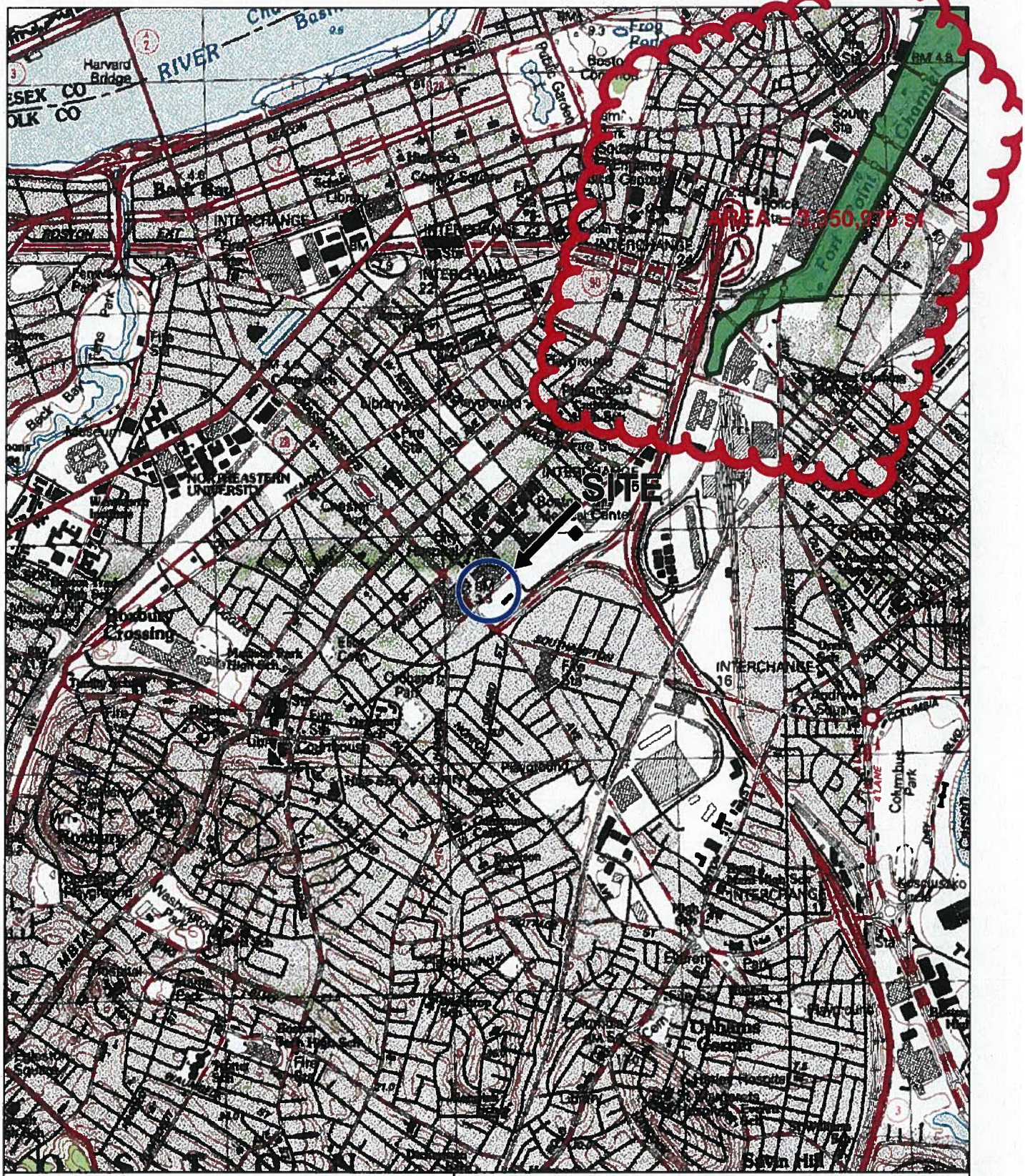
Q_D = MAX DISCHARGE RATE IN CFS = 80 GPM = 0.178 CFS

Q_F = RECEIVING WATER FLOW = 736 CFS

$DF = \frac{0.178 + 736 \text{ CFS}}{0.178 \text{ CFS}} = 4136$

REFER TO APPENDIX IV OF THE RGP → FOR DF >100 METAL EFFLUENT LIMIT FOR IRON IS 5,000 PPB.

↳ NOTE THAT THIS IS GREATER THAN THE 1400 PPB CONCENTRATION DETECTED IN THE RECENT DEWATERING SAMPLE.



SITE COORDINATES: 42°20'3"N,71°4'23"W

N
W
E
S

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

HALEY & ALDRICH

BOSTON MEDICAL CENTER
MENINO ADDITION AND RENOVATIONS
BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
NOVEMBER 2013

FIGURE 1

27668-100 1.PDF

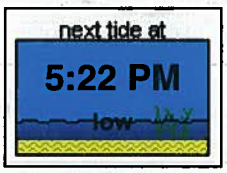
Boston, MA - Station ID: 8443970

Station Info Today's Tides Photos Sensor Information Observations

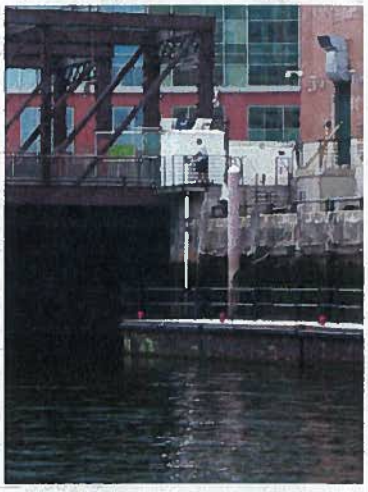
Directions and Map Available Products

Established:	May 3 1921
Time Meridian:	75° W
Present Installation:	Nov 16 1988
Date Removed:	N/A
Water Level Max (ref MHHW):	4.82 ft. (02/07/1978)
Water Level Min (ref MLLW):	-3.72 ft. (03/24/1940)
Mean Range:	9.49 ft.
Diurnal Range:	10.27 ft.
Latitude	42° 21.2' N

Today's Tides (LST/LDT)



5:17 AM	low	-0.1 ft.
11:33 AM	high	9.3 ft.
5:22 PM	**low**	**0.9** ft.
11:38 PM	high	10.5 ft.



Boston, MA

9 more station photos available, click to view.

(stationphotos.html?id=8443970)

Appendix B
Best Management Practices Plan (BMPP)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDIATION GENERAL PERMIT (RGP)
TEMPORARY CONSTRUCTION DEWATERING
BOSTON MEDICAL CENTER – MENINO EXPANSION
BOSTON, MASSACHUSETTS

Appendix B - Best Management Practices Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction site dewatering planned to occur during the proposed below-grade construction of a new two to five-story expansion to the Boston Medical Center in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering will be conducted from sumps or temporary dewatering wells located within the excavation limits. The treatment system will be designed by the contractor. Prior to discharge, collected water will be routed through a sedimentation tank with an oil/water separator component with bag filter, at a minimum, to remove suspended solids and undissolved chemical constituents. Discharge of construction dewatering effluent under this RGP NOI will be to a 72-in. x 78-in. combined sewer located beneath Albany Street. The sewer connected to the Roxbury Conduit and discharges into outfall CSO BOS070 at the Fort Point Channel.

Discharge Monitoring and Compliance

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

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

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

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

System Maintenance

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

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

Miscellaneous Items

Due to the nature of the excavation, erosion control and the nature of the site and surrounding infrastructure, it is not anticipated that there will be any run off into the site from other sources, as well as no run off from the site.

Site security for the treatment system can be covered within the overall site security plan.

Management of Treatment System Materials

No potential sources of pollutants are anticipated during construction dewatering activities. 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 on the site for any equipment or materials storage which may be possible sources of pollution away from any dewatering activities.

Sediment from the fractionalization tank used in the treatment system will be characterized and disposed of as soil at an appropriate receiving facility in accordance with applicable laws and regulations. Bag filters will be placed in drums and manifested for off-site disposal.

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

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Place: South End;

Inv. No.	Property Name	Street	Town	Year
BOS.AB	South End District		Boston	
BOS.AC	South End Landmark District		Boston	
BOS.AD	South End Landmark District Protection Area		Boston	
BOS.AE	Boston City Hospital		Boston	
BOS.AF	Lawrence Model Lodging Houses		Boston	
BOS.AG	Boston Center for the Arts		Boston	
BOS.AH	South End Industrial District		Boston	
BOS.AI	East Brookline Street Historic District		Boston	
BOS.AJ	East Brookline Streetscape		Boston	
BOS.RK	South End Industrial Survey Area		Boston	
BOS.RY	Ascension - Caproni Area		Boston	
BOS.RZ	Blackstone Square - Franklin Square Area		Boston	
BOS.SA	Cathedral of the Holy Cross Roman Catholic Church		Boston	
bos.sb	Cathedral Veteran's Housing Project Complex		Boston	
BOS.SC	Haven Streetscape		Boston	
BOS.SD	Northampton - Massachusetts Avenue Area		Boston	
BOS.SE	Washington - Dover Streets Area		Boston	
BOS.16581	Independent Taxi Operators Association Building	223 Albany St	Boston	1941
BOS.12842	Brahman and Dow Pipe and Valve Company Building	237-241 Albany St	Boston	1865
BOS.1450		363 Albany St	Boston	1910
BOS.1451	Paul, Joseph F. and Company Building	365 Albany St	Boston	1911
BOS.1452	Goodyear Shoe Machinery Company Building	443 Albany St	Boston	1897
BOS.1453	Everett Piano Company	495-527 Albany St	Boston	1887
BOS.1454	Badger Woodworking Mill - Estabrook Building	531-541 Albany St	Boston	1888
BOS.1455	Green, Samuel Building	575 Albany St	Boston	1904

Inv. No.	Property Name	Street	Town	Year
BOS.1456	Bolter, J. L. and H. K. Building	609-613 Albany St	Boston	1905
BOS.1457	Smith American Organ Company	615 Albany St	Boston	1865
BOS.1458	Massachusetts Homeopathic Hospital	685 Albany St	Boston	1876
BOS.234		13 Appleton St	Boston	
BOS.235		15 Appleton St	Boston	
BOS.236		16 Appleton St	Boston	
BOS.237		17 Appleton St	Boston	
BOS.238		18 Appleton St	Boston	
BOS.239		19 Appleton St	Boston	
BOS.240		20 Appleton St	Boston	
BOS.241		21 Appleton St	Boston	
BOS.242		22 Appleton St	Boston	
BOS.243		23 Appleton St	Boston	
BOS.244		24 Appleton St	Boston	
BOS.245		25 Appleton St	Boston	
BOS.246		26 Appleton St	Boston	
BOS.247		27 Appleton St	Boston	
BOS.248		28 Appleton St	Boston	
BOS.249		29 Appleton St	Boston	
BOS.250		30 Appleton St	Boston	
BOS.251		31 Appleton St	Boston	
BOS.252		32 Appleton St	Boston	
BOS.253		33 Appleton St	Boston	
BOS.254		34 Appleton St	Boston	
BOS.255		35 Appleton St	Boston	
BOS.256		36 Appleton St	Boston	
BOS.257		37 Appleton St	Boston	
BOS.258		38 Appleton St	Boston	
BOS.259		39 Appleton St	Boston	
BOS.260		40 Appleton St	Boston	
BOS.261		41 Appleton St	Boston	
BOS.262		42 Appleton St	Boston	
BOS.263		43 Appleton St	Boston	
BOS.264		44 Appleton St	Boston	
BOS.265		45 Appleton St	Boston	
BOS.266		46 Appleton St	Boston	
BOS.267		47 Appleton St	Boston	
BOS.268		48 Appleton St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.269		49 Appleton St	Boston	
BOS.270		50 Appleton St	Boston	
BOS.271		51 Appleton St	Boston	
BOS.272		52 Appleton St	Boston	
BOS.273		53 Appleton St	Boston	
BOS.274		54 Appleton St	Boston	
BOS.275		55 Appleton St	Boston	
BOS.276		57 Appleton St	Boston	1865
BOS.277		59 Appleton St	Boston	
BOS.278		61 Appleton St	Boston	
BOS.279		63 Appleton St	Boston	
BOS.280		65 Appleton St	Boston	
BOS.281		66 Appleton St	Boston	
BOS.282		67 Appleton St	Boston	
BOS.283		68 Appleton St	Boston	
BOS.284		70 Appleton St	Boston	
BOS.285		72 Appleton St	Boston	
BOS.286		74 Appleton St	Boston	
BOS.16585		90 Appleton St	Boston	1865
BOS.287		1 Bond St	Boston	1845
BOS.288		3 Bond St	Boston	
BOS.289		5 Bond St	Boston	
BOS.290		6 Bond St	Boston	1845
BOS.291		7 Bond St	Boston	
BOS.292		8 Bond St	Boston	
BOS.293		9 Bond St	Boston	
BOS.294		10 Bond St	Boston	
BOS.295		11 Bond St	Boston	
BOS.296		12 Bond St	Boston	
BOS.297		13 Bond St	Boston	
BOS.298		14 Bond St	Boston	1840
BOS.299		15 Bond St	Boston	
BOS.300		16 Bond St	Boston	
BOS.301		17 Bond St	Boston	
BOS.302		5 Braddock Pk	Boston	
BOS.303		9 Braddock Pk	Boston	
BOS.304		11 Braddock Pk	Boston	
BOS.305		12 Braddock Pk	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.306		14 Braddock Pk	Boston	
BOS.307		15 Braddock Pk	Boston	
BOS.308		16 Braddock Pk	Boston	
BOS.309		17 Braddock Pk	Boston	
BOS.310		18 Braddock Pk	Boston	
BOS.311		19 Braddock Pk	Boston	
BOS.312		20 Braddock Pk	Boston	
BOS.313		21 Braddock Pk	Boston	1870
BOS.314		22 Braddock Pk	Boston	
BOS.315		23 Braddock Pk	Boston	
BOS.316		24 Braddock Pk	Boston	
BOS.317		25 Braddock Pk	Boston	
BOS.318		26 Braddock Pk	Boston	
BOS.319		27 Braddock Pk	Boston	
BOS.320		28 Braddock Pk	Boston	
BOS.321		29 Braddock Pk	Boston	
BOS.322		30 Braddock Pk	Boston	
BOS.323		31 Braddock Pk	Boston	
BOS.324		32 Braddock Pk	Boston	1875
BOS.325		33 Braddock Pk	Boston	
BOS.326		34 Braddock Pk	Boston	
BOS.327		35 Braddock Pk	Boston	
BOS.328		37 Braddock Pk	Boston	
BOS.329		39 Braddock Pk	Boston	
BOS.330		41 Braddock Pk	Boston	
BOS.331		43 Braddock Pk	Boston	
BOS.332	Metal Workers Building	35-37 Bradford St	Boston	
BOS.1459		23-57 Bristol St	Boston	1910
BOS.1460		52 Bristol St	Boston	1900
BOS.1461		54 Bristol St	Boston	1900
BOS.1462	Conant, George Warehouse	56 Bristol St	Boston	1899
BOS.1463	Bristol Street Fire Station	60 Bristol St	Boston	1904
BOS.1464		91 Bristol St	Boston	1875
BOS.1502	Peoples Baptist Church	134 Camden St	Boston	1868
BOS.15554	Graham, Suzannah House	1 Cazenove St	Boston	1872
BOS.15372		3 Cazenove St	Boston	1875
BOS.333		44 Chandler St	Boston	
BOS.334		48 Chandler St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.335		50 Chandler St	Boston	
BOS.336		52 Chandler St	Boston	
BOS.337		54 Chandler St	Boston	
BOS.338		56 Chandler St	Boston	
BOS.339		58 Chandler St	Boston	
BOS.340		60 Chandler St	Boston	
BOS.341		62 Chandler St	Boston	
BOS.15551		63 Chandler St	Boston	1865
BOS.342		64 Chandler St	Boston	
BOS.343		66 Chandler St	Boston	
BOS.344		68 Chandler St	Boston	
BOS.345		70 Chandler St	Boston	
BOS.346		72 Chandler St	Boston	
BOS.347		74 Chandler St	Boston	
BOS.348		76 Chandler St	Boston	
BOS.349		78 Chandler St	Boston	
BOS.350		80 Chandler St	Boston	
BOS.351		82 Chandler St	Boston	
BOS.352		84 Chandler St	Boston	
BOS.353		86 Chandler St	Boston	
BOS.354		88 Chandler St	Boston	
BOS.355		90 Chandler St	Boston	
BOS.356		92 Chandler St	Boston	
BOS.357		94 Chandler St	Boston	
BOS.358		96 Chandler St	Boston	
BOS.359		98 Chandler St	Boston	
BOS.360		102 Chandler St	Boston	
BOS.361		104 Chandler St	Boston	
BOS.362		106 Chandler St	Boston	
BOS.363		108 Chandler St	Boston	
BOS.364		110 Chandler St	Boston	
BOS.365		112 Chandler St	Boston	
BOS.366		114 Chandler St	Boston	
BOS.367		116 Chandler St	Boston	
BOS.368		118 Chandler St	Boston	
BOS.369		120 Chandler St	Boston	
BOS.370		122 Chandler St	Boston	
BOS.371		124 Chandler St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.372		126 Chandler St	Boston	
BOS.373		128 Chandler St	Boston	
BOS.374		130 Chandler St	Boston	
BOS.375		132 Chandler St	Boston	
BOS.376		134 Chandler St	Boston	
BOS.377		136 Chandler St	Boston	
BOS.378		138 Chandler St	Boston	
BOS.379		140 Chandler St	Boston	
BOS.380		142 Chandler St	Boston	
BOS.381		144 Chandler St	Boston	
BOS.382		146 Chandler St	Boston	
BOS.383		148 Chandler St	Boston	
BOS.384		150 Chandler St	Boston	
BOS.15553		24 Claremont Pk	Boston	1883
BOS.1444	Pennock, S. S. Building	2 Clarendon St	Boston	1916
BOS.385		24 Clarendon St	Boston	
BOS.386		26 Clarendon St	Boston	
BOS.387		28 Clarendon St	Boston	
BOS.388		30 Clarendon St	Boston	
BOS.389		31-35 Clarendon St	Boston	
BOS.390		32 Clarendon St	Boston	
BOS.391		34 Clarendon St	Boston	
BOS.392		36 Clarendon St	Boston	
BOS.393		37-39 Clarendon St	Boston	
BOS.394		38 Clarendon St	Boston	
BOS.395		40 Clarendon St	Boston	
BOS.396		42 Clarendon St	Boston	
BOS.397		44 Clarendon St	Boston	
BOS.398		46 Clarendon St	Boston	
BOS.399		48 Clarendon St	Boston	
BOS.400		50 Clarendon St	Boston	
BOS.401		52 Clarendon St	Boston	
BOS.402		54 Clarendon St	Boston	
BOS.16584	Miller, Henry F. House	480 Columbus Ave	Boston	1870
BOS.1500	Union United Methodist Church	485 Columbus Ave	Boston	1872
BOS.403		517 Columbus Ave	Boston	
BOS.404		519 Columbus Ave	Boston	
BOS.405		521 Columbus Ave	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.406	Blodgett House	523 Columbus Ave	Boston	1867
BOS.407		525 Columbus Ave	Boston	
BOS.408		527 Columbus Ave	Boston	
BOS.409		529 Columbus Ave	Boston	
BOS.410		531 Columbus Ave	Boston	
BOS.411		533-535 Columbus Ave	Boston	
BOS.412		537 Columbus Ave	Boston	
BOS.413		542 Columbus Ave	Boston	
BOS.414		544 Columbus Ave	Boston	
BOS.415		545 Columbus Ave	Boston	
BOS.416		546 Columbus Ave	Boston	
BOS.417		547 Columbus Ave	Boston	
BOS.418		548 Columbus Ave	Boston	
BOS.419		549 Columbus Ave	Boston	
BOS.420		550 Columbus Ave	Boston	
BOS.421		551 Columbus Ave	Boston	
BOS.422		552 Columbus Ave	Boston	
BOS.423		553 Columbus Ave	Boston	
BOS.424		554 Columbus Ave	Boston	
BOS.425		555 Columbus Ave	Boston	
BOS.426		556 Columbus Ave	Boston	1879
BOS.427		557 Columbus Ave	Boston	
BOS.428		558 Columbus Ave	Boston	
BOS.429		560 Columbus Ave	Boston	
BOS.16586		610 Columbus Ave	Boston	1880
BOS.430		3 Columbus Sq	Boston	
BOS.431		4 Columbus Sq	Boston	
BOS.432		5 Columbus Sq	Boston	
BOS.433		6 Columbus Sq	Boston	
BOS.434		7 Columbus Sq	Boston	
BOS.435		8 Columbus Sq	Boston	
BOS.436		9 Columbus Sq	Boston	
BOS.437		10 Columbus Sq	Boston	
BOS.438		12 Columbus Sq	Boston	
BOS.439		1 Concord Sq	Boston	
BOS.440		3 Concord Sq	Boston	
BOS.441		4 Concord Sq	Boston	
BOS.442		5 Concord Sq	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.443		6 Concord Sq	Boston	
BOS.444		7 Concord Sq	Boston	
BOS.445		8 Concord Sq	Boston	
BOS.446		9 Concord Sq	Boston	
BOS.447		10 Concord Sq	Boston	
BOS.448		11 Concord Sq	Boston	
BOS.449		12 Concord Sq	Boston	
BOS.450		13 Concord Sq	Boston	
BOS.451		14 Concord Sq	Boston	
BOS.452		14 Concord Sq	Boston	
BOS.453		16 Concord Sq	Boston	
BOS.454		17 Concord Sq	Boston	
BOS.455		18 Concord Sq	Boston	
BOS.456		19 Concord Sq	Boston	
BOS.457		20 Concord Sq	Boston	
BOS.458		21 Concord Sq	Boston	
BOS.459		22 Concord Sq	Boston	
BOS.460		23 Concord Sq	Boston	
BOS.461		24 Concord Sq	Boston	
BOS.462		25 Concord Sq	Boston	
BOS.463		26 Concord Sq	Boston	
BOS.464		27 Concord Sq	Boston	
BOS.465		28 Concord Sq	Boston	
BOS.466		29 Concord Sq	Boston	
BOS.467		30 Concord Sq	Boston	
BOS.468		31 Concord Sq	Boston	
BOS.469		32 Concord Sq	Boston	
BOS.470		33 Concord Sq	Boston	
BOS.471		34 Concord Sq	Boston	
BOS.472		35 Concord Sq	Boston	
BOS.473		36 Concord Sq	Boston	
BOS.474		37 Concord Sq	Boston	
BOS.475		38 Concord Sq	Boston	
BOS.476		39 Concord Sq	Boston	
BOS.477		40 Concord Sq	Boston	
BOS.478		41 Concord Sq	Boston	
BOS.479		42 Concord Sq	Boston	
BOS.480		43 Concord Sq	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.482		44 Concord Sq	Boston	
BOS.483		45 Concord Sq	Boston	
BOS.484		46 Concord Sq	Boston	
BOS.485		47 Concord Sq	Boston	
BOS.486		1 Dartmouth Pl	Boston	
BOS.487		2 Dartmouth Pl	Boston	
BOS.488		3 Dartmouth Pl	Boston	
BOS.489		4 Dartmouth Pl	Boston	
BOS.490		5 Dartmouth Pl	Boston	
BOS.491		6 Dartmouth Pl	Boston	
BOS.492		7 Dartmouth Pl	Boston	
BOS.493		8 Dartmouth Pl	Boston	
BOS.494		9 Dartmouth Pl	Boston	
BOS.495		10 Dartmouth Pl	Boston	
BOS.496		11 Dartmouth Pl	Boston	
BOS.497		12 Dartmouth Pl	Boston	
BOS.498		13 Dartmouth Pl	Boston	
BOS.499		14 Dartmouth Pl	Boston	
BOS.500		15 Dartmouth Pl	Boston	
BOS.501		16 Dartmouth Pl	Boston	1865
BOS.502		17 Dartmouth Pl	Boston	
BOS.503		18 Dartmouth Pl	Boston	
BOS.504		19 Dartmouth Pl	Boston	
BOS.505		20 Dartmouth Pl	Boston	
BOS.506		21 Dartmouth Pl	Boston	
BOS.507		22 Dartmouth Pl	Boston	
BOS.508		23 Dartmouth Pl	Boston	
BOS.16588		34 Dartmouth St	Boston	1870
BOS.15374		40 Dartmouth St	Boston	1875
BOS.509		61 Dartmouth St	Boston	
BOS.510		63 Dartmouth St	Boston	
BOS.511		65 Dartmouth St	Boston	
BOS.512		67 Dartmouth St	Boston	
BOS.513		69 Dartmouth St	Boston	
BOS.514		71 Dartmouth St	Boston	
BOS.515		73 Dartmouth St	Boston	
BOS.516		77 Dartmouth St	Boston	
BOS.517		79 Dartmouth St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.518		81 Dartmouth St	Boston	
BOS.519		83 Dartmouth St	Boston	
BOS.520		85 Dartmouth St	Boston	
BOS.521		5 Dwight St	Boston	
BOS.522		6 Dwight St	Boston	
BOS.523		7 Dwight St	Boston	
BOS.524		8 Dwight St	Boston	
BOS.525		9 Dwight St	Boston	
BOS.526		10 Dwight St	Boston	
BOS.527		11 Dwight St	Boston	
BOS.528		12 Dwight St	Boston	
BOS.529		13 Dwight St	Boston	
BOS.530		15 Dwight St	Boston	
BOS.531		17 Dwight St	Boston	
BOS.532		18 Dwight St	Boston	
BOS.533		19 Dwight St	Boston	
BOS.534		20 Dwight St	Boston	
BOS.535		21 Dwight St	Boston	
BOS.536		22 Dwight St	Boston	
BOS.537		23 Dwight St	Boston	
BOS.538		24 Dwight St	Boston	
BOS.539		25 Dwight St	Boston	
BOS.540		26 Dwight St	Boston	
BOS.541		27 Dwight St	Boston	
BOS.542		28 Dwight St	Boston	
BOS.543		29 Dwight St	Boston	
BOS.544		30 Dwight St	Boston	
BOS.545		31 Dwight St	Boston	
BOS.546		31 1/2 Dwight St	Boston	
BOS.547		32 Dwight St	Boston	
BOS.548		33 Dwight St	Boston	
BOS.549		34 Dwight St	Boston	
BOS.550		35 Dwight St	Boston	
BOS.551	Boston Wharf Company Building	36 Dwight St	Boston	
BOS.552		37 Dwight St	Boston	
BOS.553		38 Dwight St	Boston	
BOS.554		39 Dwight St	Boston	
BOS.555		40 Dwight St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.556		41 Dwight St	Boston	
BOS.557		42 Dwight St	Boston	
BOS.558		43 Dwight St	Boston	
BOS.559		44 Dwight St	Boston	
BOS.560		45 Dwight St	Boston	
BOS.561		46 Dwight St	Boston	
BOS.562		47 Dwight St	Boston	
BOS.563		48 Dwight St	Boston	
BOS.564		49 Dwight St	Boston	
BOS.565		50 Dwight St	Boston	
BOS.566		51 Dwight St	Boston	
BOS.567		52 Dwight St	Boston	
BOS.568		53 Dwight St	Boston	
BOS.569		54 Dwight St	Boston	
BOS.570		55 Dwight St	Boston	
BOS.571		56 Dwight St	Boston	
BOS.572		57 Dwight St	Boston	
BOS.573		59 Dwight St	Boston	
BOS.574		61 Dwight St	Boston	
BOS.13036	Leeds, Timothy C. - Sawyer, Francis A. House	69 East Berkeley St	Boston	1900
BOS.13037		71 East Berkeley St	Boston	1900
BOS.13038		73 East Berkeley St	Boston	1900
BOS.13039		75 East Berkeley St	Boston	1900
BOS.13040		77 East Berkeley St	Boston	1900
BOS.13041		79 East Berkeley St	Boston	1900
BOS.13042		81 East Berkeley St	Boston	1900
BOS.1465	Blander, Abram Building	209-225 East Berkeley St	Boston	1909
BOS.1466		240 East Berkeley St	Boston	1890
BOS.1467	Lawrence Model Lodging Houses - Lawrence, The	79 East Canton St	Boston	1874
BOS.1468	Lawrence Model Lodging Houses - Abbott, The	89 East Canton St	Boston	1874
BOS.1469	Lawrence Model Lodging Houses - Bigelow, The	99 East Canton St	Boston	1874
BOS.1470	Lawrence Model Lodging Houses - Groton, The	109 East Canton St	Boston	1892
BOS.575	Pray Brothers Carriage Manufactory	30-34 East Concord St	Boston	
BOS.13078	Franklin Square Hotel Addition	11 East Newton St	Boston	1914
BOS.577	Hotel Saint James	27 East Newton St	Boston	1868
BOS.576	Franklin Hall Apartments	34-36 East Newton St	Boston	1925
BOS.13054	Bradlee, Nathaniel Jeremiah Livery Stable	4-6 East Springfield St	Boston	1875

Inv. No.	Property Name	Street	Town	Year
BOS.13993	Free Hospital For Women	60 East Springfield St	Boston	1870
BOS.578		15 Gray St	Boston	
BOS.579		16 Gray St	Boston	
BOS.580		17 Gray St	Boston	
BOS.581		19 Gray St	Boston	
BOS.582		20 Gray St	Boston	
BOS.583		21 Gray St	Boston	
BOS.584		23 Gray St	Boston	
BOS.585		25 Gray St	Boston	
BOS.586		27 Gray St	Boston	
BOS.587		29 Gray St	Boston	
BOS.588		31 Gray St	Boston	
BOS.589		32 Gray St	Boston	
BOS.590		33 Gray St	Boston	
BOS.591		34 Gray St	Boston	
BOS.592		35 Gray St	Boston	1860
BOS.593		36 Gray St	Boston	
BOS.594		37 Gray St	Boston	
BOS.595		38 Gray St	Boston	
BOS.596		39 Gray St	Boston	
BOS.597		40 Gray St	Boston	
BOS.598		41 Gray St	Boston	
BOS.599		42 Gray St	Boston	
BOS.601		44 Gray St	Boston	
BOS.600		45 Gray St	Boston	
BOS.602		46 Gray St	Boston	
BOS.603		47 Gray St	Boston	
BOS.604		48 Gray St	Boston	
BOS.605		49 Gray St	Boston	
BOS.606		50 Gray St	Boston	
BOS.607		51 Gray St	Boston	
BOS.608		52 Gray St	Boston	1865
BOS.609		53 Gray St	Boston	
BOS.610		54 Gray St	Boston	
BOS.611		55 Gray St	Boston	
BOS.612		56 Gray St	Boston	
BOS.613		57 Gray St	Boston	
BOS.614		58 Gray St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.13974		11 1/2 Greenwich Pk	Boston	1870
BOS.15534		16 Greenwich Pk	Boston	1870
BOS.615		1 Hanson St	Boston	
BOS.616		3 Hanson St	Boston	
BOS.617		5 Hanson St	Boston	
BOS.618		7 Hanson St	Boston	
BOS.619		9 Hanson St	Boston	
BOS.620		11 Hanson St	Boston	
BOS.621		13 Hanson St	Boston	
BOS.622		15 Hanson St	Boston	
BOS.623		17 Hanson St	Boston	
BOS.624		18 Hanson St	Boston	
BOS.625		19 Hanson St	Boston	
BOS.626		20 Hanson St	Boston	
BOS.627		21 Hanson St	Boston	
BOS.628		22 Hanson St	Boston	
BOS.629		23 Hanson St	Boston	
BOS.630		24 Hanson St	Boston	
BOS.631		25 Hanson St	Boston	
BOS.632		26 Hanson St	Boston	
BOS.633		27 Hanson St	Boston	
BOS.634		28 Hanson St	Boston	
BOS.635		29 Hanson St	Boston	
BOS.636		30 Hanson St	Boston	
BOS.637		31 Hanson St	Boston	
BOS.638		32 Hanson St	Boston	
BOS.639		33 Hanson St	Boston	
BOS.640		34 Hanson St	Boston	
BOS.641		35 Hanson St	Boston	
BOS.642		36 Hanson St	Boston	
BOS.643		37 Hanson St	Boston	
BOS.644		38 Hanson St	Boston	
BOS.645		40 Hanson St	Boston	
BOS.1471	Blander, Abraham Building	406-414 Harrison Ave	Boston	1909
BOS.1472	Jenks, James L. Building	434 Harrison Ave	Boston	1880
BOS.12837	Thayer Street Art and Industry Building	450 Harrison Ave	Boston	1920
BOS.12838	Reed's Block	460 Harrison Ave	Boston	1880
BOS.12839		471 Harrison Ave	Boston	1910

Inv. No.	Property Name	Street	Town	Year
BOS.12840	Decore Upholstering Building	477 Harrison Ave	Boston	1900
BOS.12841		485 Harrison Ave	Boston	1890
BOS.1473	Roger Upright Piano Company - Bacon Building	486-496 Harrison Ave	Boston	1875
BOS.1474	Reece Buttonhole Machinery Company	500-502 Harrison Ave	Boston	1896
BOS.1475	Emerson Piano Company - Randolph Street Factory	520-524 Harrison Ave	Boston	1882
BOS.12843		536 Harrison Ave	Boston	1910
BOS.1476		540 Harrison Ave	Boston	1920
BOS.1477	Boston Elevated Railway Co. Central Power Station	540A Harrison Ave	Boston	1892
BOS.12844		552 Harrison Ave	Boston	1915
BOS.1478	Emerson Piano Company - Waltham Street Factory	560 Harrison Ave	Boston	1891
BOS.13080	Cathedral of the Holy Cross Grammar School	595 Harrison Ave	Boston	1910
BOS.1479	Bryant, Gridley Pavilion - Boston City Hospital	717 Harrison Ave	Boston	1861
BOS.646	Bates, Joshua School	731 Harrison Ave	Boston	1884
BOS.1480	Church of the Immaculate Conception	761 Harrison Ave	Boston	
BOS.647	Rice, William D. House	1 Haven St	Boston	1847
BOS.648	Jurluns, Nathaniel House	2 Haven St	Boston	1847
BOS.649		3 Haven St	Boston	1890
BOS.650		4 Haven St	Boston	1890
BOS.651	Curtis, Elijah S. House	5 Haven St	Boston	1830
BOS.13079		15 James St	Boston	1890
BOS.652		1 Lawrence St	Boston	
BOS.653		2 Lawrence St	Boston	
BOS.654		3 Lawrence St	Boston	
BOS.655		4 Lawrence St	Boston	
BOS.656		5 Lawrence St	Boston	
BOS.657		6 Lawrence St	Boston	1865
BOS.658		7 Lawrence St	Boston	
BOS.659		8 Lawrence St	Boston	
BOS.660		9 Lawrence St	Boston	
BOS.661		10 Lawrence St	Boston	
BOS.662		11 Lawrence St	Boston	
BOS.663		12 Lawrence St	Boston	
BOS.664		12 1/2 Lawrence St	Boston	
BOS.665		14 Lawrence St	Boston	
BOS.666		15 Lawrence St	Boston	
BOS.667		16 Lawrence St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.668		17 Lawrence St	Boston	
BOS.669		18 Lawrence St	Boston	
BOS.670		19 Lawrence St	Boston	
BOS.671		20 Lawrence St	Boston	
BOS.672		21 Lawrence St	Boston	
BOS.673		22 Lawrence St	Boston	
BOS.674		23 Lawrence St	Boston	
BOS.675		24 Lawrence St	Boston	
BOS.676		25 Lawrence St	Boston	
BOS.677		26 Lawrence St	Boston	
BOS.678		27 Lawrence St	Boston	
BOS.16582		43 Lawrence St	Boston	1865
BOS.16583	Fowle, William B. Jr. House	480 Massachusetts Ave	Boston	1860
BOS.13968	Kemp, Elizabeth and Robert House	486 Massachusetts Ave	Boston	1870
BOS.679		502-504 Massachusetts Ave	Boston	
BOS.680	Chester Square	505 Massachusetts Ave	Boston	
BOS.681		507 Massachusetts Ave	Boston	
BOS.682		508 Massachusetts Ave	Boston	
BOS.683		511 Massachusetts Ave	Boston	
BOS.684		512 Massachusetts Ave	Boston	
BOS.685		514 Massachusetts Ave	Boston	
BOS.686		515 Massachusetts Ave	Boston	
BOS.687		518 Massachusetts Ave	Boston	
BOS.688		519 Massachusetts Ave	Boston	
BOS.689		520 Massachusetts Ave	Boston	
BOS.690		521 Massachusetts Ave	Boston	
BOS.691		522 Massachusetts Ave	Boston	
BOS.721		522 Massachusetts Ave	Boston	
BOS.692		523 Massachusetts Ave	Boston	
BOS.693		524 Massachusetts Ave	Boston	
BOS.694		525 Massachusetts Ave	Boston	
BOS.695		526 Massachusetts Ave	Boston	
BOS.696		527 Massachusetts Ave	Boston	
BOS.697		528 Massachusetts Ave	Boston	
BOS.698		529 Massachusetts Ave	Boston	
BOS.699		530 Massachusetts Ave	Boston	
BOS.700		531 Massachusetts Ave	Boston	
BOS.701		532 Massachusetts Ave	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.702		533 Massachusetts Ave	Boston	
BOS.703		534 Massachusetts Ave	Boston	
BOS.704		535 Massachusetts Ave	Boston	
BOS.705		536 Massachusetts Ave	Boston	
BOS.706		537 Massachusetts Ave	Boston	
BOS.707		538 Massachusetts Ave	Boston	
BOS.708		539 Massachusetts Ave	Boston	
BOS.709		540 Massachusetts Ave	Boston	
BOS.710		541 Massachusetts Ave	Boston	
BOS.711		542 Massachusetts Ave	Boston	
BOS.712		543 Massachusetts Ave	Boston	
BOS.713		544 Massachusetts Ave	Boston	
BOS.714		545 Massachusetts Ave	Boston	
BOS.715		546 Massachusetts Ave	Boston	
BOS.716		547 Massachusetts Ave	Boston	
BOS.717		548 Massachusetts Ave	Boston	
BOS.718		549 Massachusetts Ave	Boston	
BOS.719		550 Massachusetts Ave	Boston	
BOS.720		551 Massachusetts Ave	Boston	
BOS.722		553 Massachusetts Ave	Boston	
BOS.723		554 Massachusetts Ave	Boston	
BOS.724		555 Massachusetts Ave	Boston	
BOS.725		556 Massachusetts Ave	Boston	
BOS.726		557 Massachusetts Ave	Boston	
BOS.727	Farwell Mansion	558 Massachusetts Ave	Boston	1857
BOS.728		559 Massachusetts Ave	Boston	
BOS.729		560 Massachusetts Ave	Boston	
BOS.730		561 Massachusetts Ave	Boston	
BOS.731		562 Massachusetts Ave	Boston	
BOS.732		563 Massachusetts Ave	Boston	
BOS.733		564 Massachusetts Ave	Boston	
BOS.734		565 Massachusetts Ave	Boston	
BOS.735		566 Massachusetts Ave	Boston	
BOS.736		567 Massachusetts Ave	Boston	
BOS.737		569 Massachusetts Ave	Boston	
BOS.738		570 Massachusetts Ave	Boston	
BOS.739		571 Massachusetts Ave	Boston	
BOS.740		572 Massachusetts Ave	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.741		573 Massachusetts Ave	Boston	
BOS.742		574 Massachusetts Ave	Boston	
BOS.743		577 Massachusetts Ave	Boston	
BOS.744		578 Massachusetts Ave	Boston	
BOS.745		581 Massachusetts Ave	Boston	
BOS.746		582 Massachusetts Ave	Boston	
BOS.747		583-585 Massachusetts Ave	Boston	
BOS.748		586 Massachusetts Ave	Boston	
BOS.749		2 Milford St	Boston	
BOS.750		2A Milford St	Boston	
BOS.751		4 Milford St	Boston	
BOS.752		4A Milford St	Boston	
BOS.753		6 Milford St	Boston	
BOS.754		8 Milford St	Boston	
BOS.755		9 Milford St	Boston	
BOS.756		10 Milford St	Boston	
BOS.757		11 Milford St	Boston	
BOS.758		11A Milford St	Boston	
BOS.759		12 Milford St	Boston	1850
BOS.760		14 Milford St	Boston	
BOS.761		15 Milford St	Boston	
BOS.762		16 Milford St	Boston	
BOS.763		17 Milford St	Boston	
BOS.764		18 Milford St	Boston	
BOS.765		19 Milford St	Boston	
BOS.766		20 Milford St	Boston	
BOS.767		21 Milford St	Boston	
BOS.768		22 Milford St	Boston	
BOS.769		23 Milford St	Boston	
BOS.770		24 Milford St	Boston	
BOS.771		25 Milford St	Boston	
BOS.772		26 Milford St	Boston	
BOS.773		27 Milford St	Boston	
BOS.774		28 Milford St	Boston	
BOS.775		29 Milford St	Boston	
BOS.776		30 Milford St	Boston	
BOS.777		31 Milford St	Boston	
BOS.778		32 Milford St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.779		33 Milford St	Boston	
BOS.780		34 Milford St	Boston	
BOS.781		35 Milford St	Boston	
BOS.782		36 Milford St	Boston	
BOS.783		37 Milford St	Boston	
BOS.784		39 Milford St	Boston	
BOS.785		41 Milford St	Boston	
BOS.786		43 Milford St	Boston	
BOS.787		45 Milford St	Boston	
BOS.788		47 Milford St	Boston	
BOS.789		68 Montgomery St	Boston	
BOS.790		69 Montgomery St	Boston	
BOS.791		70 Montgomery St	Boston	
BOS.792		71 Montgomery St	Boston	
BOS.793		72 Montgomery St	Boston	
BOS.794		73 Montgomery St	Boston	
BOS.795		74 Montgomery St	Boston	
BOS.796		75 Montgomery St	Boston	
BOS.797		77 Montgomery St	Boston	
BOS.798		78 Montgomery St	Boston	
BOS.799		79 Montgomery St	Boston	
BOS.1000		80 Montgomery St	Boston	
BOS.1001		81 Montgomery St	Boston	
BOS.1002		82 Montgomery St	Boston	1865
BOS.1003		83 Montgomery St	Boston	1865
BOS.13068	Emmanuel Settlement House	10 Newcombe St	Boston	1906
BOS.13069	Caproni, Pietro P. and Brother Plaster Casting Co.	16 Newcombe St	Boston	1906
BOS.12845		43-54 Paul Sullivan Way	Boston	1890
BOS.1481		52 Plympton St	Boston	1895
BOS.1482	Rotch, Lester Playground Fieldhouse	30 Randolph St	Boston	1920
BOS.1004		1 Ringgold St	Boston	
BOS.1005		2 Ringgold St	Boston	
BOS.1006		3 Ringgold St	Boston	
BOS.1007		4 Ringgold St	Boston	
BOS.1008		5 Ringgold St	Boston	
BOS.1009		6 Ringgold St	Boston	
BOS.1010		7 Ringgold St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1011		8 Ringgold St	Boston	
BOS.13065	Redfield, Isaac F. House	9 Rollins St	Boston	1857
BOS.13066	Babcock, Fanny F. House	11 Rollins St	Boston	1857
BOS.13067	Wheeler, Nathan House	11C Rollins St	Boston	1857
BOS.1012		3 Rutland Sq	Boston	
BOS.1013		4 Rutland Sq	Boston	
BOS.1014		5 Rutland Sq	Boston	
BOS.1015		6 Rutland Sq	Boston	
BOS.1016		7 Rutland Sq	Boston	
BOS.1017		8 Rutland Sq	Boston	
BOS.1018		9 Rutland Sq	Boston	
BOS.1019		10 Rutland Sq	Boston	
BOS.1020		11 Rutland Sq	Boston	
BOS.1021		12 Rutland Sq	Boston	
BOS.1022		13 Rutland Sq	Boston	
BOS.1023		14 Rutland Sq	Boston	
BOS.1024		15 Rutland Sq	Boston	1859
BOS.1025		16 Rutland Sq	Boston	
BOS.1026		17 Rutland Sq	Boston	
BOS.1027		18 Rutland Sq	Boston	
BOS.1028		19 Rutland Sq	Boston	1859
BOS.1029		20 Rutland Sq	Boston	
BOS.1030		21 Rutland Sq	Boston	
BOS.1031	Wilson, Charles B. House	22-24 Rutland Sq	Boston	1847
BOS.1032	Chipman, George A. Row House	23 Rutland Sq	Boston	1859
BOS.1033		25 Rutland Sq	Boston	
BOS.1034		27 Rutland Sq	Boston	
BOS.1035		28 Rutland Sq	Boston	
BOS.1036		29 Rutland Sq	Boston	
BOS.1037		30 Rutland Sq	Boston	
BOS.1038		31 Rutland Sq	Boston	
BOS.1039		32 Rutland Sq	Boston	
BOS.1040		33 Rutland Sq	Boston	
BOS.1041		34 Rutland Sq	Boston	
BOS.1042		35 Rutland Sq	Boston	
BOS.1043		37 Rutland Sq	Boston	
BOS.1044		38 Rutland Sq	Boston	
BOS.1045		39 Rutland Sq	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1046		40 Rutland Sq	Boston	
BOS.1047		41 Rutland Sq	Boston	
BOS.1048		42 Rutland Sq	Boston	
BOS.1049		43 Rutland Sq	Boston	
BOS.1050		44 Rutland Sq	Boston	
BOS.1051		45 Rutland Sq	Boston	
BOS.1052		46 Rutland Sq	Boston	
BOS.1053		47 Rutland Sq	Boston	
BOS.1054		48 Rutland Sq	Boston	
BOS.1055		49 Rutland Sq	Boston	1866
BOS.1056		50 Rutland Sq	Boston	
BOS.1057		51 Rutland Sq	Boston	
BOS.1058		52 Rutland Sq	Boston	
BOS.1059		53 Rutland Sq	Boston	
BOS.1060		54 Rutland Sq	Boston	
BOS.1061		55 Rutland Sq	Boston	
BOS.1062		56 Rutland Sq	Boston	
BOS.1063		57 Rutland Sq	Boston	
BOS.1064		59 Rutland Sq	Boston	
BOS.1065	Saint George Syrian Orthodox Church	7-9 Saint George St	Boston	
BOS.1066		15 Saint George St	Boston	
BOS.12846		100-112 Shawmut Ave	Boston	1915
BOS.15228	Holy Trinity (German) Roman Catholic Church	136 Shawmut Ave	Boston	1871
BOS.13043		212-214 Shawmut Ave	Boston	1837
BOS.1067		258 Shawmut Ave	Boston	
BOS.1068		275 Shawmut Ave	Boston	
BOS.1069		277 Shawmut Ave	Boston	
BOS.1070		279 Shawmut Ave	Boston	
BOS.1071		281 Shawmut Ave	Boston	
BOS.1072		283 Shawmut Ave	Boston	
BOS.1073		285 Shawmut Ave	Boston	
BOS.1074		289 Shawmut Ave	Boston	
BOS.1075		291 Shawmut Ave	Boston	
BOS.1076		293 Shawmut Ave	Boston	
BOS.1077		296 1/2 Shawmut Ave	Boston	
BOS.1078	Hotel Union, The	301 Shawmut Ave	Boston	1860
BOS.1079		401 Shawmut Ave	Boston	
BOS.1080	Royal Arcanum Building - VMC	407 Shawmut Ave	Boston	1892

Inv. No.	Property Name	Street	Town	Year
BOS.1081	Dunn, Sarah S. House	409 Shawmut Ave	Boston	1846
BOS.1082	Drury, Gardner P. House	411 Shawmut Ave	Boston	1846
BOS.1083	Saint Stephen's Episcopal Church and Parish Hall	419 Shawmut Ave	Boston	1926
BOS.1084	Hotel Blackstone	423 Shawmut Ave	Boston	1860
BOS.1085		425 Shawmut Ave	Boston	1846
BOS.1086		427 Shawmut Ave	Boston	1846
BOS.1087		429 Shawmut Ave	Boston	1846
BOS.1088		431 Shawmut Ave	Boston	1846
BOS.1089		433 Shawmut Ave	Boston	1846
BOS.1090	Raymond, E. A. House	435 Shawmut Ave	Boston	1846
BOS.1091		437 Shawmut Ave	Boston	
BOS.1092		439 Shawmut Ave	Boston	
BOS.1093		441 Shawmut Ave	Boston	
BOS.1094		443 Shawmut Ave	Boston	
BOS.1095		445 Shawmut Ave	Boston	
BOS.1096		446 Shawmut Ave	Boston	
BOS.1097		447 Shawmut Ave	Boston	
BOS.1098		448 Shawmut Ave	Boston	
BOS.1099		449 Shawmut Ave	Boston	
BOS.1100		451 Shawmut Ave	Boston	
BOS.1101		453 Shawmut Ave	Boston	
BOS.1102	Harlon, Amasa House	456 Shawmut Ave	Boston	1847
BOS.1103	Cook, Betsey B. House	458 Shawmut Ave	Boston	1847
BOS.1104	Stone, Nathaniel House	460 Shawmut Ave	Boston	1847
BOS.1105	Rowe, Sarah Freeman House	462 Shawmut Ave	Boston	1847
BOS.1106		463 Shawmut Ave	Boston	
BOS.1107	Rowe, Sarah Freeman House	464 Shawmut Ave	Boston	1847
BOS.1108		465 Shawmut Ave	Boston	
BOS.1109	Rowe, Sarah Freeman House	466 Shawmut Ave	Boston	1847
BOS.1110		467-477 Shawmut Ave	Boston	1912
BOS.1111		470 Shawmut Ave	Boston	
BOS.13044		474 Shawmut Ave	Boston	1895
BOS.1112		1 Taylor St	Boston	
BOS.1113		3 Taylor St	Boston	
BOS.1114		5 Taylor St	Boston	
BOS.1115		7 Taylor St	Boston	
BOS.1116	Sargent, William House	8 Taylor St	Boston	1856

Inv. No.	Property Name	Street	Town	Year
BOS.1117		9 Taylor St	Boston	
BOS.1118		11A Taylor St	Boston	
BOS.1119		11 Taylor St	Boston	
BOS.1120		15 Taylor St	Boston	
BOS.1483	Reed, Gideon F. T. Block	2-66 Thayer St	Boston	1880
BOS.1484	Summerfields Furniture Warehouse	33 Traveler St	Boston	1890
BOS.1445	National Theater	533 Tremont St	Boston	1910
BOS.1446	Cyclorama Building (Boston Center for the Arts)	543-547 Tremont St	Boston	1884
BOS.1447	Tremont Estates Building	549-553 Tremont St	Boston	1865
BOS.1448	Mystic Bridge Building	557 Tremont St	Boston	1865
BOS.1449	Saint Cloud Hotel	565-569 Tremont St	Boston	1869
BOS.1121		629 Tremont St	Boston	
BOS.1122		631 Tremont St	Boston	
BOS.1123		633 Tremont St	Boston	
BOS.1124		635 Tremont St	Boston	
BOS.1125		637 Tremont St	Boston	
BOS.1126		639 Tremont St	Boston	
BOS.1501	Shawmut Congregational Church	640 Tremont St	Boston	1872
BOS.1127		641 Tremont St	Boston	
BOS.1128		643 Tremont St	Boston	
BOS.1129		645 Tremont St	Boston	
BOS.13969		676 Tremont St	Boston	1860
BOS.13970		684 Tremont St	Boston	1860
BOS.13971		686 Tremont St	Boston	1860
BOS.13972		690 Tremont St	Boston	1860
BOS.13973		692 Tremont St	Boston	1860
BOS.1499	Tremont Street Methodist Church	740 Tremont St	Boston	1862
BOS.13954		752 Tremont St	Boston	1860
BOS.15906	Swallow, Calvin House	784-790 Tremont St	Boston	1874
BOS.13045	South Congregational Unitarian Church	15 Union Park St	Boston	1861
BOS.13081	Cathedral of the Holy Cross High School	64 Union Park St	Boston	1926
BOS.13082	Cathedral of the Holy Cross Roman Catholic Rectory	75 Union Park St	Boston	1937
BOS.13083	Sisters of Saint Joseph's Convent	76 Union Park St	Boston	1916
BOS.1485	Working Girls Home	89 Union Park St	Boston	1892
BOS.1486	Bilafski, A. Rowhouse	116 Union Park St	Boston	1895
BOS.1130		1 Union Pk	Boston	
BOS.1131		2 Union Pk	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1132		3 Union Pk	Boston	
BOS.1133		4 Union Pk	Boston	
BOS.1134		5 Union Pk	Boston	
BOS.1135		6 Union Pk	Boston	
BOS.1136		7 Union Pk	Boston	
BOS.1137		8 Union Pk	Boston	
BOS.1138		9 Union Pk	Boston	
BOS.1139		10 Union Pk	Boston	
BOS.1140		11 Union Pk	Boston	
BOS.1141		11 1/2 Union Pk	Boston	
BOS.1142		12 Union Pk	Boston	
BOS.1143		14 Union Pk	Boston	
BOS.1144		15 Union Pk	Boston	
BOS.1145		16 Union Pk	Boston	
BOS.1146	Emery, Francis F. House	17 Union Pk	Boston	1858
BOS.1147		18 Union Pk	Boston	
BOS.1148		19 Union Pk	Boston	
BOS.1149		20 Union Pk	Boston	
BOS.1150		21 Union Pk	Boston	
BOS.1151		22 Union Pk	Boston	
BOS.1152		23 Union Pk	Boston	
BOS.1153		24 Union Pk	Boston	
BOS.1154		25 Union Pk	Boston	
BOS.1155		26 Union Pk	Boston	
BOS.1156		27 Union Pk	Boston	
BOS.1157		28 Union Pk	Boston	
BOS.1158		29 Union Pk	Boston	
BOS.1159		30 Union Pk	Boston	
BOS.1160		31 Union Pk	Boston	
BOS.1161		32 Union Pk	Boston	
BOS.1162		33 Union Pk	Boston	
BOS.1163		34 Union Pk	Boston	
BOS.1164		35 Union Pk	Boston	
BOS.1165		36 Union Pk	Boston	
BOS.1166		37 Union Pk	Boston	
BOS.1167		38 Union Pk	Boston	
BOS.1168		39 Union Pk	Boston	
BOS.1169		40 Union Pk	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1170		41 Union Pk	Boston	
BOS.1171		42 Union Pk	Boston	
BOS.1172		43 Union Pk	Boston	
BOS.1173		44 Union Pk	Boston	
BOS.1174		45 Union Pk	Boston	
BOS.1175		46 Union Pk	Boston	
BOS.1176		47 Union Pk	Boston	
BOS.1177		48 Union Pk	Boston	
BOS.1178		49 Union Pk	Boston	
BOS.1179		50 Union Pk	Boston	
BOS.1180		51 Union Pk	Boston	
BOS.1181		52 Union Pk	Boston	
BOS.1182		53 Union Pk	Boston	
BOS.15552		54 Union Pk	Boston	1865
BOS.15540		47 Waltham St	Boston	1875
BOS.1183		68 Waltham St	Boston	
BOS.1184		70 Waltham St	Boston	
BOS.1185		72 Waltham St	Boston	
BOS.1186		74 Waltham St	Boston	
BOS.1187		75 Waltham St	Boston	
BOS.1188		76 Waltham St	Boston	
BOS.1189		77 Waltham St	Boston	
BOS.1190		78 Waltham St	Boston	
BOS.1191		79 Waltham St	Boston	
BOS.1192		80 Waltham St	Boston	
BOS.1193		81 Waltham St	Boston	
BOS.1194		82 Waltham St	Boston	
BOS.1195		83 Waltham St	Boston	
BOS.1196		84 Waltham St	Boston	
BOS.1197		85 Waltham St	Boston	
BOS.1198		86 Waltham St	Boston	
BOS.1199		87 Waltham St	Boston	
BOS.1200		88 Waltham St	Boston	
BOS.1201		89 Waltham St	Boston	
BOS.1202		90 Waltham St	Boston	
BOS.1203		91 Waltham St	Boston	
BOS.1204		92 Waltham St	Boston	
BOS.1205		93 Waltham St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1206		94 Waltham St	Boston	
BOS.1207		95 Waltham St	Boston	
BOS.1208		96 Waltham St	Boston	
BOS.1209		97 Waltham St	Boston	
BOS.1210		98 Waltham St	Boston	
BOS.1211		99 Waltham St	Boston	
BOS.1212		100 Waltham St	Boston	
BOS.1487		29-33 Wareham St	Boston	1880
BOS.1488		35-39 Wareham St	Boston	1875
BOS.1489	McNutt, John J. Building - Novelty Wood Works Bldg	38 Wareham St	Boston	1863
BOS.1490	Clark, Cyrus Building	45-51 Wareham St	Boston	1875
BOS.1491	New England Organ Company	46 Wareham St	Boston	1876
BOS.1492	Creesy and Noyes Carpentry Shop	53-59 Wareham St	Boston	1875
BOS.1493	Badger, William Carpentry Shop	61-63 Wareham St	Boston	1875
BOS.1494	Smith and Jacobs Carpentry Shop	65-69 Wareham St	Boston	1875
BOS.1495	Morton and Chesley Carpenty Shop	71-73 Wareham St	Boston	1875
BOS.1496	Hart and Pride Carpenty Shop	75-79 Wareham St	Boston	1875
BOS.1497	Badger, William F. Planing Mill	81-87 Wareham St	Boston	1897
BOS.1213	Currier, Lewis House	8 Warren Ave	Boston	1865
BOS.1214		15 Warren Ave	Boston	
BOS.1215		23 Warren Ave	Boston	1881
BOS.1216		25 Warren Ave	Boston	
BOS.1217		27 Warren Ave	Boston	
BOS.1218		29 Warren Ave	Boston	
BOS.1219		31 Warren Ave	Boston	
BOS.1220		33 Warren Ave	Boston	
BOS.1221		35 Warren Ave	Boston	
BOS.1222		37 Warren Ave	Boston	
BOS.1223		39 Warren Ave	Boston	
BOS.1224		41 Warren Ave	Boston	
BOS.1225		43 Warren Ave	Boston	
BOS.1226		45 Warren Ave	Boston	
BOS.1227		47 Warren Ave	Boston	
BOS.1228		49 Warren Ave	Boston	
BOS.1229		51 Warren Ave	Boston	
BOS.1230		53 Warren Ave	Boston	1870
BOS.1231		55 Warren Ave	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1232		57 Warren Ave	Boston	
BOS.1233		59 Warren Ave	Boston	
BOS.1234		61-63 Warren Ave	Boston	
BOS.1235		73 Warren Ave	Boston	
BOS.1236		75 Warren Ave	Boston	
BOS.1237		77 Warren Ave	Boston	
BOS.1238		79 Warren Ave	Boston	
BOS.1239		81 Warren Ave	Boston	
BOS.1240		83 Warren Ave	Boston	
BOS.1241		85 Warren Ave	Boston	
BOS.1242		87 Warren Ave	Boston	
BOS.1243		89 Warren Ave	Boston	
BOS.1244		91 Warren Ave	Boston	
BOS.1245		93 Warren Ave	Boston	
BOS.1246		95 Warren Ave	Boston	
BOS.1247		97 Warren Ave	Boston	
BOS.1248		99 Warren Ave	Boston	
BOS.1249		101 Warren Ave	Boston	
BOS.1250		103 Warren Ave	Boston	
BOS.1251		105 Warren Ave	Boston	
BOS.1252		107 Warren Ave	Boston	
BOS.1253		109 Warren Ave	Boston	
BOS.1254		111 Warren Ave	Boston	
BOS.1255		113 Warren Ave	Boston	
BOS.1256		115 Warren Ave	Boston	
BOS.1257		117 Warren Ave	Boston	
BOS.1258		119 Warren Ave	Boston	
BOS.1259		121 Warren Ave	Boston	
BOS.1260		123 Warren Ave	Boston	
BOS.1261		125 Warren Ave	Boston	
BOS.1262		127 Warren Ave	Boston	
BOS.1263		167 Warren Ave	Boston	
BOS.1264		169 Warren Ave	Boston	
BOS.1265		171 Warren Ave	Boston	
BOS.1266		173 Warren Ave	Boston	
BOS.1267		175 Warren Ave	Boston	
BOS.1268		177 Warren Ave	Boston	
BOS.1269		179 Warren Ave	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1270		181 Warren Ave	Boston	
BOS.1271		183 Warren Ave	Boston	
BOS.1272		185 Warren Ave	Boston	
BOS.1273		187 Warren Ave	Boston	
BOS.1274		189 Warren Ave	Boston	
BOS.1275		191 Warren Ave	Boston	
BOS.1276		193 Warren Ave	Boston	
BOS.825	South End Burial Ground	Washington St	Boston	1812
BOS.912	Northampton Station - Boston Elevated Railway	Washington St	Boston	1901
BOS.913	Castle Square Signal Tower	Washington St	Boston	1901
BOS.914	Main Line Elevated Railway Track	Washington St	Boston	1901
BOS.9474	Blackstone Square	Washington St	Boston	1832
BOS.9475	Franklin Square	Washington St	Boston	1828
BOS.13096		1110-1130 Washington St	Boston	1916
BOS.13097	HUB Building	1134-1140 Washington St	Boston	1916
BOS.13098	Snow, Gideon - Loring, Caleb W. House	1144-1148 Washington St	Boston	1845
BOS.13099		1154 Washington St	Boston	1892
BOS.13100	Columbia Hotel	1162-1168 Washington St	Boston	1845
BOS.13046		1242-1274 Washington St	Boston	1923
BOS.13047		1280-1284 Washington St	Boston	1889
BOS.15541	Hub Motor Company	1283 Washington St	Boston	1919
BOS.13048	Grover and Baker Sewing Machine Factory	1337-1359 Washington St	Boston	1856
BOS.13049	Boston Penny Savings Bank	1361-1365 Washington St	Boston	1915
BOS.13050	Saint George Building	1387-1393 Washington St	Boston	1873
BOS.1498	Cathedral of the Holy Cross Roman Catholic Church	1400 Washington St	Boston	1861
BOS.9492	Cathedral of the Holy Cross Hook & Hastings Organ	1400 Washington St	Boston	
BOS.13051	Arlington, The	1409-1417 Washington St	Boston	1890
BOS.13094	Cathedral Veteran's Housing	1472 Washington St	Boston	1951
BOS.13052	U. S. Post Office - South End Station #4	1474 Washington St	Boston	1919
BOS.1277	Sanford, The	1511-1525 Washington St	Boston	1889
BOS.13053	Salvation Army Building	1514 Washington St	Boston	1940
BOS.1278		1560 Washington St	Boston	1914
BOS.1279	Malone Block	1656 Washington St	Boston	1854
BOS.1280	Malone Block	1658 Washington St	Boston	1854
BOS.1281	Malone Block	1662 Washington St	Boston	1854
BOS.1282	Malone Block	1666 Washington St	Boston	1854

Inv. No.	Property Name	Street	Town	Year
BOS.1283	Malone Block	1670 Washington St	Boston	1854
BOS.1284		1672 Washington St	Boston	
BOS.1285	Pope Block	1673-1679 Washington St	Boston	1884
BOS.1286	Allen, Aaron H. House	1682 Washington St	Boston	1859
BOS.13061	Mullen, John H. Apartment House	1686 Washington St	Boston	1896
BOS.13062	Mullen, John H. Apartment House	1688 Washington St	Boston	1896
BOS.13063	Mullen, John H. Apartment House	1690 Washington St	Boston	1896
BOS.13064	Mullen, John H. Apartment House	1692 Washington St	Boston	1896
BOS.1287	Smith Block - Minot Hall	1723-1733 Washington St	Boston	1866
BOS.13055	Porter, William Double House	1724-1726 Washington St	Boston	1806
BOS.13056		1730 Washington St	Boston	1915
BOS.1288	Porter Mansion	1732 Washington St	Boston	
BOS.1289	Johnson Block	1734-1740 Washington St	Boston	1910
BOS.13058	Tompkins, Orlando House	1742-1744 Washington St	Boston	1855
BOS.13059	Emerson, Andrew House	1746 Washington St	Boston	1855
BOS.13060	Hyde, Henry House	1750 Washington St	Boston	1855
BOS.1290	Hotel Alexandra	1759-1763 Washington St	Boston	1875
BOS.1291	Bean, Ivory - Perkins, E. Lamson House	1767-1769 Washington St	Boston	1853
BOS.1292	Kennedy Block	1777-1781 Washington St	Boston	1887
BOS.1293	Chester Block	1783-1789 Washington St	Boston	1857
BOS.13070	Sampson, Edward H. - Singleton, George W. House	1900 Washington St	Boston	1858
BOS.13071		1902 Washington St	Boston	1858
BOS.13072	Capen, Samuel C. House	1904 Washington St	Boston	1858
BOS.13073	Church of the Ascension	1910 Washington St	Boston	1892
BOS.13074	Caproni, Pietro P. and Brother Plaster Casting Co.	1914-1920 Washington St	Boston	1900
BOS.13075	Striberg Furniture Store	1938-1940 Washington St	Boston	1916
BOS.13076	Goodman's Furniture Store	1960 Washington St	Boston	1925
BOS.13077	McLaughlin's Garage	1990 Washington St	Boston	1925
BOS.1294	South End Municipal Building	63-71 West Brookline St	Boston	1922
BOS.1295	Hotel Sun	73 West Brookline St	Boston	1878
BOS.1296		75 West Brookline St	Boston	
BOS.1297		77 West Brookline St	Boston	
BOS.1298		79 West Brookline St	Boston	
BOS.1299		83 West Brookline St	Boston	
BOS.1300		153 West Brookline St	Boston	
BOS.1301		154 West Brookline St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1302		155 West Brookline St	Boston	
BOS.1303		156 West Brookline St	Boston	
BOS.1304		157 West Brookline St	Boston	
BOS.1305		158 West Brookline St	Boston	
BOS.1306		159 West Brookline St	Boston	
BOS.1307		160 West Brookline St	Boston	
BOS.1308		161 West Brookline St	Boston	
BOS.1309		162 West Brookline St	Boston	
BOS.1310		163 West Brookline St	Boston	
BOS.1311		164 West Brookline St	Boston	
BOS.1312		165 West Brookline St	Boston	
BOS.1313		166 West Brookline St	Boston	
BOS.1314		167 West Brookline St	Boston	
BOS.1315		168 West Brookline St	Boston	
BOS.1316		169 West Brookline St	Boston	1850
BOS.1317		170 West Brookline St	Boston	
BOS.1318		171 West Brookline St	Boston	
BOS.1319		172 West Brookline St	Boston	
BOS.1320		173 West Brookline St	Boston	
BOS.1321		174 West Brookline St	Boston	
BOS.1322		175 West Brookline St	Boston	
BOS.1323		176 West Brookline St	Boston	
BOS.1324		177 West Brookline St	Boston	
BOS.1325		178 West Brookline St	Boston	
BOS.1326		179 West Brookline St	Boston	
BOS.1327		180 West Brookline St	Boston	
BOS.1328		181 West Brookline St	Boston	
BOS.1329		182 West Brookline St	Boston	
BOS.1330		183 West Brookline St	Boston	
BOS.1331		184 West Brookline St	Boston	
BOS.1332		185 West Brookline St	Boston	
BOS.1333		186 West Brookline St	Boston	
BOS.1334		187 West Brookline St	Boston	
BOS.1335		188 West Brookline St	Boston	
BOS.1336		189 West Brookline St	Boston	
BOS.1337		190 West Brookline St	Boston	
BOS.1338		191 West Brookline St	Boston	
BOS.1339		192 West Brookline St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1340		193 West Brookline St	Boston	
BOS.1341		194 West Brookline St	Boston	
BOS.1342		195 West Brookline St	Boston	
BOS.1343		196 West Brookline St	Boston	
BOS.1344		198 West Brookline St	Boston	
BOS.1345		200 West Brookline St	Boston	
BOS.1346		202 West Brookline St	Boston	
BOS.1347		204 West Brookline St	Boston	
BOS.1348		206 West Brookline St	Boston	
BOS.1349		136 West Canton St	Boston	
BOS.1350		137 West Canton St	Boston	
BOS.1351		138 West Canton St	Boston	
BOS.1352		139 West Canton St	Boston	
BOS.1353		140 West Canton St	Boston	
BOS.1354		141 West Canton St	Boston	
BOS.1355		142 West Canton St	Boston	
BOS.1356		143 West Canton St	Boston	
BOS.1357		144 West Canton St	Boston	
BOS.1358		145 West Canton St	Boston	1860
BOS.1359		146 West Canton St	Boston	
BOS.1360		147 West Canton St	Boston	
BOS.1361		148 West Canton St	Boston	
BOS.1362		149 West Canton St	Boston	
BOS.1363		150 West Canton St	Boston	
BOS.1364		151 West Canton St	Boston	
BOS.1365		152 West Canton St	Boston	
BOS.1366		153 West Canton St	Boston	1864
BOS.1367		154 West Canton St	Boston	
BOS.1368		155 West Canton St	Boston	
BOS.1369		156 West Canton St	Boston	
BOS.1370		157 West Canton St	Boston	
BOS.1371		158 West Canton St	Boston	
BOS.1372		159 West Canton St	Boston	
BOS.1373		160 West Canton St	Boston	
BOS.1374		161 West Canton St	Boston	
BOS.1375		162 West Canton St	Boston	
BOS.1376		163 West Canton St	Boston	
BOS.1377		164 West Canton St	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1378		165 West Canton St	Boston	
BOS.1379		166 West Canton St	Boston	
BOS.1380		168 West Canton St	Boston	
BOS.1381		170 West Canton St	Boston	1865
BOS.1382		172 West Canton St	Boston	
BOS.1383		174 West Canton St	Boston	
BOS.1384		176 West Canton St	Boston	
BOS.1385		178 West Canton St	Boston	
BOS.1386		180 West Canton St	Boston	
BOS.1387		182 West Canton St	Boston	
BOS.1388		184 West Canton St	Boston	
BOS.1389	Chatham Hotel	68 West Concord St	Boston	1890
BOS.13057	Hunnewell, George H. - DeBlois, Stephen Town House	78-80 West Concord St	Boston	1859
BOS.1503		96 West Concord St	Boston	
BOS.15535		140 West Concord St	Boston	1860
BOS.9007	West Fourth Street Bridge - Dover Street Bridge	West Fourth St	Boston	1893
BOS.1390	Pope, William J. House	35-36 West Newton St	Boston	1851
BOS.1391	Harwood, Daniel House	37 West Newton St	Boston	1851
BOS.1392	Nickerson, Pliny House	38 West Newton St	Boston	1851
BOS.1393	Jones, Frederick House	39 West Newton St	Boston	1851
BOS.1394	Jones, Josiah M. House	40 West Newton St	Boston	1851
BOS.1395	Boyd, Samuel House	41 West Newton St	Boston	1851
BOS.1396	Greene, Charles G. House	42 West Newton St	Boston	1851
BOS.1397	Converse, James W. House	43 West Newton St	Boston	1851
BOS.1398	Fowle, George E. House	44 West Newton St	Boston	1851
BOS.1399	Daggett, Henry L. House	45 West Newton St	Boston	1851
BOS.1400	Parkview Chambers Apartment Building	46 West Newton St	Boston	1912
BOS.15555		143 West Newton St	Boston	1865
BOS.1401		4 West Springfield St	Boston	
BOS.15925		195 West Springfield St	Boston	1860
BOS.15373		208 West Springfield St	Boston	1860
BOS.1402		1 Worcester Sq	Boston	
BOS.1403		2 Worcester Sq	Boston	
BOS.1404		3 Worcester Sq	Boston	
BOS.1405		4 Worcester Sq	Boston	
BOS.1406		5 Worcester Sq	Boston	
BOS.1407		6 Worcester Sq	Boston	

Inv. No.	Property Name	Street	Town	Year
BOS.1408		7 Worcester Sq	Boston	
BOS.1409		8 Worcester Sq	Boston	
BOS.1410		9 Worcester Sq	Boston	
BOS.1411		10 Worcester Sq	Boston	
BOS.1412		11 Worcester Sq	Boston	
BOS.1413		12 Worcester Sq	Boston	
BOS.1414		13 Worcester Sq	Boston	
BOS.1415		14 Worcester Sq	Boston	
BOS.1416		15 Worcester Sq	Boston	
BOS.1417		16 Worcester Sq	Boston	
BOS.1418		17 Worcester Sq	Boston	
BOS.1419		18 Worcester Sq	Boston	
BOS.1420		19 Worcester Sq	Boston	
BOS.1421		20 Worcester Sq	Boston	
BOS.1422		21 Worcester Sq	Boston	
BOS.1423		22 Worcester Sq	Boston	
BOS.1424		23 Worcester Sq	Boston	
BOS.1425		24 Worcester Sq	Boston	
BOS.1426		25 Worcester Sq	Boston	
BOS.1427		26 Worcester Sq	Boston	
BOS.1429		28 Worcester Sq	Boston	
BOS.1430		29 Worcester Sq	Boston	
BOS.1431		30 Worcester Sq	Boston	
BOS.1432		31 Worcester Sq	Boston	
BOS.1433		32 Worcester Sq	Boston	
BOS.1434		33 Worcester Sq	Boston	
BOS.1435		34 Worcester Sq	Boston	
BOS.1436		35 Worcester Sq	Boston	
BOS.1437		36 Worcester Sq	Boston	
BOS.1438		37 Worcester Sq	Boston	
BOS.1439		38 Worcester Sq	Boston	
BOS.1440		39 Worcester Sq	Boston	
BOS.1441		40 Worcester Sq	Boston	
BOS.1442		41 Worcester Sq	Boston	
BOS.1443		42 Worcester Sq	Boston	
BOS.1428		27 Worcester St	Boston	1850

Appendix D
Endangered Species Act Documentation

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 7, 2014

To Whom It May Concern:

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

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

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

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

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

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

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

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

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

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

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

Ellisville Harbor
(600 acres, 1980) Plymouth

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

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

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

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

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

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

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

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

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

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

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

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

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

Pocasset River
(160 acres, 1980) Bourne

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

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

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

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

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

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

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

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

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

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

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

Towns with ACECs within their Boundaries — November 2010

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

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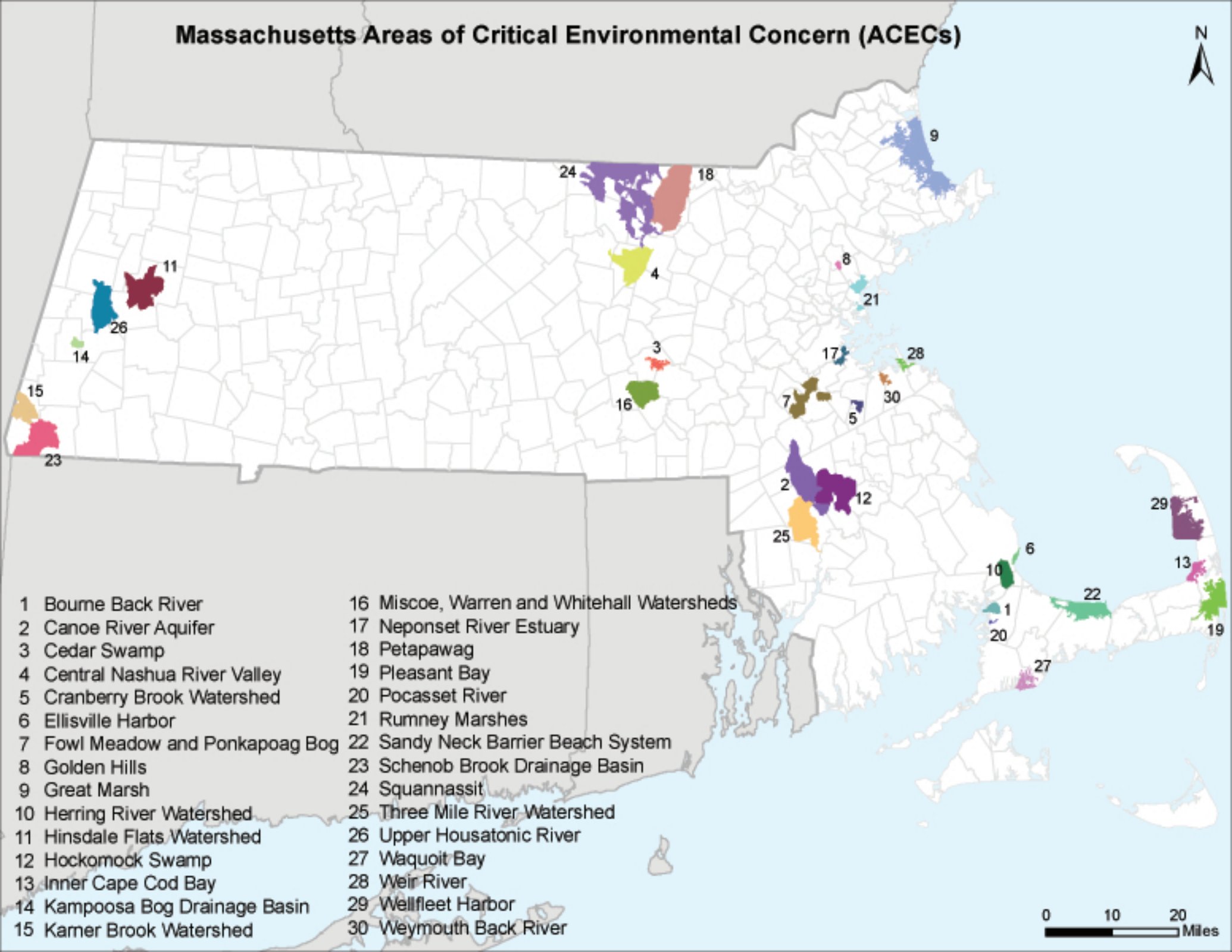
Massachusetts Areas of Critical Environmental Concern (ACECs)



FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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

Revised 06/22/2009

MassDEP - Bureau of Waste Site Cleanup

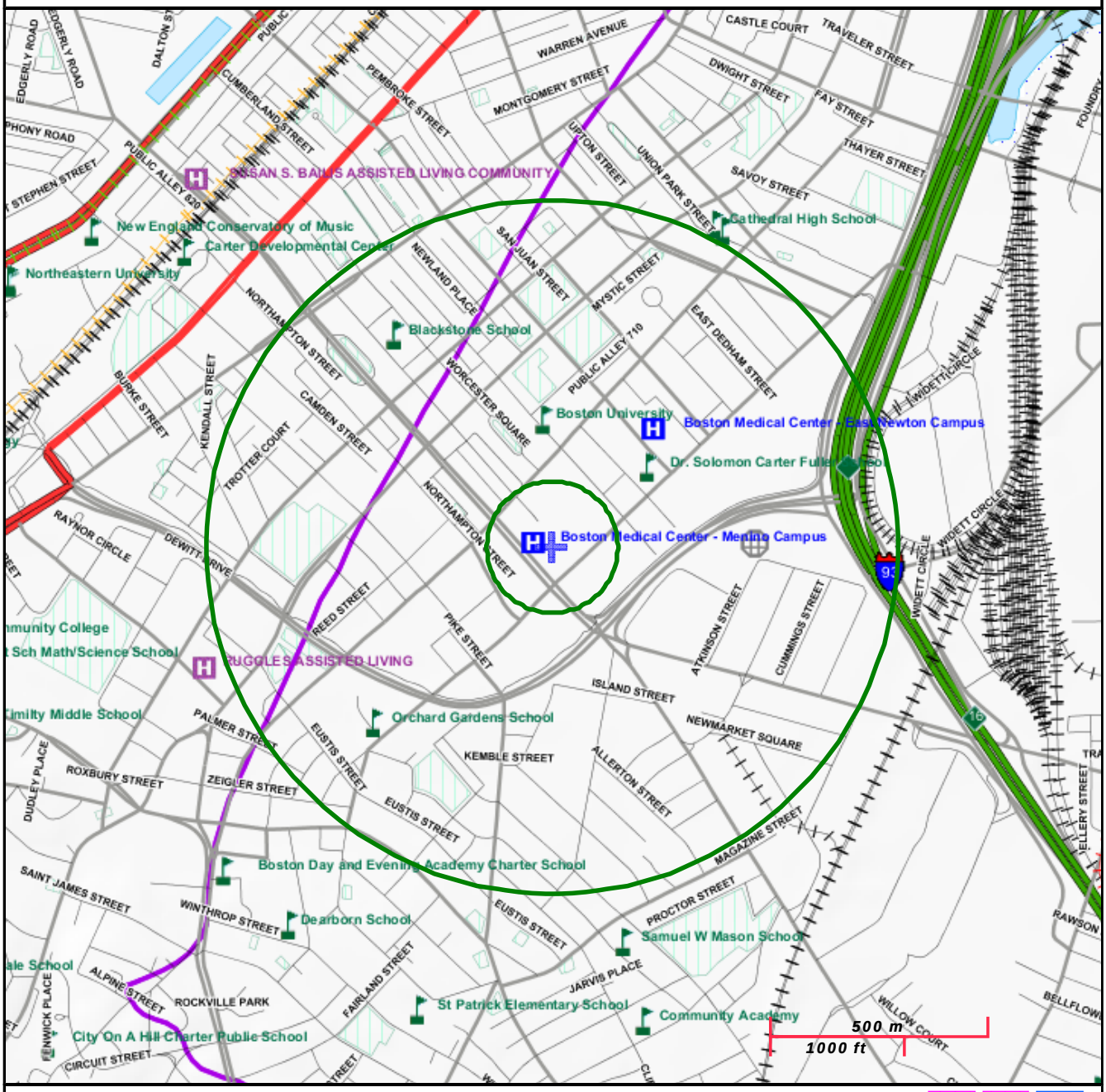
Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

BOSTON MEDICAL CENTER
840 HARRISON AVENUE BOSTON, MA

NAD83 UTM Meters:
4688983mN , 329182mE (Zone: 19)
June 26, 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.

The Official Website of the Department of Fish and Game (DFG)

Department of Fish and Game Commissioner Mary B. Griffin

DFG Home Mass.Gov Home State Agencies State Online Services

MassWildlife
Massachusetts Division of Fisheries & Wildlife
Wayne F. MacCallum, Director

Natural Heritage & Endangered Species

Home Recreation Wildlife Fisheries Natural Heritage Habitat Education Search MassWildlife

Heritage Home

Rare Species by Town

MESA (Massachusetts Endangered Species Act) and Federal Status

Quick Links

» Town Index
» MESA List
» Contact Us

E = Endangered T = Threatened SC = Special Concern

Most Recent Observation

This field represents the most recent observation of that species in a town. However, because they are rare, many MESA-listed species are difficult to detect even when they are present. Natural Heritage does not have the resources to be able to conduct methodical species surveys in each town on a regular basis. Therefore, the fact that the 'Most Recent Observation' recorded for a species may be several years old should not be interpreted as meaning that the species no longer occurs in a town. However, Natural Heritage regards records older than twenty-five years historic.

Click on a town below to view MESA-listed species for that town. To print the species for a particular town, highlight the species using your mouse, go to Print under the File Menu, click on 'Selection' under 'Print Range' and click OK.

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

These data were extracted from the database of the Natural Heritage and Endangered Species Program in September 2009.

Barnstable | Barre | Becket | Bedford | Belchertown | Bellingham | Belmont | Berkley | Berlin | Bernardston | Beverly | Billerica | Blackstone | Blandford | Bolton | Boston | Bourne | Boxborough | Boxford | Boylston | Braintree | Brewster | Bridgewater | Brimfield | Brockton | Brookfield | Brookline | Buckland | Burlington

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BARNSTABLE	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		2009
BARNSTABLE	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BARNSTABLE	Bird	Asio flammeus	Short-eared Owl	E		Historic
BARNSTABLE	Bird	Asio otus	Long-eared Owl	SC		1978
BARNSTABLE	Bird	Charadrius melodus	Piping Plover	T	T	2006
BARNSTABLE	Bird	Parula americana	Northern Parula	T		1989
BARNSTABLE	Bird	Sterna dougallii	Roseate Tern	E	E	2008

BARNSTABLE	Bird	Sterna hirundo	Common Tern	SC	2008
BARNSTABLE	Bird	Sterna paradisaea	Arctic Tern	SC	1901
BARNSTABLE	Bird	Sternula antillarum	Least Tern	SC	2007
BARNSTABLE	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC	1982
BARNSTABLE	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC	1951
BARNSTABLE	Butterfly/Moth	Cingilia catenaria	Chain Dot Geometer	SC	1954
BARNSTABLE	Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC	1994
BARNSTABLE	Butterfly/Moth	Itame sp. 1 nr. inextricata	Pine Barrens Itame	SC	1968
BARNSTABLE	Butterfly/Moth	Papaipema stenocelis	Chain Fern Borer Moth	T	1950
BARNSTABLE	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T	2004
BARNSTABLE	Butterfly/Moth	Pieris oleracea	Mustard White	T	1949
BARNSTABLE	Butterfly/Moth	Satyrium favonius	Oak Hairstreak	SC	1982
BARNSTABLE	Butterfly/Moth	Zale sp. 1 nr. lunifera	Pine Barrens Zale	SC	1951
BARNSTABLE	Crustacean	Eulimnadia agassizii	Agassiz's Clam Shrimp	E	2009
BARNSTABLE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC	2004
BARNSTABLE	Dragonfly/Damselfly	Enallagma carunculatum	Tule Bluet	SC	1941
BARNSTABLE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC	1989
BARNSTABLE	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T	2005
BARNSTABLE	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T	2004
BARNSTABLE	Fish	Notropis bifrenatus	Bridle Shiner	SC	1993
BARNSTABLE	Mussel	Alasmidonta undulata	Triangle Floater	SC	2007
BARNSTABLE	Mussel	Leptodea ochracea	Tidewater Mucket	SC	2007
BARNSTABLE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC	2007
BARNSTABLE	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T	2007
BARNSTABLE	Reptile	Terrapene carolina	Eastern Box Turtle	SC	2007
BARNSTABLE	Snail	Ferrissia walkeri	Walker's Limpet	SC	2006
BARNSTABLE	Vascular Plant	Amelanchier nantucketensis	Nantucket Shadbush	SC	1993
BARNSTABLE	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T	1916
BARNSTABLE	Vascular Plant	Carex mitchelliana	Mitchell's Sedge	T	1988
BARNSTABLE	Vascular Plant	Corema conradii	Broom Crowberry	SC	1916
BARNSTABLE	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC	1999

BARNSTABLE	Vascular Plant	Dichanthelium ovale ssp. pseudopubescens	Commons's Panic-grass	SC	1986
BARNSTABLE	Vascular Plant	Dichanthelium wrightianum	Wright's Panic-grass	SC	2004
BARNSTABLE	Vascular Plant	Lachnanthes caroliana	Redroot	SC	2004
BARNSTABLE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	2006
BARNSTABLE	Vascular Plant	Linum intercursum	Sandplain Flax	SC	1989
BARNSTABLE	Vascular Plant	Linum medium var. texanum	Rigid Flax	T	1983
BARNSTABLE	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	1898
BARNSTABLE	Vascular Plant	Listera cordata	Heartleaf Twayblade	E	1916
BARNSTABLE	Vascular Plant	Malaxis bayardii	Bayard's Green Adder's-mouth	E	1989
BARNSTABLE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1960s
BARNSTABLE	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC	1989
BARNSTABLE	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC	2003
BARNSTABLE	Vascular Plant	Rhexia mariana	Maryland Meadow Beauty	E	1967
BARNSTABLE	Vascular Plant	Rhynchospora nitens	Short-beaked Bald-sedge	T	2002
BARNSTABLE	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC	1995
BARNSTABLE	Vascular Plant	Rhynchospora torreyana	Torrey's Beak-sedge	E	2007
BARNSTABLE	Vascular Plant	Sabatia campanulata	Slender Marsh Pink	E	2008
BARNSTABLE	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC	2008
BARNSTABLE	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC	2004
BARNSTABLE	Vascular Plant	Scleria pauciflora	Papillose Nut Sedge	E	1986
BARNSTABLE	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC	1919
BARNSTABLE	Vascular Plant	Sphenopholis pensylvanica	Swamp Oats	T	1988
BARNSTABLE	Vascular Plant	Spiranthes vernalis	Grass-leaved Ladies'-tresses	T	1986
BARNSTABLE	Vascular Plant	Tipularia discolor	Cranefly Orchid	E	1983
BARNSTABLE	Vascular Plant	Utricularia subulata	Subulate Bladderwort	SC	1918

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BARRE	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2007

BARRE	Bird	Botaurus lentiginosus	American Bittern	E		1930
BARRE	Bird	Ixobrychus exilis	Least Bittern	E		2005
BARRE	Butterfly/Moth	Psectraglaea carnosa	Pink Sallow	SC		2007
BARRE	Dragonfly/Damselfly	Neurocordulia yamaskanensis	Stygian Shadowdragon	SC		2004
BARRE	Fish	Notropis bifrenatus	Bridle Shiner	SC		2005
BARRE	Mussel	Alasmidonta undulata	Triangle Floater	SC		1999
BARRE	Mussel	Strophitus undulatus	Creeper	SC		1999
BARRE	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
BARRE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2005
BARRE	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1865
BARRE	Vascular Plant	Clematis occidentalis	Purple Clematis	SC		2008
BARRE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1950
BARRE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1870
BARRE	Vascular Plant	Viola adunca	Sand Violet	SC		2006

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BECKET	Bird	Botaurus lentiginosus	American Bittern	E		1991
BECKET	Butterfly/Moth	Erora laeta	Early Hairstreak	T		2005
BECKET	Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		2004
BECKET	Dragonfly/Damselfly	Somatochlora forcipata	Forcipate Emerald	SC		1973
BECKET	Fish	Catostomus catostomus	Longnose Sucker	SC		1979
BECKET	Fish	Notropis bifrenatus	Bridle Shiner	SC		1994
BECKET	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
BECKET	Vascular Plant	Arceuthobium pusillum	Dwarf Mistletoe	SC		1904
BECKET	Vascular Plant	Carex livida	Glaucous Sedge	E		Historic
BECKET	Vascular Plant	Carex pauciflora	Few-flowered Sedge	E		Historic
BECKET	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		Historic
BECKET	Vascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E		2001

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BEDFORD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2009
BEDFORD	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1902
BEDFORD	Bird	Bartramia longicauda	Upland Sandpiper	E		2000
BEDFORD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1998
BEDFORD	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2008
BEDFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		1995
BEDFORD	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2004
BEDFORD	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1884

BEDFORD	Vascular Plant	Bolboschoenus fluviatilis	River Bulrush	SC	2002
BEDFORD	Vascular Plant	Carex oligosperma	Few-fruited Sedge	E	2007
BEDFORD	Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E	1882
BEDFORD	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1899
BEDFORD	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E	1885
BEDFORD	Vascular Plant	Nabalus serpentarius	Lion's Foot	E	1883
BEDFORD	Vascular Plant	Nuphar microphylla	Tiny Cow-lily	E	1883
BEDFORD	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1900
BEDFORD	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T	1888
BEDFORD	Vascular Plant	Scirpus longii	Long's Bulrush	T	2007
BEDFORD	Vascular Plant	Senna hebecarpa	Wild Senna	E	1883
BEDFORD	Vascular Plant	Viola brittoniana	Britton's Violet	T	2007

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELCHERTOWN	Amphibian	Ambystoma opacum	Marbled Salamander	T		2006
BELCHERTOWN	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1941
BELCHERTOWN	Bird	Botaurus lentiginosus	American Bittern	E		2008
BELCHERTOWN	Bird	Gallinula chloropus	Common Moorhen	SC		1932
BELCHERTOWN	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2008
BELCHERTOWN	Bird	Ixobrychus exilis	Least Bittern	E		2007
BELCHERTOWN	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1932
BELCHERTOWN	Bird	Tyto alba	Barn Owl	SC		1951
BELCHERTOWN	Crustacean	Eubranchipus intricatus	Intricate Fairy Shrimp	SC		1970s
BELCHERTOWN	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2008
BELCHERTOWN	Fish	Notropis bifrenatus	Bridle Shiner	SC		1998
BELCHERTOWN	Mammal	Synaptomys cooperi	Southern Bog Lemming	SC		1974
BELCHERTOWN	Reptile	Glyptemys insculpta	Wood Turtle	SC		2007
BELCHERTOWN	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2006
BELCHERTOWN	Vascular Plant	Acer nigrum	Black Maple	SC		1891
BELCHERTOWN	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1875
BELCHERTOWN	Vascular Plant	Blephilia ciliata	Downy Wood-mint	E		1891
BELCHERTOWN	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		2000

BELCHERTOWN	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1883
BELCHERTOWN	Vascular Plant	Podostemum ceratophyllum	Threadfoot	SC		1925
BELCHERTOWN	Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	SC		1871
BELCHERTOWN	Vascular Plant	Scheuchzeria palustris	Pod-grass	E		1872
BELCHERTOWN	Vascular Plant	Utricularia resupinata	Resupinate Bladderwort	T		1873

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELLINGHAM	Amphibian	Ambystoma opacum	Marbled Salamander	T		2007
BELLINGHAM	Fish	Lampetra appendix	American Brook Lamprey	T		2001
BELLINGHAM	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1894
BELLINGHAM	Vascular Plant	Goodyera repens	Dwarf Rattlesnake-plantain	E		1886
BELLINGHAM	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1986

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BELMONT	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1800s
BELMONT	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		Historic
BELMONT	Bird	Tyto alba	Barn Owl	SC		1952
BELMONT	Bird	Gallinula chloropus	Common Moorhen	SC		Historic
BELMONT	Bird	Cistothorus platensis	Sedge Wren	E		1868
BELMONT	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2005
BELMONT	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1852
BELMONT	Vascular Plant	Carex gracilescens	Slender Woodland Sedge	E		1932

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERKLEY	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1913
BERKLEY	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1912
BERKLEY	Reptile	Glyptemys insculpta	Wood Turtle	SC		1991
BERKLEY	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		1982
BERKLEY	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2007
BERKLEY	Vascular Plant	Bidens eatonii	Eaton's Beggar-ticks	E		1923

BERKLEY	Vascular Plant	Cardamine longii	Long's Bitter-cress	E	1997
BERKLEY	Vascular Plant	Carex polymorpha	Variable Sedge	E	1908

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERLIN	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1800s
BERLIN	Amphibian	Ambystoma opacum	Marbled Salamander	T		2000
BERLIN	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1936
BERLIN	Bird	Ammodramus henslowii	Henslow's Sparrow	E		Historic
BERLIN	Mussel	Alasmidonta varicosa	Brook Floater (Swollen Wedgemussel)	E		1859
BERLIN	Reptile	Glyptemys insculpta	Wood Turtle	SC		1993
BERLIN	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1991
BERLIN	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1915
BERLIN	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1944

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BERNARDSTON	Butterfly/Moth	Erora laeta	Early Hairstreak	T		1988
BERNARDSTON	Vascular Plant	Actaea racemosa	Black Cohosh	E		1998

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BEVERLY	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1925
BEVERLY	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		1987
BEVERLY	Vascular Plant	Magnolia virginiana	Sweetbay Magnolia	E		1995
BEVERLY	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1874
BEVERLY	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E		1878
BEVERLY	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1902

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BILLERICA	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2008
BILLERICA	Fish	Notropis bifrenatus	Bridle Shiner	SC		1961
BILLERICA	Reptile	Emydoidea blandingii	Blanding's Turtle	T		1992
BILLERICA	Vascular Plant	Liatris scariosa var. novae -angliae	New England Blazing Star	SC		1917
BILLERICA	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E		1889
BILLERICA	Vascular Plant	Nabalus serpentarius	Lion's Foot	E		1871

BILLERICA	Vascular Plant	Nuphar microphylla	Tiny Cow-lily	E	1869
BILLERICA	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1900
BILLERICA	Vascular Plant	Viola brittoniana	Britton's Violet	T	1915

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BLACKSTONE	Fish	Lampetra appendix	American Brook Lamprey	T		2001
BLACKSTONE	Mussel	Alasmidonta undulata	Triangle Floater	SC		1999
BLACKSTONE	Mussel	Strophitus undulatus	Creeper	SC		1999

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BLANDFORD	Bird	Bartramia longicauda	Upland Sandpiper	E		Historic
BLANDFORD	Bird	Botaurus lentiginosus	American Bittern	E		2005
BLANDFORD	Bird	Circus cyaneus	Northern Harrier	T		1923
BLANDFORD	Bird	Cistothorus platensis	Sedge Wren	E		1982
BLANDFORD	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2008
BLANDFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		1995
BLANDFORD	Vascular Plant	Rhododendron maximum	Great Laurel	T		1946
BLANDFORD	Vascular Plant	Sisyrinchium mucronatum	Slender Blue-eyed Grass	E		1919

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOLTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2006
BOLTON	Amphibian	Ambystoma opacum	Marbled Salamander	T		2008
BOLTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2007
BOLTON	Bird	Botaurus lentiginosus	American Bittern	E		1990
BOLTON	Bird	Ixobrychus exilis	Least Bittern	E		1985
BOLTON	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1984
BOLTON	Bird	Rallus elegans	King Rail	T		1999
BOLTON	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2009
BOLTON	Reptile	Glyptemys insculpta	Wood Turtle	SC		1999
BOLTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1989
BOLTON	Vascular Plant	Carex typhina	Cat-tail Sedge	T		1999
BOLTON	Vascular Plant	Corallorhiza odontorhiza	Autumn Coralroot	SC		2006

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOSTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2003
BOSTON	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1932
BOSTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1910
BOSTON	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1928
BOSTON	Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		1927
BOSTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1898
BOSTON	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BOSTON	Bird	Bartramia longicauda	Upland Sandpiper	E		1993
BOSTON	Bird	Falco peregrinus	Peregrine Falcon	E		2007
BOSTON	Bird	Gavia immer	Common Loon	SC		1824
BOSTON	Bird	Pooecetes gramineus	Vesper Sparrow	T		1985
BOSTON	Bird	Sterna hirundo	Common Tern	SC		2008
BOSTON	Bird	Sternula antillarum	Least Tern	SC		2007
BOSTON	Bird	Tyto alba	Barn Owl	SC		1989
BOSTON	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		Historic
BOSTON	Butterfly/Moth	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E		Historic
BOSTON	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		2001
BOSTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1934
BOSTON	Butterfly/Moth	Rhodoecia aurantiago	Orange Sallow Moth	T		1988
BOSTON	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2009
BOSTON	Fish	Gasterosteus aculeatus	Threespine Stickleback	T		2000
BOSTON	Mussel	Alasmidonta undulata	Triangle Floater	SC		2005
BOSTON	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1841
BOSTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1939
BOSTON	Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1896
BOSTON	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1800s
BOSTON	Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		1877
BOSTON	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1878
BOSTON	Vascular Plant	Boechera missouriensis	Green Rock-cress	T		1930
BOSTON	Vascular Plant	Carex striata	Walter's Sedge	E		Historic
BOSTON	Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil	T		1896
BOSTON	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1885

BOSTON	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1918
BOSTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1933
BOSTON	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1909
BOSTON	Vascular Plant	Lycopus rubellus	Gypsywort	E		1896
BOSTON	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		Historic
BOSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1884
BOSTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1908
BOSTON	Vascular Plant	Ranunculus micranthus	Tiny-flowered Buttercup	E		1891
BOSTON	Vascular Plant	Rumex pallidus	Seabeach Dock	T		1984
BOSTON	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		Historic
BOSTON	Vascular Plant	Scirpus longii	Long's Bulrush	T		1907
BOSTON	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		2001
BOSTON	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1909
BOSTON	Vascular Plant	Viola brittoniana	Britton's Violet	T		1909

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOURNE	Amphibian	Ambystoma opacum	Marbled Salamander	T		1936
BOURNE	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		2003
BOURNE	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1935
BOURNE	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		2001
BOURNE	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		2007
BOURNE	Bird	Charadrius melodus	Piping Plover	T	T	2006
BOURNE	Bird	Circus cyaneus	Northern Harrier	T		2007
BOURNE	Bird	Pooecetes gramineus	Vesper Sparrow	T		2006
BOURNE	Bird	Sterna dougallii	Roseate Tern	E	E	2008
BOURNE	Bird	Sterna hirundo	Common Tern	SC		2008
BOURNE	Bird	Sternula antillarum	Least Tern	SC		2007
BOURNE	Bird	Tyto alba	Barn Owl	SC		1974
BOURNE	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		1996
BOURNE	Butterfly/Moth	Acronicta albarufa	Barrens Daggermoth	T		1998
BOURNE	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC		1998
BOURNE	Butterfly/Moth	Catocala herodias gerhardi	Gerhard's Underwing Moth	SC		1999
BOURNE	Butterfly/Moth	Cicinnus melsheimeri	Melsheimer's Sack Bearer	T		1998
BOURNE	Butterfly/Moth	Cingilia catenaria	Chain Dot Geometer	SC		2006
BOURNE	Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC		2006
BOURNE	Butterfly/Moth	Itame sp. 1 nr. inextricata	Pine Barrens Itame	SC		1998

BOURNE	Butterfly/Moth	Metarranthis pilosaria	Coastal Swamp Metarranthis Moth	SC		1998
BOURNE	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BOURNE	Butterfly/Moth	Zale sp. 1 nr. lunifera	Pine Barrens Zale	SC		1997
BOURNE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC		2007
BOURNE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2004
BOURNE	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T		1998
BOURNE	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		2007
BOURNE	Fish	Notropis bifrenatus	Bridle Shiner	SC		1993
BOURNE	Mussel	Leptodea ochracea	Tidewater Mucket	SC		1996
BOURNE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1997
BOURNE	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		2004
BOURNE	Reptile	Pseudemys rubriventris pop. 1	Northern Red-bellied Cooter	E	E	2003
BOURNE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2009
BOURNE	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1901
BOURNE	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1915
BOURNE	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC		2000
BOURNE	Vascular Plant	Eleocharis ovata	Ovate Spike-sedge	E		1992
BOURNE	Vascular Plant	Hypericum adpressum	Creeping St. John's-wort	T		2007
BOURNE	Vascular Plant	Juncus debilis	Weak Rush	E		1993
BOURNE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		2005
BOURNE	Vascular Plant	Lygodium palmatum	Climbing Fern	SC		1992
BOURNE	Vascular Plant	Malaxis bayardii	Bayard's Green Adder's-mouth	E		1919
BOURNE	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		2006
BOURNE	Vascular Plant	Polygonum glaucum	Sea-beach Knotweed	SC		1913
BOURNE	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC		1994
BOURNE	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC		1986
BOURNE	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC		1996
BOURNE	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC		1994
BOURNE	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		1913
BOURNE	Vascular Plant	Spiranthes vernalis	Grass-leaved Ladies'-tresses	T		1896
BOURNE	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1995
BOURNE	Vascular Plant	Triosteum perfoliatum	Broad Tinker's-weed	E		2004

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation

BOXBOROUGH	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2007
BOXBOROUGH	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2003
BOXBOROUGH	Reptile	Glyptemys insculpta	Wood Turtle	SC		2002
BOXBOROUGH	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2001

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOXFORD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2008
BOXFORD	Amphibian	Ambystoma opacum	Marbled Salamander	T		1983
BOXFORD	Bird	Tyto alba	Barn Owl	SC		1957
BOXFORD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1999
BOXFORD	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		Historic
BOXFORD	Reptile	Emydoidea blandingii	Blanding's Turtle	T		2008
BOXFORD	Reptile	Glyptemys insculpta	Wood Turtle	SC		2000
BOXFORD	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1883
BOXFORD	Vascular Plant	Carex livida	Glaucous Sedge	E		1890
BOXFORD	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1909
BOXFORD	Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1881
BOXFORD	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1882
BOXFORD	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		2004
BOXFORD	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		2004
BOXFORD	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1905
BOXFORD	Vascular Plant	Panicum philadelphicum ssp. philadelphicum	Philadelphia Panic-grass	SC		1953
BOXFORD	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1881
BOXFORD	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E		2004
BOXFORD	Vascular Plant	Senna hebecarpa	Wild Senna	E		1882
BOXFORD	Vascular Plant	Sparganium natans	Small Bur-reed	E		1997
BOXFORD	Vascular Plant	Viola adunca	Sand Violet	SC		2004

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BOYLSTON	Amphibian	Ambystoma opacum	Marbled Salamander	T		1995
BOYLSTON	Bird	Gavia immer	Common Loon	SC		2008
BOYLSTON	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2009
BOYLSTON	Bird	Podilymbus podiceps	Pied-billed Grebe	E		1978
BOYLSTON	Butterfly/Moth	Rhodoecia aurantiago	Orange Sallow Moth	T		2008
BOYLSTON	Fish	Notropis bifrenatus	Bridle Shiner	SC		1951
BOYLSTON	Reptile	Glyptemys insculpta	Wood Turtle	SC		1983

BOYLSTON	Vascular Plant	Hydrophyllum canadense	Broad Waterleaf	E	1943
BOYLSTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1932
BOYLSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	2000

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRAINTREE	Dragonfly/Damselfly	Anax longipes	Comet Darner	SC		1970
BRAINTREE	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1969
BRAINTREE	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		1989
BRAINTREE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		2000
BRAINTREE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1997
BRAINTREE	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1922
BRAINTREE	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1886

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BREWSTER	Bird	Charadrius melodus	Piping Plover	T	T	2006
BREWSTER	Bird	Parula americana	Northern Parula	T		2006
BREWSTER	Bird	Sterna dougallii	Roseate Tern	E	E	2008
BREWSTER	Bird	Sterna hirundo	Common Tern	SC		2008
BREWSTER	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		1981
BREWSTER	Butterfly/Moth	Apamea inebriata	Drunk Apamea Moth	SC		1981
BREWSTER	Butterfly/Moth	Bagisara rectifascia	Straight Lined Mallow Moth	SC		1982
BREWSTER	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BREWSTER	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2000
BREWSTER	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T		2003
BREWSTER	Dragonfly/Damselfly	Enallagma recurvatum	Pine Barrens Bluet	T		2005
BREWSTER	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		1987
BREWSTER	Fish	Notropis bifrenatus	Bridle Shiner	SC		1961
BREWSTER	Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		2002
BREWSTER	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2008
BREWSTER	Vascular Plant	Carex mitchelliana	Mitchell's Sedge	T		2006
BREWSTER	Vascular Plant	Corema conradii	Broom Crowberry	SC		1994
BREWSTER	Vascular Plant	Crocanthemum dumosum	Bushy Rockrose	SC		2006
BREWSTER	Vascular Plant	Dichanthelium dichotomum ssp. mattamuskeetense	Mattamuskeet Panic-grass	E		1918

BREWSTER	Vascular Plant	Dichanthelium ovale ssp. pseudopubescens	Commons's Panic-grass	SC	2006
BREWSTER	Vascular Plant	Gamochaeta purpurea	Purple Cudweed	E	1924
BREWSTER	Vascular Plant	Isoetes acadiensis	Acadian Quillwort	E	1989
BREWSTER	Vascular Plant	Lachnanthes caroliana	Redroot	SC	2002
BREWSTER	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1931
BREWSTER	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	2006
BREWSTER	Vascular Plant	Mertensia maritima	Oysterleaf	E	2001
BREWSTER	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T	1992
BREWSTER	Vascular Plant	Opuntia humifusa	Prickly Pear	E	1989
BREWSTER	Vascular Plant	Polygonum puritanorum	Pondshore Knotweed	SC	2003
BREWSTER	Vascular Plant	Rhexia mariana	Maryland Meadow Beauty	E	2008
BREWSTER	Vascular Plant	Rhynchospora scirpoides	Long-beaked Bald-sedge	SC	1986
BREWSTER	Vascular Plant	Rumex pallidus	Seabeach Dock	T	1994
BREWSTER	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC	2004
BREWSTER	Vascular Plant	Sagittaria teres	Terete Arrowhead	SC	2008
BREWSTER	Vascular Plant	Spartina cynosuroides	Salt Reedgrass	T	2004
BREWSTER	Vascular Plant	Utricularia resupinata	Resupinate Bladderwort	T	2002

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRIDGEWATER	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1997
BRIDGEWATER	Bird	Asio otus	Long-eared Owl	SC		1978
BRIDGEWATER	Bird	Bartramia longicauda	Upland Sandpiper	E		1980
BRIDGEWATER	Bird	Tyto alba	Barn Owl	SC		1981
BRIDGEWATER	Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1994
BRIDGEWATER	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1994
BRIDGEWATER	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T		2004
BRIDGEWATER	Mussel	Alasmidonta undulata	Triangle Floater	SC		1999
BRIDGEWATER	Mussel	Leptodea ochracea	Tidewater Mucket	SC		1997
BRIDGEWATER	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1997

BRIDGEWATER	Reptile	Glyptemys insculpta	Wood Turtle	SC		2004
BRIDGEWATER	Reptile	Pseudemys rubriventris pop. 1	Northern Red-bellied Cooter	E	E	2005
BRIDGEWATER	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2009
BRIDGEWATER	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E		2005
BRIDGEWATER	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1912
BRIDGEWATER	Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC		2005
BRIDGEWATER	Vascular Plant	Scirpus longii	Long's Bulrush	T		1988

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BRIMFIELD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2000
BRIMFIELD	Bird	Botaurus lentiginosus	American Bittern	E		1997
BRIMFIELD	Bird	Ixobrychus exilis	Least Bittern	E		2007
BRIMFIELD	Dragonfly/Damselfly	Ophiogomphus aspersus	Brook Snaketail	SC		2004
BRIMFIELD	Fish	Notropis bifrenatus	Bridle Shiner	SC		1999
BRIMFIELD	Mussel	Alasmidonta undulata	Triangle Floater	SC		1982
BRIMFIELD	Mussel	Strophitus undulatus	Creeper	SC		1982
BRIMFIELD	Reptile	Glyptemys insculpta	Wood Turtle	SC		2006
BRIMFIELD	Vascular Plant	Isoetes lacustris	Lake Quillwort	E		1930

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROCKTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1909
BROCKTON	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2003
BROCKTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1900
BROCKTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1902

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROOKFIELD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1990

BROOKFIELD	Amphibian	Ambystoma opacum	Marbled Salamander	T	1996
BROOKFIELD	Bird	Bartramia longicauda	Upland Sandpiper	E	Historic
BROOKFIELD	Bird	Botaurus lentiginosus	American Bittern	E	2008
BROOKFIELD	Bird	Cistothorus platensis	Sedge Wren	E	1992
BROOKFIELD	Bird	Haliaeetus leucocephalus	Bald Eagle	E	2008
BROOKFIELD	Bird	Ixobrychus exilis	Least Bittern	E	2007
BROOKFIELD	Bird	Podilymbus podiceps	Pied-billed Grebe	E	1993
BROOKFIELD	Bird	Rallus elegans	King Rail	T	2007
BROOKFIELD	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC	2003
BROOKFIELD	Fish	Notropis bifrenatus	Bridle Shiner	SC	2003
BROOKFIELD	Mussel	Alasmidonta undulata	Triangle Floater	SC	1999
BROOKFIELD	Vascular Plant	Carex polymorpha	Variable Sedge	E	2004
BROOKFIELD	Vascular Plant	Clematis occidentalis	Purple Clematis	SC	2007
BROOKFIELD	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T	2007
BROOKFIELD	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E	1898
BROOKFIELD	Vascular Plant	Poa saltuensis ssp. languida	Drooping Speargrass	E	2000
BROOKFIELD	Vascular Plant	Potamogeton vaseyi	Vasey's Pondweed	E	1998
BROOKFIELD	Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	SC	2007
BROOKFIELD	Vascular Plant	Scirpus longii	Long's Bulrush	T	2000

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BROOKLINE	Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		Historic
BROOKLINE	Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		Historic
BROOKLINE	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1905
BROOKLINE	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		1932
BROOKLINE	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1897
BROOKLINE	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1903
BROOKLINE	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T		1902
BROOKLINE	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1912

BROOKLINE	Vascular Plant	Viola brittoniana	Britton's Violet	T	1913

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BUCKLAND	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1989
BUCKLAND	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		2001
BUCKLAND	Butterfly/Moth	Erora laeta	Early Hairstreak	T		1988
BUCKLAND	Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		2004
BUCKLAND	Dragonfly/Damselfly	Gomphus abbreviatus	Spine-crowned Clubtail	E		2004
BUCKLAND	Dragonfly/Damselfly	Neurocordulia yamaskanensis	Stygian Shadowdragon	SC		2004
BUCKLAND	Dragonfly/Damselfly	Rhionaeschna mutata	Spatterdock Darner	SC		2004
BUCKLAND	Fish	Catostomus catostomus	Longnose Sucker	SC		1989
BUCKLAND	Reptile	Glyptemys insculpta	Wood Turtle	SC		2007
BUCKLAND	Vascular Plant	Alnus viridis ssp. crispa	Mountain Alder	T		2004
BUCKLAND	Vascular Plant	Amelanchier sanguinea	Roundleaf Shadbush	SC		1911
BUCKLAND	Vascular Plant	Aplectrum hyemale	Putty-root	E		1904
BUCKLAND	Vascular Plant	Corallorhiza odontorhiza	Autumn Coralroot	SC		2006
BUCKLAND	Vascular Plant	Huperzia selago	Mountain Firmoss	E		1899
BUCKLAND	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1913
BUCKLAND	Vascular Plant	Platanthera dilatata	Leafy White Orchis	T		1932
BUCKLAND	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		1907
BUCKLAND	Vascular Plant	Symphyotrichum tradescantii	Tradescant's Aster	T		2002

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
BURLINGTON	Fish	Notropis bifrenatus	Bridle Shiner	SC		1994
BURLINGTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1998
BURLINGTON	Vascular Plant	Carex polymorpha	Variable Sedge	E		2008
BURLINGTON	Vascular Plant	Nabalus serpentarius	Lion's Foot	E		1906

Return to top

Updated: October 27, 2009

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

Appendix E
Boston Water and Sewer Commission Permit Application

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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Boston Medical Center Address: 750 Albany Street, Boston, MA 02218

Phone number: 617-532-5004 Fax number: _____

Contact person name: Gerald Topping Title: Senior Project Manager

Cell number: _____ Email address: gerald.topping@bmc.org

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify):_____

Owner's Information (if different from above):

Owner of property being dewatered: _____

Owner's mailing address: _____ Phone number: _____

Location of Discharge & Proposed Treatment System(s):

Street number and name: 840 Harrison Avenue, Boston, MA Neighborhood South End

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

Describe Proposed Pre-Treatment System(s): Sedimentation Tank

BWSC Outfall No. CSO BOS 070 Receiving Waters Fort Point Channel by way of Outfall

---

Temporary Discharges (Provide Anticipated Dates of Discharge): From 8/1/2014 To 8/1/2015

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

Permanent Discharges

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

---

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

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

BWSC Use Only: Date Received _____ Comments: _____

Appendix F
Laboratory Data Reports for Groundwater Sampling/Testing

ANALYTICAL REPORT

Lab Number:	L1411561
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Lee Vanzler
Phone:	(617) 886-7561
Project Name:	BOSTON MEDICAL CENTER
Project Number:	27668-100
Report Date:	06/04/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1411561-01	MW-8	Not Specified	05/29/14 10:00
L1411561-02	TRIP BLANK	Not Specified	05/29/14 00:00

Project Name:	BOSTON MEDICAL CENTER	**Lab Number:**	L1411561
Project Number:	27668-100	**Report Date:**	06/04/14

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: BOSTON MEDICAL CENTER **Lab Number:** L1411561
Project Number: 27668-100 **Report Date:** 06/04/14

Case Narrative (continued)

Sample Receipt

The sample was field filtered for Dissolved Metals.

Total Metals

L1411561-01 (MW-8) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

Dissolved Metals

L1411561-01 (MW-8) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG694541-4 MS recovery, performed on L1411561-01 (MW-8), is outside the acceptance criteria for iron (60%). A post digestion spike was performed and was within acceptance criteria.

Chromium, Hexavalent

L1411561-01 has an elevated detection limit due to the dilution required by matrix interferences encountered during analysis.

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

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative Date: 06/04/14

ORGANICS

VOLATILES

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	06/02/14 12:22		
Analyst:	PD		

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-01 Date Collected: 05/29/14 10:00

Client ID: MW-8 Date Received: 05/29/14

Sample Location: Not Specified Field Prep: See Narrative

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-01 Date Collected: 05/29/14 10:00

Client ID: MW-8 Date Received: 05/29/14

Sample Location: Not Specified Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	06/02/14 12:22		
Analyst:	PD		

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	06/02/14 11:30
Analytical Date:	06/02/14 18:37		
Analyst:	SH		

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-02
Client ID: TRIP BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/02/14 17:02
Analyst: PD

Date Collected: 05/29/14 00:00
Date Received: 05/29/14
Field Prep: Not Specified

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-02 Date Collected: 05/29/14 00:00

Client ID: TRIP BLANK Date Received: 05/29/14

Sample Location: Not Specified Field Prep: Not Specified

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-02 Date Collected: 05/29/14 00:00

Client ID: TRIP BLANK Date Received: 05/29/14

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 06/02/14 17:08
Analyst: SH

Extraction Date: 06/02/14 11:30

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG694196-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 06/02/14 11:11
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG694266-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/02/14 11:11
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG694282-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/02/14 11:11
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG694282-3					
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrolein	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/02/14 11:11
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG694282-3					
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Halothane	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/02/14 11:11
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG694282-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01		Batch: WG694196-2						
1,2-Dibromoethane	112		-		70-130	-		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG694266-1 WG694266-2								
1,4-Dioxane	86		82		70-130	5		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG694282-1 WG694282-2								
Methylene chloride	98		100		70-130	2		20
1,1-Dichloroethane	97		98		70-130	1		20
Chloroform	103		104		70-130	1		20
Carbon tetrachloride	111		112		63-132	1		20
1,2-Dichloropropane	98		96		70-130	2		20
Dibromochloromethane	106		107		63-130	1		20
1,1,2-Trichloroethane	101		98		70-130	3		20
Tetrachloroethene	115		116		70-130	1		20
Chlorobenzene	109		109		75-130	0		25
Trichlorofluoromethane	98		100		62-150	2		20
1,2-Dichloroethane	97		95		70-130	2		20
1,1,1-Trichloroethane	113		112		67-130	1		20
Bromodichloromethane	102		101		67-130	1		20
trans-1,3-Dichloropropene	89		89		70-130	0		20
cis-1,3-Dichloropropene	105		104		70-130	1		20
1,1-Dichloropropene	101		102		70-130	1		20
Bromoform	111		108		54-136	3		20
1,1,2,2-Tetrachloroethane	95		93		67-130	2		20
Benzene	102		101		70-130	1		25
Toluene	108		108		70-130	0		25
Ethylbenzene	108		108		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG694282-1 WG694282-2								
Chloromethane	**53**	Q	**57**	Q	64-130	7		20
Bromomethane	46		55		39-139	18		20
Vinyl chloride	80		83		55-140	4		20
Chloroethane	101		105		55-138	4		20
1,1-Dichloroethene	102		106		61-145	4		25
trans-1,2-Dichloroethene	99		103		70-130	4		20
Trichloroethene	103		106		70-130	3		25
1,2-Dichlorobenzene	108		107		70-130	1		20
1,3-Dichlorobenzene	112		110		70-130	2		20
1,4-Dichlorobenzene	111		110		70-130	1		20
Methyl tert butyl ether	99		96		63-130	3		20
p/m-Xylene	112		112		70-130	0		20
o-Xylene	112		111		70-130	1		20
cis-1,2-Dichloroethene	101		101		70-130	0		20
Dibromomethane	98		97		70-130	1		20
1,4-Dichlorobutane	92		90		70-130	2		20
1,2,3-Trichloropropane	95		93		64-130	2		20
Styrene	112		111		70-130	1		20
Dichlorodifluoromethane	76		77		36-147	1		20
Acetone	64		66		58-148	3		20
Carbon disulfide	83		92		51-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG694282-1 WG694282-2								
2-Butanone	**51**	Q	**52**	Q	63-138	2		20
Vinyl acetate	84		85		70-130	1		20
4-Methyl-2-pentanone	81		82		59-130	1		20
2-Hexanone	72		73		57-130	1		20
Ethyl methacrylate	92		93		70-130	1		20
Acrolein	100		108		70-130	8		20
Acrylonitrile	83		80		70-130	4		20
Bromochloromethane	109		111		70-130	2		20
Tetrahydrofuran	73		75		58-130	3		20
2,2-Dichloropropane	117		115		63-133	2		20
1,2-Dibromoethane	103		101		70-130	2		20
1,3-Dichloropropane	98		96		70-130	2		20
1,1,1,2-Tetrachloroethane	123		122		64-130	1		20
Bromobenzene	115		112		70-130	3		20
n-Butylbenzene	107		108		53-136	1		20
sec-Butylbenzene	111		110		70-130	1		20
tert-Butylbenzene	114		114		70-130	0		20
o-Chlorotoluene	108		106		70-130	2		20
p-Chlorotoluene	110		108		70-130	2		20
1,2-Dibromo-3-chloropropane	81		81		41-144	0		20
Hexachlorobutadiene	107		109		63-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG694282-1 WG694282-2								
Isopropylbenzene	109		110		70-130	1		20
p-Isopropyltoluene	114		113		70-130	1		20
Naphthalene	95		96		70-130	1		20
n-Propylbenzene	110		109		69-130	1		20
1,2,3-Trichlorobenzene	96		97		70-130	1		20
1,2,4-Trichlorobenzene	100		101		70-130	1		20
1,3,5-Trimethylbenzene	113		111		64-130	2		20
1,3,5-Trichlorobenzene	112		111		70-130	1		20
1,2,4-Trimethylbenzene	112		110		70-130	2		20
trans-1,4-Dichloro-2-butene	84		85		70-130	1		20
Halothane	102		106		70-130	4		20
Ethyl ether	106		104		59-134	2		20
Methyl Acetate	87		82		70-130	6		20
Ethyl Acetate	84		85		70-130	1		20
Isopropyl Ether	84		84		70-130	0		20
Cyclohexane	88		89		70-130	1		20
Tert-Butyl Alcohol	113		118		70-130	4		20
Ethyl-Tert-Butyl-Ether	95		93		70-130	2		20
Tertiary-Amyl Methyl Ether	91		91		66-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	112		116		70-130	4		20
Methyl cyclohexane	107		108		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG694282-1 WG694282-2								
p-Diethylbenzene	123		120		70-130	2		20
4-Ethyltoluene	113		112		70-130	1		20
1,2,4,5-Tetramethylbenzene	114		112		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		92		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	97		96		70-130
Dibromofluoromethane	100		103		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694196-3 QC Sample: L1411561-01 Client ID: MW-8													
1,2-Dibromoethane	ND	0.258	0.306	119		-	-		70-130	-		20	A

SEMIVOLATILES

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	05/30/14 02:34
Analytical Date:	06/03/14 12:18		
Analyst:	RC		

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

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-01 Date Collected: 05/29/14 10:00

Client ID: MW-8 Date Received: 05/29/14

Sample Location: Not Specified Field Prep: See Narrative

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	91		41-149

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	05/30/14 02:32
Analytical Date:	06/04/14 09:28		
Analyst:	MW		

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	93		41-149

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/01/14 10:57
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 05/30/14 02:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG693570-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/01/14 10:57
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 05/30/14 02:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG693570-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	99		41-149

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/14 08:35
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 05/30/14 02:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG693571-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/14 08:35
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 05/30/14 02:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG693571-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	72		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG693570-2 WG693570-3								
Benzidine	26		14		10-75	**60**	Q	30
1,2,4-Trichlorobenzene	54		56		39-98	4		30
Bis(2-chloroethyl)ether	69		71		40-140	3		30
1,2-Dichlorobenzene	54		56		40-140	4		30
1,3-Dichlorobenzene	51		54		40-140	6		30
1,4-Dichlorobenzene	53		55		36-97	4		30
3,3'-Dichlorobenzidine	89		90		40-140	1		30
2,4-Dinitrotoluene	**104**	Q	**109**	Q	24-96	5		30
2,6-Dinitrotoluene	98		98		40-140	0		30
Azobenzene	89		92		40-140	3		30
4-Chlorophenyl phenyl ether	93		93		40-140	0		30
4-Bromophenyl phenyl ether	100		102		40-140	2		30
Bis(2-chloroisopropyl)ether	58		63		40-140	8		30
Bis(2-chloroethoxy)methane	70		72		40-140	3		30
Hexachlorocyclopentadiene	41		40		40-140	2		30
Isophorone	72		72		40-140	0		30
Nitrobenzene	74		78		40-140	5		30
NDPA/DPA	98		98		40-140	0		30
Bis(2-ethylhexyl)phthalate	107		111		40-140	4		30
Butyl benzyl phthalate	105		110		40-140	5		30
Di-n-butylphthalate	101		108		40-140	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG693570-2 WG693570-3								
Di-n-octylphthalate	106		112		40-140	6		30
Diethyl phthalate	98		101		40-140	3		30
Dimethyl phthalate	96		98		40-140	2		30
Aniline	**28**	Q	**25**	Q	40-140	11		30
4-Chloroaniline	40		**39**	Q	40-140	3		30
2-Nitroaniline	91		92		52-143	1		30
3-Nitroaniline	72		74		25-145	3		30
4-Nitroaniline	99		103		51-143	4		30
Dibenzofuran	86		86		40-140	0		30
n-Nitrosodimethylamine	31		35		22-74	12		30
2,4,6-Trichlorophenol	91		93		30-130	2		30
p-Chloro-m-cresol	81		80		23-97	1		30
2-Chlorophenol	64		68		27-123	6		30
2,4-Dichlorophenol	78		80		30-130	3		30
2,4-Dimethylphenol	69		71		30-130	3		30
2-Nitrophenol	75		78		30-130	4		30
4-Nitrophenol	39		49		10-80	23		30
2,4-Dinitrophenol	86		84		20-130	2		30
4,6-Dinitro-o-cresol	111		110		20-164	1		30
Phenol	26		27		12-110	4		30
2-Methylphenol	53		55		30-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG693570-2 WG693570-3								
3-Methylphenol/4-Methylphenol	50		52		30-130	4		30
2,4,5-Trichlorophenol	91		88		30-130	3		30
Benzoic Acid	15		17		10-164	13		30
Benzyl Alcohol	48		51		26-116	6		30
Carbazole	97		106		55-144	9		30
Pyridine	20		20		10-66	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	36		39		21-120
Phenol-d6	24		25		10-120
Nitrobenzene-d5	71		77		23-120
2-Fluorobiphenyl	75		73		15-120
2,4,6-Tribromophenol	114		**123**	Q	10-120
4-Terphenyl-d14	99		107		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG693571-2 WG693571-3								
Acenaphthene	65		67		37-111	3		40
2-Chloronaphthalene	66		68		40-140	3		40
Fluoranthene	76		78		40-140	3		40
Hexachlorobutadiene	56		59		40-140	5		40
Naphthalene	65		68		40-140	5		40
Benzo(a)anthracene	82		82		40-140	0		40
Benzo(a)pyrene	79		80		40-140	1		40
Benzo(b)fluoranthene	84		84		40-140	0		40
Benzo(k)fluoranthene	75		74		40-140	1		40
Chrysene	78		80		40-140	3		40
Acenaphthylene	69		71		40-140	3		40
Anthracene	73		74		40-140	1		40
Benzo(ghi)perylene	71		71		40-140	0		40
Fluorene	70		74		40-140	6		40
Phenanthrene	72		73		40-140	1		40
Dibenzo(a,h)anthracene	80		80		40-140	0		40
Indeno(1,2,3-cd)Pyrene	76		77		40-140	1		40
Pyrene	77		77		26-127	0		40
1-Methylnaphthalene	64		66		40-140	3		40
2-Methylnaphthalene	69		72		40-140	4		40
Pentachlorophenol	55		60		9-103	9		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG693571-2 WG693571-3								
Hexachlorobenzene	70		72		40-140	3		40
Hexachloroethane	61		64		40-140	5		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	36		38		21-120
Phenol-d6	24		26		10-120
Nitrobenzene-d5	70		73		23-120
2-Fluorobiphenyl	64		64		15-120
2,4,6-Tribromophenol	80		84		10-120
4-Terphenyl-d14	75		77		41-149

PCBS

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

SAMPLE RESULTS

Lab ID:	L1411561-01	Date Collected:	05/29/14 10:00
Client ID:	MW-8	Date Received:	05/29/14
Sample Location:	Not Specified	Field Prep:	See Narrative
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	05/30/14 16:56
Analytical Date:	06/02/14 00:35	Cleanup Method1:	EPA 3665A
Analyst:	TQ	Cleanup Date1:	06/01/14
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/01/14

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	80		30-150	A

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 06/02/14 01:15
Analyst: TQ

Extraction Method: EPA 608
Extraction Date: 05/30/14 16:56
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/01/14
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/01/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG693828-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	98		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693828-3 QC Sample: L1411561-01 Client ID: MW-8													
Aroclor 1016	ND	2	1.71	86		-	-		40-140	-		50	A
Aroclor 1260	ND	2	1.74	87		-	-		40-140	-		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84				30-150	A
Decachlorobiphenyl	86				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG693828-2									
Aroclor 1016	78		-		40-140	-		50	A
Aroclor 1260	86		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65				30-150	A
Decachlorobiphenyl	93				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693828-4 QC Sample: L1411561-01 Client ID: MW-8							
Aroclor 1016	ND	ND	ug/l	NC		50	A
Aroclor 1221	ND	ND	ug/l	NC		50	A
Aroclor 1232	ND	ND	ug/l	NC		50	A
Aroclor 1242	ND	ND	ug/l	NC		50	A
Aroclor 1248	ND	ND	ug/l	NC		50	A
Aroclor 1254	ND	ND	ug/l	NC		50	A
Aroclor 1260	ND	ND	ug/l	NC		50	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		80		30-150	A
Decachlorobiphenyl	80		80		30-150	A

METALS

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-01
Client ID: MW-8
Sample Location: Not Specified
Matrix: Water
Date Collected: 05/29/14 10:00
Date Received: 05/29/14
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.00500	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Arsenic, Total	0.00679		mg/l	0.00250	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00100	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Chromium, Total	ND		mg/l	0.00500	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Copper, Total	ND		mg/l	0.00500	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Iron, Total	1.4		mg/l	0.05	--	1	06/02/14 12:41	06/03/14 17:36	EPA 3005A	19,200.7	TT
Lead, Total	ND		mg/l	0.00250	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Mercury, Total	ND		mg/l	0.0002	--	1	05/30/14 12:05	06/02/14 10:17	EPA 7470A	3,245.1	JH
Nickel, Total	0.00414		mg/l	0.00250	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Selenium, Total	ND		mg/l	0.0250	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Silver, Total	ND		mg/l	0.00200	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Zinc, Total	ND		mg/l	0.05000	--	5	06/02/14 12:41	06/03/14 21:02	EPA 3005A	1,6020A	BM
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.00500	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Arsenic, Dissolved	0.00614		mg/l	0.00250	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00100	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00500	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00500	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Iron, Dissolved	1.2		mg/l	0.05	--	1	06/03/14 10:03	06/03/14 17:31	NA	19,200.7	JH
Lead, Dissolved	ND		mg/l	0.00250	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.0002	--	1	05/30/14 12:05	06/02/14 10:41	EPA 7470A	3,245.1	JH
Nickel, Dissolved	0.00489		mg/l	0.00250	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.0250	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00200	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.05000	--	5	06/03/14 10:03	06/03/14 20:50	NA	1,6020A	BM

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG693133-1										
Iron, Total	ND		mg/l	0.05	--	1	06/02/14 12:41	06/03/14 16:38	19,200.7	TT

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG693683-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	05/30/14 12:09	06/02/14 10:38	3,245.1	JH

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG693712-1										
Mercury, Total	ND		mg/l	0.0002	--	1	05/30/14 12:05	06/02/14 10:13	3,245.1	JH

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG694251-1										
Antimony, Total	ND		mg/l	0.00100	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Arsenic, Total	ND		mg/l	0.00050	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00020	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Chromium, Total	ND		mg/l	0.00100	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Copper, Total	ND		mg/l	0.00100	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Lead, Total	ND		mg/l	0.00050	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

Method Blank Analysis
Batch Quality Control

Nickel, Total	ND	mg/l	0.00050	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Selenium, Total	ND	mg/l	0.00500	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Silver, Total	ND	mg/l	0.00040	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM
Zinc, Total	ND	mg/l	0.01000	--	1	06/02/14 12:41	06/03/14 19:44	1,6020A	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG694540-1										
Antimony, Dissolved	ND		mg/l	0.00100	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.00050	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00100	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00050	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Nickel, Dissolved	ND		mg/l	0.00050	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.01000	--	1	06/03/14 10:03	06/03/14 20:24	1,6020A	BM

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG694541-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	06/03/14 10:03	06/03/14 17:00	19,200.7	JH

Prep Information

Digestion Method: NA

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG693133-2								
Iron, Total	110		-		85-115	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG693683-2								
Mercury, Dissolved	111		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG693712-2								
Mercury, Total	107		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG694251-2								
Antimony, Total	92		-		80-120	-		
Arsenic, Total	96		-		80-120	-		
Cadmium, Total	100		-		80-120	-		
Chromium, Total	93		-		80-120	-		
Copper, Total	99		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	99		-		80-120	-		
Selenium, Total	102		-		80-120	-		
Silver, Total	95		-		80-120	-		
Zinc, Total	98		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG694540-2					
Antimony, Dissolved	88	-	80-120	-	
Arsenic, Dissolved	95	-	80-120	-	
Cadmium, Dissolved	98	-	80-120	-	
Chromium, Dissolved	93	-	80-120	-	
Copper, Dissolved	98	-	80-120	-	
Lead, Dissolved	102	-	80-120	-	
Nickel, Dissolved	98	-	80-120	-	
Selenium, Dissolved	98	-	80-120	-	
Silver, Dissolved	94	-	80-120	-	
Zinc, Dissolved	94	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG694541-2					
Iron, Dissolved	94	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693133-4 QC Sample: L1410947-01 Client ID: MS Sample												
Iron, Total	ND	1	1.1	110		-	-		75-125	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693683-4 QC Sample: L1411561-01 Client ID: MW-8												
Mercury, Dissolved	ND	0.005	0.0046	93		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693712-4 QC Sample: L1411561-01 Client ID: MW-8												
Mercury, Total	ND	0.005	0.0052	103		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694251-4 QC Sample: L1411561-01 Client ID: MW-8												
Antimony, Total	ND	0.5	0.5278	106		-	-		75-125	-		20
Arsenic, Total	0.00679	0.12	0.1215	96		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05203	102		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.1849	92		-	-		75-125	-		20
Copper, Total	ND	0.25	0.2397	96		-	-		75-125	-		20
Lead, Total	ND	0.51	0.5226	102		-	-		75-125	-		20
Nickel, Total	0.00414	0.5	0.4788	95		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.110	92		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04781	96		-	-		75-125	-		20
Zinc, Total	ND	0.5	0.4745	95		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694540-4 QC Sample: L1411561-01 Client ID: MW-8										
Antimony, Dissolved	ND	0.5	0.4839	97		-	-	75-125	-	20
Arsenic, Dissolved	0.00614	0.12	0.1235	98		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05244	103		-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.1915	96		-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2464	98		-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5390	106		-	-	75-125	-	20
Nickel, Dissolved	0.00489	0.5	0.4921	97		-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.112	93		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.03740	75		-	-	75-125	-	20
Zinc, Dissolved	ND	0.5	0.4833	97		-	-	75-125	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694541-4 QC Sample: L1411561-01 Client ID: MW-8										
Iron, Dissolved	1.2	1	1.8	**60**	Q	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693133-3 QC Sample: L1410947-01 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693683-3 QC Sample: L1411561-01 Client ID: MW-8						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693712-3 QC Sample: L1411561-01 Client ID: MW-8						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694251-3 QC Sample: L1411561-01 Client ID: MW-8						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00679	0.00613	mg/l	10		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00414	0.00489	mg/l	17		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694540-3 QC Sample: L1411561-01 Client ID: MW-8					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.00614	0.00636	mg/l	4	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	0.00489	0.00458	mg/l	7	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694541-3 QC Sample: L1411561-01 Client ID: MW-8					
Iron, Dissolved	1.2	1.2	mg/l	0	20

INORGANICS
&
MISCELLANEOUS

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100
Lab Number: L1411561
Report Date: 06/04/14

SAMPLE RESULTS

Lab ID: L1411561-01
Client ID: MW-8
Sample Location: Not Specified
Matrix: Water

Date Collected: 05/29/14 10:00
Date Received: 05/29/14
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/03/14 11:25	30,2540D	DW
Cyanide, Total	0.005		mg/l	0.005	--	1	06/03/14 08:29	06/03/14 14:26	30,4500CN-CE	JO
Cyanide, Amenable	ND		mg/l	0.010	--	2	06/02/14 14:25	06/03/14 13:53	30,4500CN-G	SP
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	06/03/14 10:15	06/04/14 10:06	64,9014(M)	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/30/14 01:26	30,4500CL-D	JA
TPH	ND		mg/l	4.40	--	1.1	06/03/14 10:30	06/04/14 08:00	74,1664A	ML
Phenolics, Total	ND		mg/l	0.03	--	1	05/30/14 14:15	05/30/14 17:29	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.050	--	5	05/29/14 20:41	05/29/14 20:48	30,3500CR-D	JA
Anions by Ion Chromatography - Westborough Lab										
Chloride	3400		mg/l	50.0	--	100	-	05/31/14 06:13	44,300.0	AU

Project Name: BOSTON MEDICAL CENTER **Lab Number:** L1411561

Project Number: 27668-100 **Report Date:** 06/04/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG693515-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/29/14 20:41	05/29/14 20:46	30,3500CR-D	JA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG693554-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/30/14 01:26	30,4500CL-D	JA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG693770-1										
Phenolics, Total	ND		mg/l	0.03	--	1	05/30/14 11:00	05/30/14 17:54	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG694247-1										
Cyanide, Total	ND		mg/l	0.005	--	1	06/03/14 08:29	06/03/14 14:21	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG694341-1										
Cyanide, Amenable	ND		mg/l	0.010	--	2	06/02/14 14:25	06/03/14 13:53	30,4500CN-G	SP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG694435-1										
Chloride	ND		mg/l	0.500	--	1	-	05/31/14 00:37	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG694490-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/03/14 11:25	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG694534-1										
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	06/03/14 10:15	06/04/14 09:59	64,9014(M)	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG694663-1										
TPH	ND		mg/l	4.00	--	1	06/03/14 10:30	06/04/14 08:00	74,1664A	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG693515-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG693554-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG693770-2								
Phenolics, Total	100		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG694247-2								
Cyanide, Total	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG694341-2								
Cyanide, Amenable	93		-			-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG694435-2								
Chloride	97		-		90-110	-		
General Chemistry - Westborough Lab NEGATIVE LCS Associated sample(s): 01 Batch: WG694534-2								
Cyanide, Physiologically Available	**3**		-		0-10	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BOSTON MEDICAL CENTER

Project Number: 27668-100

Lab Number: L1411561

Report Date: 06/04/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG694534-3					
Cyanide, Physiologically Available	96	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG694663-2					
TPH	80	-	64-132	-	34

Matrix Spike Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693515-4 QC Sample: L1411561-01 Client ID: MW-8												
Chromium, Hexavalent	ND	0.5	0.461	92		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693770-4 QC Sample: L1411561-01 Client ID: MW-8												
Phenolics, Total	ND	0.4	0.38	94		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694247-3 QC Sample: L1411701-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.200	100		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694435-3 QC Sample: L1410797-07 Client ID: MS Sample												
Chloride	10400	2000	12000	82		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694534-5 QC Sample: L1411561-01 Client ID: MW-8												
Cyanide, Physiologically Available	ND	0.2	0.198	99		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694663-4 QC Sample: L1411642-01 Client ID: MS Sample												
TPH	ND	23.5	17.4	74		-	-		64-132	-		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693515-3 QC Sample: L1411561-01 Client ID: MW-8						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693554-3 QC Sample: L1411561-01 Client ID: MW-8						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG693770-3 QC Sample: L1411561-01 Client ID: MW-8						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694247-4 QC Sample: L1411561-01 Client ID: MW-8						
Cyanide, Total	0.005	0.005	mg/l	3		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694341-3 QC Sample: L1411561-01 Client ID: MW-8						
Cyanide, Amenable	ND	ND	mg/l	NC		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694435-4 QC Sample: L1410797-07 Client ID: DUP Sample						
Chloride	10400	10400	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694490-2 QC Sample: L1411432-01 Client ID: DUP Sample						
Solids, Total Suspended	99	90	mg/l	10		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694534-4 QC Sample: L1411561-01 Client ID: MW-8						
Cyanide, Physiologically Available	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG694663-3 QC Sample: L1411642-02 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

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(*)
L1411561-01A	Vial HCl preserved	A	N/A	1.7	Y	Absent	8260-SIM(14),8260(14)
L1411561-01B	Vial HCl preserved	A	N/A	1.7	Y	Absent	8260-SIM(14),8260(14)
L1411561-01C	Vial HCl preserved	A	N/A	1.7	Y	Absent	8260-SIM(14),8260(14)
L1411561-01D	Amber 1000ml unpreserved	A	N/A	1.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1411561-01E	Amber 1000ml unpreserved	A	N/A	1.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1411561-01G	Amber 1000ml unpreserved	A	7	1.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1411561-01H	Amber 1000ml unpreserved	A	7	1.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1411561-01I	Amber 1000ml Na2S2O3	A	7	1.7	Y	Absent	PCB-608(7)
L1411561-01J	Amber 1000ml Na2S2O3	A	7	1.7	Y	Absent	PCB-608(7)
L1411561-01K	Plastic 250ml NaOH preserved	A	>12	1.7	Y	Absent	TCN-4500(14),ACN-4500(14),PACN(14)
L1411561-01L	Amber 1000ml HCl preserved	A	<2	1.7	Y	Absent	TPH-1664(28)
L1411561-01M	Amber 1000ml HCl preserved	A	<2	1.7	Y	Absent	TPH-1664(28)
L1411561-01N	Amber 1000ml H2SO4 preserved	A	<2	1.7	Y	Absent	TPHENOL-420(28)
L1411561-01O	Plastic 1000ml unpreserved	A	7	1.7	Y	Absent	TSS-2540(7)
L1411561-01P	Plastic 250ml unpreserved	A	7	1.7	Y	Absent	CL-300(28),HEXCR-3500(1)
L1411561-01Q	Plastic 250ml HNO3 preserved	A	<2	1.7	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1411561-01R	Vial Na2S2O3 preserved	A	N/A	1.7	Y	Absent	504(14)
L1411561-01S	Vial Na2S2O3 preserved	A	N/A	1.7	Y	Absent	504(14)
L1411561-01T	Plastic 500ml unpreserved	A	7	1.7	Y	Absent	TRC-4500(1)
L1411561-01U	Plastic 250ml HNO3 preserved	A	<2	1.7	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)

*Values in parentheses indicate holding time in days

Project Name: BOSTON MEDICAL CENTER
Project Number: 27668-100

Lab Number: L1411561
Report Date: 06/04/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1411561-01V	Plastic 250ml NaOH preserved	A	<2	1.7	Y	Absent	TCN-4500(14),ACN-4500(14),PACN(14)
L1411561-02A	Vial HCl preserved	A	N/A	1.7	Y	Absent	8260(14)
L1411561-02B	Vial Na2S2O3 preserved	A	N/A	1.7	Y	Absent	8260(7)
L1411561-02C	Vial Na2S2O3 preserved	A	N/A	1.7	Y	Absent	8260(7)

Container Comments

L1411561-01K

L1411561-01V

*Values in parentheses indicate holding time in days

Project Name:	BOSTON MEDICAL CENTER	**Lab Number:**	L1411561
Project Number:	27668-100	**Report Date:**	06/04/14

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:	BOSTON MEDICAL CENTER	**Lab Number:**	L1411561
Project Number:	27668-100	**Report Date:**	06/04/14

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:	BOSTON MEDICAL CENTER	**Lab Number:**	L1411561
Project Number:	27668-100	**Report Date:**	06/04/14

REFERENCES

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

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

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

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

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

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

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

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

64 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). August 2004.

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

LIMITATION OF LIABILITIES

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

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

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.

COC edits by Gina Hall 5/30/14

Serial_No:06041421:15 L1411561

HALEY & ALDRICH

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

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO. 27668-100
PROJECT NAME Boston Medical Center - Menino
H&A CONTACT Lee Vanzler

LABORATORY Alpha Analytical
ADDRESS Westborough, MA
CONTACT Gina H

DELIVERY DATE 5/29/14
TURNAROUND TIME STANDARD
PROJECT MANAGER Lee Vanzler

Analysis Requested

Sample No.	Date	Time	Depth	Type	① VOA	② ABNs PAH only	③ MCP Metals	④ Pesticides PCBs	⑤ VPH Full Suite C-ranges only	⑥ EPH Full Suite C-ranges only	⑦ TPH (specify)	⑧ TCLP (specify)	⑨ Reactivity Ignitability Corrosivity	⑩	⑪	⑫	Number of Containers
MW-8	5/29/14	[illegible]	GW	AQ	X	X	X	X	X	X	X	X	X	X	X	X	24
Tripblank						X											

-01 for VOC: 8260, 8260-SIM, 8011; -02 tripblank 8260 only (no SIM; no 8011 on tripblank)

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.
1. 8011/504 ~~-TB~~
2. 8260 ~~-TB~~
3. Total Phenol
4. PCBs - 608
5. 8270-SIM
6. 8270
7. TPH-1664
8. Dissolved RGP Metals - FF
9. Total RGP Metals
10. TCN, PACN, ACN
11. TSS
12. Cl, TRC, HexCr

Sampled and Relinquished by
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Firm H&A
Date 5/29/14 Time

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Date 5/29/14 Time 16:30

Relinquished by
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Firm ALPHA
Date 5/29/14 Time 1815

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Firm Alpha
Date 5/29/14 Time 1815

~~SOLID~~

VOA Vial / Amber Glass / Plastic Bottle / Preservative / Volume

24 TOTAL ~~SOLID~~ LIQUID

VOA Vial: X →
Amber Glass: X →
~~Plastic Bottle~~ PLASTIC: X →
Preservative: A,I | A,F | A,E | A,I,A → | A,F | A,D → | A,C | A →
Volume: 40ml → | 1L → | 250 → | 1L | 500ml

Sampling Comments

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

PRESERVATION KEY

A	Sample chilled	C	NaOH	E	H_2SO_4	G	Methanol	I $Na_2S_2O_3$
B	Sample filtered	D	HNO_3	F	HCL	H	Water/NaHSO4 (circle)	

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_______ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_______ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_______ This Chain of Custody Record (specify) ______ includes ______ does not include samples defined as Drinking Water Samples.

_______ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) ______ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory

AUGUST 2008

Form 3003

Serial_No:06041421:15 L1411561

HALEY & ALDRICH

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

CHAIN OF CUSTODY RECORD

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Fax (617) 886-7600

Page 1 of 1

H&A FILE NO.	27668-100	LABORATORY	Alpha Analytical	DELIVERY DATE	5/29/14
PROJECT NAME	Boston Medical Center - Menino	ADDRESS	Westborough, MA	TURNAROUND TIME	STANDARD
H&A CONTACT	Lee Vanzler	CONTACT	Gina H	PROJECT MANAGER	Lee Vanzler

Analysis Requested

Sample No.	Date	Time	Depth	Type	① VOA	② ABNs PAH only	③ MCP Metals	④ Pesticides PCBs	⑤ VPH Full Suite C-ranges only	⑥ EPH Full Suite C-ranges only	⑦ TPH (specify)	⑧ TCLP (specify)	⑨ Reactivity Ignitability Corrosivity	⑩	⑪	⑫	Number of Containers
MW-8	5/29/14	1100	GW	AQ	X	X	X	X	X	X	X	X	X	X	X	X	24

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

① 608/504 - TB
② 8260 - TB
③ Total Phenol
④ PCBs - 608
⑤ 8270-SIM
⑥ 8270
⑦ TPH - 1664
⑧ Dissolved RGP Metals - FF
⑨ Total RGP Metals
⑩ TCN, PACN, ACN
⑪ TSS
⑫ Cl, TRC, HexCr

Sampled and Relinquished by	Received by
Sign [signature]	Sign M. Auth
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Firm H&A	Firm H&A
Date 5/29/14 Time	Date 5/29/14 Time 16:30
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Firm H&A	Firm ALPHA
Date 5/29/14 Time 16:30	Date 5/29/14 Time 16:30
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Firm ALPHA	Firm Alpha
Date 5/29/14 Time 1815	Date 5/29/14 Time 1815

SOLID

VOA Vial / Amber Glass / Plastic Bottle / Preservative / Volume

24 TOTAL ~~SOLID~~ LIQUID

	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫
VOA Vial	X →											
Amber Glass			X →									
Plastic								X →				
Preservative	A,I	A,F	A,E	A,I,A →			A,F	A,D →		A,C	A →	
Volume	40ml →		1L →					250 →		1L		500 ml

Sampling Comments

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

I $Na_2S_2O_3$

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

______ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

______ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

______ This Chain of Custody Record (specify) ________ includes ________ does not include samples defined as Drinking Water Samples.

______ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) ________ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2