GUIGLI est 1966

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HEAVY | HIGHWAY | SITEWORK | CIVIL CONSTRUCTION

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

August 10, 2018
File No. 4256.00

Re: Notice of Intent for the Remediation General Permit
Temporary Construction Dewatering for Site Redevelopment
99 Sumner Street, East Boston, Massachusetts

Dear Sir/Madam:

On behalf of DIV Sumner Street, LLC, Guigli & Sons, Inc. (Guigli) is submitting this Notice of Intent (NOI) to the U.S. Environmental Protection Agency (EPA) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) MAG910000 for 99 Sumner Street in East Boston, MA (the Site). This letter and supporting documentation were prepared in accordance with the U.S. EPA guidance for construction dewatering under the RGP program. Guigli is the earthwork contractor for the project and will have direct responsibility of performing the dewatering activities at the Site. The approximate location of the Site is shown on Figure 1 and the extent of the proposed area of groundwater dewatering activities and discharge location are shown on Figure 2.

The Site is located at 99 Sumner Street in East Boston, Massachusetts as shown on Figure 1. The Site consists of a relatively flat, lightly vegetated, approximately 3.3-acre waterfront lot on Boston's Inner Harbor in East Boston, Massachusetts.

Redevelopment activities at the Site include mass excavation of urban fill and natural soils for the construction of a six-story residential building with one level of below grade parking and outdoor amenity area. During pre-characterization activities at the Site between 2005 and 2018, reportable conditions were encountered under the Massachusetts Contingency Plan (MCP). Lead, arsenic, mercury, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), Polychlorinated Biphenyls (PCBs), and total petroleum hydrocarbons (TPH) were detected in soil at concentrations above applicable MCP Reportable Concentrations for S-1 soil (RCS-1). The release condition was reported to the Massachusetts Department of Environmental Protection (DEP) and Release Tracking Number (RTN) 3-25307 and 3-35025 were assigned to the Site. On behalf of the former owner, several MCP response action submittals were submitted to DEP, and a Class C-2 Response Action Outcome (RAO), or Temporary Solution, was filed on October 8, 2010.

The Site redevelopment work will be performed under a Release Abatement Measure (RAM) Plan for management under the MCP of contaminated soil generated during construction activities. Groundwater sampling was performed in several wells across the Site as part of assessment activities for RTN 3-25307 and contaminates in groundwater were not detected at concentration above applicable MCP Reportable Concentrations.

The earthwork to prepare the Site for redevelopment will require excavation of soil down to approximate Elevation (El.) 4.0 feet for building foundations. The excavation will be supported by sheet piles and groundwater that flows into the excavations during construction activities will be treated prior to discharge to through straw or haybale sediment barrier before entering the Boston Inner Harbor, such that the discharged effluent meets the effluent limitations established by NPDES Part 2.1 and Appendix V of the RGP Application. Figure 3 includes a schematic of the proposed conceptual dewatering treatment system. The completed Notice of Intent for the Remediation General Permit form is included as Appendix A.

On April 18, 2018, Sanborn Head & Associates (Sanborn), the project's environmental consultant, collected two samples to characterize the receiving and source waters in support of this NOI. The source water was collected from a groundwater monitoring well, identified as SH-6W, which is located within the proposed excavation area. In accordance with guidance provided by EPA and DEP (see Appendix C), we understand that one (1) source water sampling is appropriate for an excavation area of this size. The receiving water was collected from a public dock in the Boston Inner Harbor located in LoPresti Park, which is in the inland direction and toward the Mystic and Charles Rivers. The groundwater samples were collected from a bailer and were submitted to Alpha Analytical Laboratory (Alpha) of Westborough, MA for analysis for the 2017 NPDES suite of parameters.

The discharge point for the treatment system will be the Inner Boston Harbor. Information regarding the receiving water was collected from the Massachusetts Year 2014 Integrated List of Waters, which is included in Appendix B. Based on our correspondence with EPA the dilution factor for saltwater bodies is 1. Our correspondence with EPA and DEP is included in Appendix C. Analytical laboratory data for on-Site and surface water sampling is summarized in Table 1 and the calculations of the Site Water Quality Based Effluent Limitations (WQBELs) are provided in Appendix C. The analytical data reports are included in Appendix D.

According to the Information for Planning and Conservation (IPaC), available through the U.S. Fish and Wildlife Service (FWS) website, critical habitats are not located within the project area and the excavation activities will not impact federally-listed threatened or endangered species. A letter from the FWS is included in Appendix E. A letter requesting information regarding federally listed species in the project discharge area of the Boston Inner Harbor was sent to the National Oceanic and Atmospheric Administration (NOAA). The response from NOAA, included in Appendix E, states that while federally listed species may frequent the Massachusetts Bay, these species would not be expected to be exposed to effects of the project.

A review of the National Register of Historic Places within East Boston was performed. Based on the review, the discharge and discharge-related activities do not have the potential to cause effects on historic properties. A list of the properties reviewed is included in Appendix F.

Discharge of treated water is scheduled to begin as early as October 1, 2018, pending authorization from the EPA and other agencies.

Thank you for your consideration of this NOI/Permit. Please feel free to contact us if you wish to discuss the information contained in this application, or if any additional information is needed.

Very truly yours,

Ernest Guigli and Sons, Inc.

Matt Guigli
Vice President

encl. Table 1 – Summary of Water Quality Data
Figure 1 – Locus Plan
Figure 2 – Location of Proposed Excavation and Dewatering
Figure 3 – Conceptual Groundwater Treatment Schematic

Appendix A – Notice of Intent Form
Appendix B – Massachusetts Category 5 Waters "Waters requiring a TDML"
Appendix C – Water Quality Based Effluent Limitations (WQBELs) Documentation
Appendix D – Analytical Data Report
Appendix E – Environmental Receptors
Appendix F – National Register of Historic Places, Research Documentation

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TABLES

Table 1
Water Quality Data Summary
99 Sumner Street
East Boston, MA

LOCATION	Units	INFLUENT	RECEIVING
SAMPLING DATE		**4/18/2018**	**4/18/2018**
Anions by Ion Chromatography			
Chloride	ug/l	**125,000**	-
General Chemistry			
Chromium, Trivalent	ug/l	**120**	-
SALINITY	SU	-	**21**
Solids, Total Suspended	ug/l	**2,300,000**	-
Cyanide, Total	ug/l	<5	-
Chlorine, Total Residual	ug/l	<20	-
pH (H)	SU	**7.9**	**7.9**
Nitrogen, Ammonia	ug/l	**654**	<75
TPH, SGT-HEM	ug/l	<4,000	-
Phenolics, Total	ug/l	<30	-
Chromium, Hexavalent	ug/l	<10	-
Microextractables by GC			
1,2-Dibromoethane	ug/l	<0.01	-
Polychlorinated Biphenyls by GC			
PCBs, Total	ug/l	BDL (<0.25)	-
Semivolatile Organics by GC/MS			
Bis(2-ethylhexyl)phthalate	ug/l	**3.3**	-
Total Phthalates	ug/l	**3.3**	-
Semivolatile Organics by GC/MS-SIM			
Fluoranthene	ug/l	**0.11**	-
Pyrene	ug/l	**0.1**	-
Total Group I PAHs	ug/l	BDL (<0.1)	-
Total Group II PAHs	ug/l	**0.2**	-
Total Metals			
Arsenic, Total	ug/l	**21.06**	**1.66**
Cadmium, Total	ug/l	**1.56**	<0.2
Chromium, Total	ug/l	**120.8**	**3.04**
Copper, Total	ug/l	**329.3**	**2.75**
Iron, Total	ug/l	**80,800**	**412**
Lead, Total	ug/l	**1,327**	**2.96**
Mercury, Total	ug/l	**2.92**	<0.2
Nickel, Total	ug/l	**60.46**	<2
Selenium, Total	ug/l	<5	<5
Silver, Total	ug/l	**0.42**	<0.4
Zinc, Total	ug/l	**1,159**	<10
Volatile Organics by GC/MS			
Methylene chloride	ug/l	<3	-
1,1-Dichloroethane	ug/l	<0.75	-
Chloroform	ug/l	<0.75	-
Carbon tetrachloride	ug/l	<0.5	-
1,2-Dichloropropane	ug/l	<1.8	-
Dibromochloromethane	ug/l	<0.5	-
1,1,2-Trichloroethane	ug/l	<0.75	-
Tetrachloroethene	ug/l	<0.5	-
Chlorobenzene	ug/l	<0.5	-
Trichlorofluoromethane	ug/l	<2.5	-
1,2-Dichloroethane	ug/l	<0.5	-
1,1,1-Trichloroethane	ug/l	<0.5	-
Bromodichloromethane	ug/l	<0.5	-
trans-1,3-Dichloropropene	ug/l	<0.5	-
cis-1,3-Dichloropropene	ug/l	<0.5	-
1,3-Dichloropropene, Total	ug/l	<0.5	-
1,1-Dichloropropene	ug/l	<2.5	-
Bromoform	ug/l	<2	-
1,1,2,2-Tetrachloroethane	ug/l	<0.5	-
Benzene	ug/l	<0.5	-
Toluene	ug/l	<0.75	-
Ethylbenzene	ug/l	<0.5	-
Chloromethane	ug/l	<2.5	-
Bromomethane	ug/l	<1	-
Vinyl chloride	ug/l	<1	-
Chloroethane	ug/l	<1	-
1,1-Dichloroethene	ug/l	<0.5	-
1,2-Dichloroethene, Total	ug/l	<0.5	-
Trichloroethene	ug/l	<0.5	-
1,2-Dichlorobenzene	ug/l	<2.5	-
1,3-Dichlorobenzene	ug/l	<2.5	-
1,4-Dichlorobenzene	ug/l	<2.5	-
Methyl tert butyl ether	ug/l	<1	-
p/m-Xylene	ug/l	<1	-
o-Xylene	ug/l	<1	-
Xylenes, Total	ug/l	<1	-
cis-1,2-Dichloroethene	ug/l	<0.5	-
Dibromomethane	ug/l	<5	-
1,4-Dichlorobutane	ug/l	<5	-
1,2,3-Trichloropropane	ug/l	<5	-
Styrene	ug/l	<1	-
Dichlorodifluoromethane	ug/l	<5	-
Acetone	ug/l	<5	-
Carbon disulfide	ug/l	<5	-

Table 1
Water Quality Data Summary
99 Sumner Street
East Boston, MA

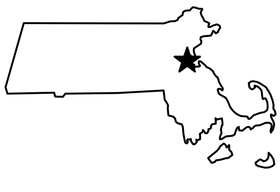
LOCATION	Units	INFLUENT	RECEIVING
SAMPLING DATE		**4/18/2018**	**4/18/2018**
2-Butanone	ug/l	<5	-
Vinyl acetate	ug/l	<5	-
4-Methyl-2-pentanone	ug/l	<5	-
2-Hexanone	ug/l	<5	-
Ethyl methacrylate	ug/l	<5	-
Acrylonitrile	ug/l	<5	-
Bromochloromethane	ug/l	<2.5	-
Tetrahydrofuran	ug/l	<5	-
2,2-Dichloropropane	ug/l	<2.5	-
1,2-Dibromoethane	ug/l	*<2*	-
1,3-Dichloropropane	ug/l	<2.5	-
1,1,1,2-Tetrachloroethane	ug/l	<0.5	-
Bromobenzene	ug/l	<2.5	-
n-Butylbenzene	ug/l	<0.5	-
sec-Butylbenzene	ug/l	<0.5	-
tert-Butylbenzene	ug/l	<2.5	-
o-Chlorotoluene	ug/l	<2.5	-
p-Chlorotoluene	ug/l	<2.5	-
1,2-Dibromo-3-chloropropane	ug/l	<2.5	-
Hexachlorobutadiene	ug/l	<0.5	-
Isopropylbenzene	ug/l	<0.5	-
p-Isopropyltoluene	ug/l	<0.5	-
Naphthalene	ug/l	<2.5	-
Tert-Butyl Alcohol	ug/l	<10	-
Tertiary-Amyl Methyl Ether	ug/l	<2	-
Total BTEX	ug/l	BDL (<0.75)	-
Volatile Organics by GC/MS-SIM			
1,4-Dioxane	ug/l	<3	-

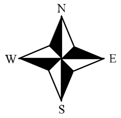
Notes:
1. The samples were collected by Sanborn, Head & Associates, Inc. personnel on the dates indicated and were submitted to Alpha Analytical, Inc. of Westborough, MA (Alpha) for analysis.
2. The Laboratory Reporting Limit (RL) meets the requirements of Appendix V of the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP).
3. Concentrations above detected laboratory reporting limits are bolded.

Abbreviations:
ug/l = micrograms per liter
BTEX = Sum of benzene, toluene, ethylbenzene, and total xylenes
NS = no standard
< = the compound was not detected above the reporting limit shown
MCP = Massachusetts Contingency Plan

FIGURES

File:P:\4200s\4256.00\Graphics Files\CAD\NOI-JUN18\NOI.dwg Plot Date: 5-11-18





NOTES:
Base map was taken from the "Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Information Technology Division"
7.5 minute USGS Quadrangle Maps: Boston, Massachusetts, REV: 1987

Drawn By: C.Green
Designed By: L.Zivalic
Reviewed By: S.Sadkowski
Project No: 4256.00
Date: August 2018

SCALE: 1:25,000

SANBORN HEAD

Figure 1

Locus Plan

Notice of Intent for Remediation General Permit

99 Sumner Street
East Boston, Massachusetts

NOTES:

1. THE BASE MAP WAS DRAWN FROM A PLAN ENTITLED, "TOPOGRAPHIC PLAN, PREPARED BY FELDMAN LAND SURVEYORS OF BOSTON, MA, DATED JANUARY 6, 2017 WITH AN ORIGINAL SCALE OF 1" = 40'.
2. THE PROPOSED SITE FEATURES WERE DRAWN FROM A PLAN ENTITLED, "GRADING & DRAINAGE PLAN", PREPARED BY HOWARD STEIN HUDSON OF BOSTON, MA, DATED SEPTEMBER 19, 2017 WITH AN ORIGINAL SCALE OF 1" = 20'.
3. EXPLORATIONS DESIGNATED SH-1W, SH-4W AND SH-6W WERE ADVANCED BY CRAWFORD DRILLING SERVICES, LLC (CDS) OF WESTMINSTER, MA AND OBSERVED BY SANBORN HEAD IN NOVEMBER 2017
4. APPROXIMATE LOCATIONS OF EXPLORATIONS OBSERVED BY SANBORN HEAD ARE BASED ON TAPED MEASUREMENTS MADE IN THE FIELD RELATIVE TO PROMINENT SITE FEATURES. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND:

- APPROXIMATE SITE BOUNDARY
- SH-4W — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL OBSERVED BY SANBORN HEAD (NOVEMBER 2017)

APPROXIMATE LIMITS OF PROPOSED EXCAVATION AND DEWATERING

SH-1W

SH-6W

SH-4W

AREA TO MEAN HIGH WATER BY ELEVATION
62,988± SQ. FT.
1.446± ACRES

PARCEL ID: 0105403000

ACCESS-EGRESS EASEMENT

APPROXIMATE LOCATION OF PROPOSED BUILDING

APPROXIMATE LOCATION OF DISCHARGE OUTFALL

APPROXIMATE LOCATION OF DEWATERING TREATMENT SYSTEM

Now or Formerly
CITY OF BOSTON
PARCEL ID 0105404000

BOSTON INNER HARBOR

AREA TO THE H
LOW WATER
107,000± SQ
2.5± ACRE

REMAINS OF

SUMNER STREET (70.00' WIDE - PUBLIC)

S 30°13'15" W 630'±

N 30°13'15" E 840.67'

625'±

SANBORN HEAD

GRAPHICAL SCALE
20' 10' 0' 20' 40'

NO.	DATE	DESCRIPTION	BY

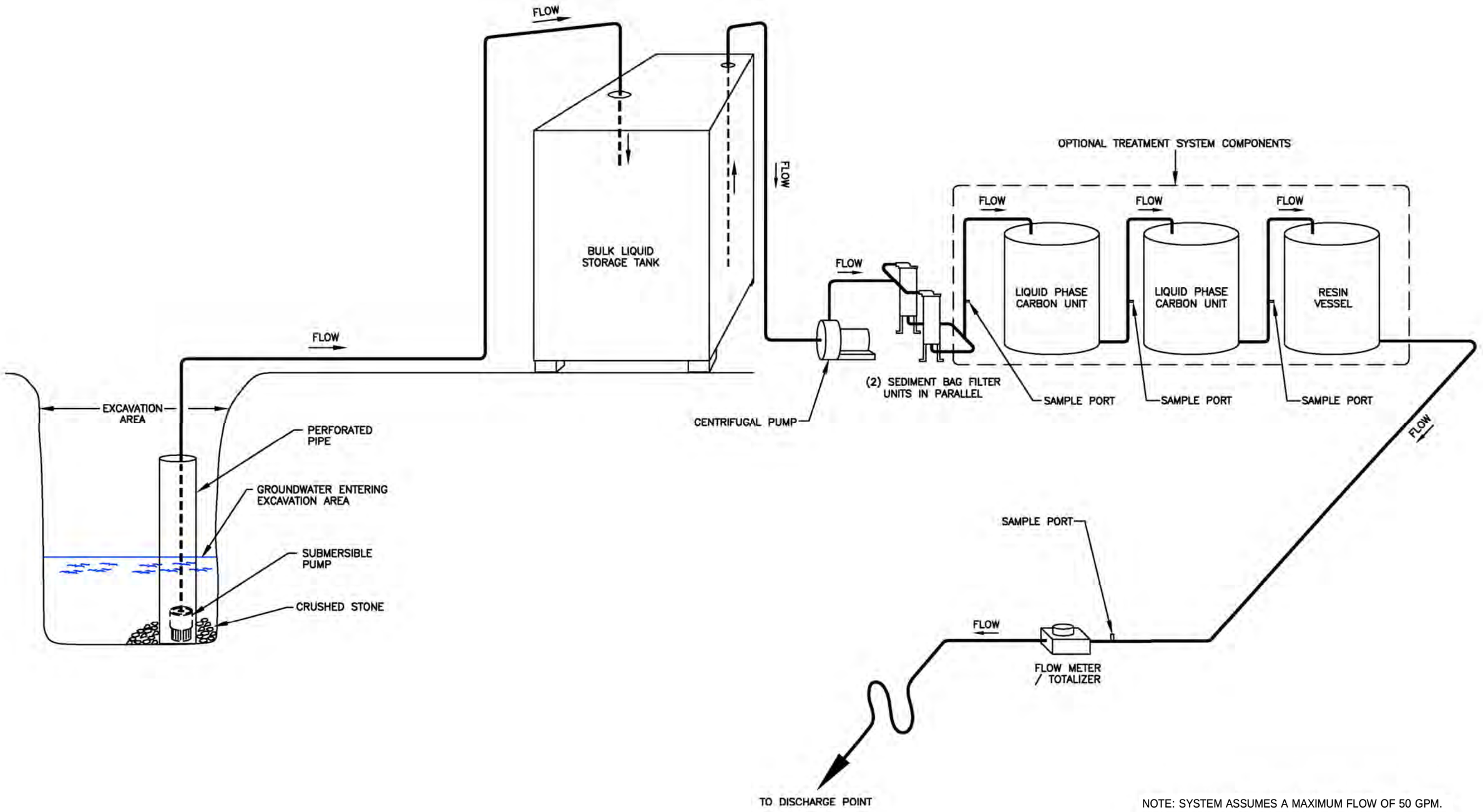
DRAWN BY: C.GREEN
DESIGNED BY: L.ZIVALIC
REVIEWED BY: M.HEIL
PROJECT MGR: Q.PRATT
PIC: S.SADKOWSKI
DATE: AUGUST 2018

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT
99 SUMNER STREET
EAST BOSTON, MASSACHUSETTS

PROJECT NUMBER: 4256.00

LOCATION OF PROPOSED EXCAVATION AND DEWATERING

SHEET NUMBER: 2



NOTE: SYSTEM ASSUMES A MAXIMUM FLOW OF 50 GPM.

SANBORN HEAD

GRAPHICAL SCALE
20' 10' 0' 20' 40'

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.GREEN
DESIGNED BY: L.ZIVALIC
REVIEWED BY: M.HEIL
PROJECT MGR: Q.PRATT
PIC: S.SADKOWSKI
DATE: AUGUST 2018

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT
99 SUMNER STREET
EAST BOSTON, MASSACHUSETTS

CONCEPTUAL GROUNDWATER TREATMENT SCHEMATIC

PROJECT NUMBER: 4256.00

SHEET NUMBER: 3

APPENDIX A

NOTICE OF INTENT FORM

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
99 Sumner Street</td><td colspan="3">Site address: 99 Sumner Street
Street:</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02128</td></tr>
<tr><td rowspan="4">2. Site owner
DIV Sumner Street, LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Mr. Stephen Davis</td></tr>
<tr><td colspan="2">Telephone: (627) 451 - 1130</td><td>Email:</td></tr>
<tr><td colspan="3">Mailing address: 125 High Street, 21st Floor
Street:</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02110</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Guilgi & Sons, Inc.</td><td colspan="3">Contact Person: Mr. Christopher Wesche</td></tr>
<tr><td colspan="2">Telephone: (508) 652-9880</td><td>Email: cwesche@guigli.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 10 Tech Circle</td></tr>
<tr><td>City: Natick</td><td>State: MA</td><td>Zip: 01760</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:
NA

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s):
3-25307, 3-35025
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
■ CWA Section 404 Applied for under the U.S. Army Corps of Engineers, General Permits for Massachusetts</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Boston Inner Harbor	MA70-02	Class SB(CSO)

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. See Appendix B

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	NA (Saltwater)
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1 (Saltwater)

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received: 4/13/2018

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No (See Table 1 and Appendix D)

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No (See Table 1 and Appendix D)	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Chloride, TSS, Amonia, Arsenic, Cadmium, Chromium III, Copper, Iron, Lead, Mercury, Nickel, Silver, Zinc, bis (2-ethylhexyl) phthalate	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): Boston Inner Harbor	Outfall location(s): (Latitude, Longitude) 42.3688, -71.0429
Discharges enter the receiving water(s) via (check any that apply): ■ Direct discharge to the receiving water ☐ Indirect discharge, if so, specify: ☐ A private storm sewer system ☐ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): Start October 1, 2018; End October 1, 2019 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No (See Figure 2)	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="5">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
■ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✔	1	4500NH3	375	654		Report mg/L	---
Chloride		✔	1	300.0	12,500	125,000		Report µg/l	---
Total Residual Chlorine	✔		1	4500CL	20	ND		0.2 mg/L	7.5
Total Suspended Solids		✔	1	2540D	100,000	2,300,000		30 mg/L	---
Antimony	✔		1	200.8	4.00	ND		206 µg/L	640
Arsenic		✔	1	200.8	1.00	21.06		104 µg/L	36
Cadmium		✔	1	200.8	0.20	1.56		10.2 µg/L	8.9
Chromium III		✔	1	200.8	10	120		323 µg/L	100
Chromium VI	✔		1	7196A	10	ND		323 µg/L	50
Copper		✔	1	200.8	1.00	329.3		242 µg/L	3.7
Iron		✔	1	200.7	50	80,800		5,000 µg/L	---
Lead		✔	1	200.8	0.50	1,327		160 µg/L	8.5
Mercury		✔	1	245.1	0.20	2.92		0.739 µg/L	1.11
Nickel		✔	1	200.8	2.00	60.46		1,450 µg/L	8.3
Selenium	✔		1	200.8	5.00	ND		235.8 µg/L	71
Silver		✔	1	200.8	0.40	0.42		35.1 µg/L	2.2
Zinc		✔	1	200.8	10	1,159		420 µg/L	86
Cyanide	✔		1	4500CN	5	ND		178 mg/L	1.0
B. Non-Halogenated VOCs									
Total BTEX	✔		1	8260C	2.75	ND		100 µg/L	---
Benzene	✔		1	8260C	0.5	ND		5.0 µg/L	---
1,4 Dioxane	✔		1	8260C	3.0	ND		200 µg/L	---
Acetone	✔		1	8260C	5.0	ND		7.97 mg/L	---
Phenol	✔		1	82,700	5.0	ND		1,080 µg/L	300

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		1	8260C	0.50	ND		4.4 µg/L	1.6
1,2 Dichlorobenzene	✔		1	8260C	2.5	ND		600 µg/L	---
1,3 Dichlorobenzene	✔		1	8260C	2.5	ND		320 µg/L	---
1,4 Dichlorobenzene	✔		1	8260C	2.5	ND		5.0 µg/L	---
Total dichlorobenzene	✔		1	8260C	2.5	ND		763 µg/L in NH	---
1,1 Dichloroethane	✔		1	8260C	0.75	ND		70 µg/L	---
1,2 Dichloroethane	✔		1	8260C	0.50	ND		5.0 µg/L	---
1,1 Dichloroethylene	✔		1	8260C	0.50	ND		3.2 µg/L	---
Ethylene Dibromide	✔		1	504.1	0.010	ND		0.05 µg/L	---
Methylene Chloride	✔		1	8260C	3.0	ND		4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	8260C	0.50	ND		200 µg/L	---
1,1,2 Trichloroethane	✔		1	8260C	0.75	ND		5.0 µg/L	---
Trichloroethylene	✔		1	8260C	0.5	ND		5.0 µg/L	---
Tetrachloroethylene	✔		1	8260C	0.50	ND		5.0 µg/L	3.3
cis-1,2 Dichloroethylene	✔		1	8260C	0.5	ND		70 µg/L	---
Vinyl Chloride	✔		1	8260C	1.0	ND		2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates		✔	1	8270D	3.0	3.3		190 µg/L	---
Diethylhexyl phthalate		✔	1	8270D	3.0	3.3		101 µg/L	2.2
Total Group I PAHs	✔		1	8270D	0.1	ND		1.0 µg/L	---
Benzo(a)anthracene	✔		1	8270D	0.1	ND		As Total PAHs	0.0038
Benzo(a)pyrene	✔		1	8270D	0.1	ND			0.0038
Benzo(b)fluoranthene	✔		1	8270D	0.1	ND			0.0038
Benzo(k)fluoranthene	✔		1	8270D	0.1	ND			0.0038
Chrysene	✔		1	8270D	0.1	ND			0.0038
Dibenzo(a,h)anthracene	✔		1	8270D	0.1	ND			0.0038
Indeno(1,2,3-cd)pyrene	✔		1	8270D	0.1	ND			0.0038

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs		✔	1	8270D	0.10	0.21		100 µg/L	---
Naphthalene	✔		1	8270D	0.10	ND		20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	608	0.20	ND		0.000064 µg/L	---
Pentachlorophenol	✔		1	8270D	0.80	ND		1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✔		1	1664A	4,000	ND		5.0 mg/L	---
Ethanol	✔							Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	8260C	1.0	ND		70 µg/L	20
tert-Butyl Alcohol	✔		1	8260C	10	ND		120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	8260C	2.0	ND		90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH			1	field		7.9 SU			
Temperature			1	field					
salinity			1	2520B	2.0	21 SU			

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
■ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.

Groundwater encountered during construction activities will be pumped into a treatment system prior to discharge into the Inner Boston Harbor. The first element of the treatment system will be a fractionalization tank where solids will settle out. The effluent will then pass through the following as necessary: bag filters, 9g-a-c-vessel, and a cation resin vessel. The effluent will be discharged to the Inner Boston Harbor.

Identify each major treatment component (check any that apply):

■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ■ Other; if so, specify: cation resin vessel (if needed).

Indicate if either of the following will occur (check any that apply):

☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Fractionation tank Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	50
Provide the proposed maximum effluent flow in gpm.	50
Provide the average effluent flow in gpm.	30
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No (See Figure 3)

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ■ Other; if so, specify:
None anticipated

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive?
(check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

■ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ■ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ■ Yes ☐ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No (See Appendix)

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

Appendix A – Notice of Intent Form; Appendix B – Massachusetts Category 5 Waters "Waters requiring a TDML"; Appendix C – Water Quality Based Effluent Limitations (WQBELs) Documentation; Appendix D – Analytical Data Report; Appendix E – Environmental Receptors; Appendix F – National Register of Historic Places, Research Documentation

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:	A BMPP meeting the requirements of this general permit will be developed and implemented upon initiation of discharge.
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ☐ No ☐ NA ■
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ☐ NA ■
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: 	Date: 8/15/18
Print Name and Title: Matt Guigli, Vice President	

APPENDIX B

MASSACHUSETTS CATEGORY 5 WATERS
"WATERS REQUIRING A TDML"

Massachusetts Category 5 Waters
"Waters requiring a TMDL"

NAME	SEGMENT ID	DESCRIPTION	SIZE	UNITS	IMPAIRMENT CAUSE	EPA TMDL NO.
Unnamed Tributary	MA51-38	Unnamed tributary to Dark Brook, from perennial portion near the Route 90, 290EB, 395SB, 12NB interchange, Auburn to the confluence with Dark Brook, south of Water Street, Auburn (sections culverted).	0.8	MILES	Chloride	
Welsh Pond	MA51176	Sutton	8	ACRES	(Non-Native Aquatic Plants*)	
					Aquatic Plants (Macrophytes)	
West River	MA51-11	Outlet Silver Lake, Grafton to Upton WWTP discharge, Upton (through Lake Wildwood formerly segment MA51181).	3.8	MILES	(Non-Native Aquatic Plants*)	
					pH, Low	
West River	MA51-12	Upton WWTP discharge, Upton to confluence with Blackstone River, Uxbridge (through former segments Harrington Pool MA51197, and West River Pond MA51177).	9.3	MILES	(Non-Native Aquatic Plants*)	
					Aquatic Plants (Macrophytes)	
					Cadmium	
					Chloride	
					Copper	
					Lead	
					Nutrient/Eutrophication Biological Indicators	
					pH, Low	
Woodbury Pond	MA51185	Sutton	5	ACRES	(Non-Native Aquatic Plants*)	
					Aquatic Plants (Macrophytes)	
Woolshop Pond	MA51186	Millbury	5	ACRES	(Non-Native Aquatic Plants*)	
					Aquatic Plants (Macrophytes)	
					Turbidity	
Boston Harbor (Proper)						
Boston Harbor	MA70-01	The area defined by a line from the southerly tip of Deer Island to Boston Lighthouse on Little Brewster Island, then south to Point Allerton; across Hull and West guts; across the mouths of Quincy and Dorchester bays, Boston Inner Harbor and WinthropBay (including President Roads and Nantasket Roads).	18.59	SQUARE MILES	Fecal Coliform	
					Other	
					PCB in Fish Tissue	
Boston Inner Harbor	MA70-02	From the Mystic and Chelsea rivers, Chelsea/Boston, to the line between Governors Island and Fort Independence, Boston (East Boston) (including Fort Point, Reserved and Little Mystic channels).	2.56	SQUARE MILES	Enterococcus	
					Fecal Coliform	
					Other	
					Oxygen, Dissolved	
					PCB in Fish Tissue	

Appendix 1
Assessment Units and Integrated List Categories by Major Watershed

NAME	SEGMENT ID	DESCRIPTION	SIZE	UNITS	CATEGORY
Boston Inner Harbor	MA70-02	From the Mystic and Chelsea rivers, Chelsea/Boston, to the line between Governors Island and Fort Independence, Boston (East Boston) (including Fort Point, Reserved and Little Mystic channels).	2.56	SQUARE MILES	5
Dorchester Bay	MA70-03	From the mouth of the Neponset River, Boston/Quincy to the line between Head Island and the north side of Thompson Island and the line between the south point of Thompson Island, Boston and Chapel Rocks, Quincy.	3.46	SQUARE MILES	5
Hingham Bay	MA70-06	The area north of the mouth of the Weymouth Fore River extending on the west along the line between Nut Island and the south point of West Head, and on the east side along a line from Prince Head just east of Pig Rock to the mouth of the Weymouth ForeRiver (midway between Lower Neck and Manot Beach), Quincy.	0.96	SQUARE MILES	5
Hingham Bay	MA70-07	The area defined between Peddocks Island and Windmill Point; from Windmill Point southeast to Bumkin Island; from Bumkin Island southeast to Sunset Point; from Sunset Point across the mouth of the Weir River to Worlds End; from Worlds End across themouth of Hingham Harbor to Crow Point; from Beach Lane, Hingham across the mouth of the Weymouth Back River to Lower Neck; and from Lower Neck midway across the mouth of the Weymouth Fore River.	4.8	SQUARE MILES	5
Hull Bay	MA70-09	The area defined east of a line from Windmill Point, Hull to Bumkin Island, Hingham and from Bumkin Island to Sunset Point, Hull.	2.48	SQUARE MILES	5
Pleasure Bay	MA70-11	A semi-enclosed bay, the flow restricted through two channels between Castle and Head islands, Boston	0.22	SQUARE MILES	5
Quincy Bay	MA70-04	From Bromfield Street near the Wollaston Yacht Club, northeast to N42 17.3 W71 00.1, then southeast to Houghs Neck near Sea Street and Peterson Road (formerly referred to as the "Willows"), Quincy.	1.52	SQUARE MILES	5
Quincy Bay	MA70-05	Quincy Bay, north of the class SA waters (segment MA70-04), Quincy to the line between Moon Head and Nut Island, Quincy.	4.41	SQUARE MILES	5
Winthrop Bay	MA70-10	From the tidal flats at Coleridge Street, Boston (East Boston) to a line between Logan International Airport and Point Shirley, Boston/Winthrop.	1.65	SQUARE MILES	5
Boston Harbor: Mystic					
Aberjona River	MA71-01	Source just south of Birch Meadow Drive, Reading to inlet Upper Mystic Lake at Mystic Valley Parkway, Winchester (portion culverted underground). (through former pond segments Judkins Pond MA71021 and Mill Pond MA71031).	9.1	MILES	5
Alewife Brook	MA71-04	Outlet of Little Pond, Belmont to confluence with Mystic River, Arlington/Somerville (portion in Belmont and Cambridge identified as Little River with name changing to Alewife Brook at Arlington corporate boundary).	2.3	MILES	5
Belle Isle Inlet	MA71-14	From tidegate at Bennington Street, Boston/Revere to confluence with Winthrop Bay, Boston/Winthrop.	0.12	SQUARE MILES	5
Bellevue Pond	MA71004	Medford	2	ACRES	3
Blacks Nook	MA71005	Cambridge	2	ACRES	5
Chelsea River	MA71-06	From confluence with Mill Creek, Chelsea/Revere to confluence with Boston Inner Harbor, Chelsea/East Boston/Charlestown.	0.38	SQUARE MILES	5
Clay Pit Pond	MA71011	Belmont	12	ACRES	5
Cummings Brook	MA71-10	Headwaters east of Wright Street, Woburn to confluence with Fowle Brook, Woburn.	2.1	MILES	3
Ell Pond	MA71014	Melrose	23	ACRES	5
Hills Pond	MA71018	Arlington	2	ACRES	4C

APPENDIX C

WATER QUALITY BASED EFFLUENT LIMITATIONS (WQBELS) DOCUMENTATION

USGS StreamStats

Report | About | Help

SELECT A STATE / REGION

Connecticut River Basin

IDENTIFY A STUDY AREA

Step 2: Click the 'Delineate' button to activate the delineation tool

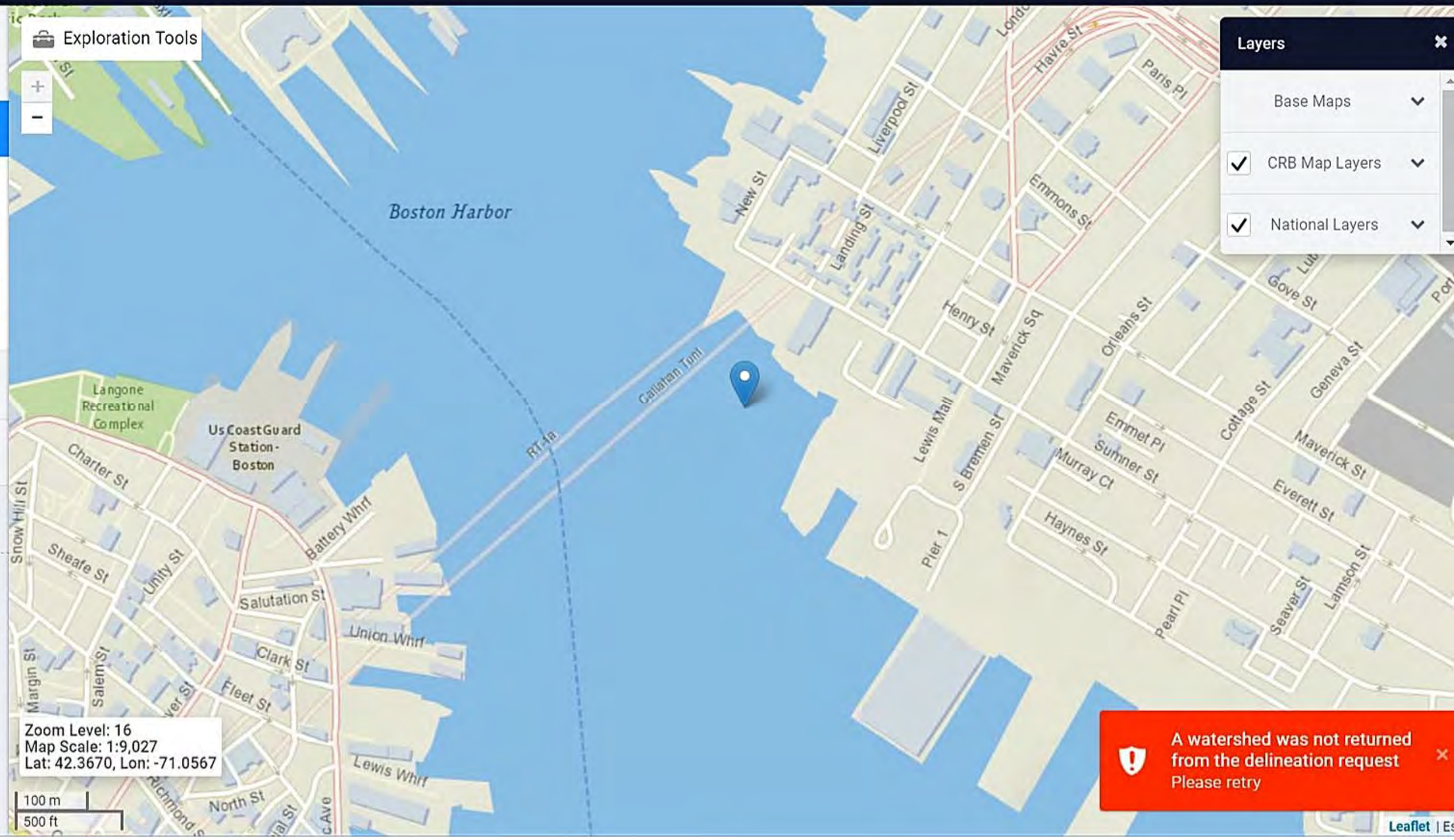
Delineate

SELECT SCENARIOS

BUILD A REPORT

POWERED BY WIM

USGS Home Contact USGS Search USGS
Accessibility FOIA Privacy Policy & Notices



From: Little, Shauna
To: Quincy Pratt; catherine.vakalopoulos@massmail.state.ma.us; Leah Zivalic
Subject: RE: East Boston, MA RGP
Date: Monday, April 16, 2018 10:39:01 AM
Attachments: image001.png

Hello,

Regarding your questions:

- Section 4.2 of the RGP says a minimum of one (1) sample is required for Activity Category III. Is one (1) sample appropriate for a property/dewatering area of this size? The NOI Requirements in Part 3.4 refer to the sampling specified in all of Part 4. This includes the NOI-specific sampling in 4.2, but also the monitoring requirements that always apply, including for the NOI. The requirements pertaining to influent, including situations where more than one sample of influent would be necessary, are found in Part 4.1.1.a of the permit (page 32 of 50). This section generally encourages contacting EPA for assistance with complex influent sample design, and I am happy to offer assistance, if desired.
- Given the discharge is to saltwater, a Dilution Factor does not apply. In this case, should we compare the source water to the TBEL criterion? The suggested electronic format for dilution factor and limit calculations will determine which limits (TBEL or WQBEL) apply based on the influent concentrations. If you wish to generally state whether your source water is above or below TBELs or WQBELs, TBELs always apply for a present parameter, and while the WQBELs don't always apply- a parameter must have reasonable potential to exceed the criteria- influent concentrations are always compared to water quality criteria. The water quality criteria are generally what are shown in the WQBEL column of the permit, though metals are shown at certain default values that may be different at your site (more so for freshwater than saltwater).

Regards,

Shauna Little
Physical Scientist
USEPA New England
5 Post Office Square, Suite 100/OEP06-1
Boston, Massachusetts 02109-3912
Phone (617)918-1989

From: Quincy Pratt [mailto:qpratt@sanbornhead.com]
Sent: Monday, April 16, 2018 10:07 AM
To: catherine.vakalopoulos@massmail.state.ma.us; Leah Zivalic <lzivalic@sanbornhead.com>
Cc: Little, Shauna <Little.Shauna@epa.gov>

Subject: RE: East Boston, MA RGP

Thank you for your informative email, Cathy. We look forward to hearing from Shauna, regarding the sampling.

Best,
Quincy

--
Quincy Pratt
Project Manager

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From: Vakalopoulos, Catherine (DEP) [mailto:Catherine.Vakalopoulos@MassMail.State.MA.US]
Sent: Friday, April 13, 2018 11:32 AM
To: Leah Zivalic <lzivalic@sanbornhead.com>
Cc: Quincy Pratt <qpratt@sanbornhead.com>; Little, Shauna <Little.Shauna@epa.gov>
Subject: RE: East Boston, MA RGP

Hi Leah,
I apologize for the delayed response but I had to be in the field this week on short notice and have not been able to keep up with my email. For the number of samples and WQBEL/TBEL questions, I need to send you to Shauna who I've cc'd here. She is out of the office today but she'll get back to you next week. Yes, you are correct, we do not apply a dilution factor to marine waters unless you can provide modeling or dye study results that show otherwise. I know Rich Signell from USGS did some hydrodynamic modeling in Boston Harbor for MWRA a while ago but I don't know how to apply his published paper to a specific location in Boston Harbor. We don't have a protocol for sampling in tidal areas but your plan to sample "upstream" towards the Charles and Mystic makes sense.

Please let me know if you have any further questions.

Cathy

Cathy Vakalopoulos, Massachusetts Department of Environmental Protection
1 Winter St., Boston, MA 02108, 617-348-4026

From: Leah Zivalic [mailto:lzivalic@sanbornhead.com]
Sent: Monday, April 09, 2018 10:30 AM
To: Vakalopoulos, Catherine (DEP)
Cc: Quincy Pratt
Subject: East Boston, MA RGP

Hello Catherine,

We are assisting a general contractor with the preparation of a Notice of Intent (NOI) for a NPDES RGP for temporary construction dewatering for a proposed groundwater discharge to the Boston Harbor. The property is located in East Boston, is approximately 3 acres, and is considered an Activity Category III (Contaminated Site). The proposed construction dewatering activities will span an approximately 30,000 square foot area and will include pumping groundwater from filtered sumps, treating the water on-site and discharging the effluent to the Boston Harbor. We were wondering if you could help us clarify a few questions we had on the NOI:

- Section 4.2 of the RGP says a minimum of one (1) sample is required for Activity Category III. Is one (1) sample appropriate for a property/dewatering area of this size?
- The proposed receiving water body is the Boston Inner Harbor. As such, the direction of flow of the proposed receiving water changes with the tide. We have assumed the receiving body of water sample will be collected in the inland direction (toward the Charles and Mystic Rivers) from the proposed discharge. Is that assumption correct? Or is there another sampling protocol we should follow for tidal areas.
- Given the discharge is to saltwater, a Dilution Factor does not apply. In this case, should we compare the source water to the TBEL criterion?

Please let us know if you have any questions or need any additional information.

Thank you,

-Leah Zivalic

Leah Zivalic
Project Engineer

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1 Technology Park Drive, Westford, MA 01886
T 978.392.0900 D 978.577.1018

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Dilution Factor	0.0			
A. Inorganics	TBEL applies if bolded		WQBEL applies if bolded	
Ammonia	**Report**	mg/L	---	
Chloride	**Report**	µg/L	---	
Total Residual Chlorine	0.2	mg/L	**7.5**	µg/L
Total Suspended Solids	**30**	mg/L	---	
Antimony	**206**	µg/L	640	µg/L
Arsenic	**104**	µg/L	36	µg/L
Cadmium	**10.2**	µg/L	8.9	µg/L
Chromium III	323	µg/L	**100.0**	µg/L
Chromium VI	**323**	µg/L	50	µg/L
Copper	242	µg/L	**3.7**	µg/L
Iron	**5000**	µg/L	---	µg/L
Lead	160	µg/L	**8.5**	µg/L
Mercury	**0.739**	µg/L	1.11	µg/L
Nickel	1450	µg/L	**8.3**	µg/L
Selenium	**235.8**	µg/L	71	µg/L
Silver	**35.1**	µg/L	2.2	µg/L
Zinc	420	µg/L	**86**	µg/L
Cyanide	**178**	mg/L	1.0	µg/L
B. Non-Halogenated VOCs				
Total BTEX	**100**	µg/L	---	
Benzene	**5.0**	µg/L	---	
1,4 Dioxane	**200**	µg/L	---	
Acetone	**7.97**	mg/L	---	
Phenol	**1,080**	µg/L	300	µg/L
C. Halogenated VOCs				
Carbon Tetrachloride	**4.4**		1.6	µg/L
1,2 Dichlorobenzene	**600**	µg/L	---	
1,3 Dichlorobenzene	**320**	µg/L	---	
1,4 Dichlorobenzene	**5.0**	µg/L	---	
Total dichlorobenzene	**---**	µg/L	---	
1,1 Dichloroethane	**70**	µg/L	---	
1,2 Dichloroethane	**5.0**	µg/L	---	
1,1 Dichloroethylene	**3.2**	µg/L	---	
Ethylene Dibromide	**0.05**	µg/L	---	
Methylene Chloride	**4.6**	µg/L	---	
1,1,1 Trichloroethane	**200**	µg/L	---	
1,1,2 Trichloroethane	**5.0**	µg/L	---	
Trichloroethylene	**5.0**	µg/L	---	
Tetrachloroethylene	**5.0**	µg/L	3.3	µg/L
cis-1,2 Dichloroethylene	**70**	µg/L	---	

Vinyl Chloride	**2.0**	µg/L	---	
D. Non-Halogenated SVOCs				
Total Phthalates	**190**	µg/L	---	µg/L
Diethylhexyl phthalate	101	µg/L	**2.2**	µg/L
Total Group I Polycyclic Aromatic Hydrocarbons	**1.0**	µg/L	---	
Benzo(a)anthracene	**1.0**	µg/L	0.0038	µg/L
Benzo(a)pyrene	**1.0**	µg/L	0.0038	µg/L
Benzo(b)fluoranthene	**1.0**	µg/L	0.0038	µg/L
Benzo(k)fluoranthene	**1.0**	µg/L	0.0038	µg/L
Chrysene	**1.0**	µg/L	0.0038	µg/L
Dibenzo(a,h)anthracene	**1.0**	µg/L	0.0038	µg/L
Indeno(1,2,3-cd)pyrene	**1.0**	µg/L	0.0038	µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	**100**	µg/L	---	
Naphthalene	**20**	µg/L	---	
E. Halogenated SVOCs				
Total Polychlorinated Biphenyls	**0.000064**	µg/L	---	
Pentachlorophenol	**1.0**	µg/L	---	
F. Fuels Parameters				
Total Petroleum Hydrocarbons	**5.0**	mg/L	---	
Ethanol	**Report**	mg/L	---	
Methyl-tert-Butyl Ether	**70**	µg/L	20	µg/L
tert-Butyl Alcohol	**120**	µg/L	---	
tert-Amyl Methyl Ether	**90**	µg/L	---	

APPENDIX D

ANALYTICAL DATA REPORT

ANALYTICAL REPORT

Lab Number:	L1813424
Client:	Sanborn, Head & Associates, Inc. 1 Technology Park Drive Westford, MA 01886
ATTN:	Quincy Pratt
Phone:	(978) 577-1054
Project Name:	99 SUMMER STREET
Project Number:	4256.00
Report Date:	04/24/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1813424-01	INFLUENT	WATER	EAST BOSTON, MA	04/18/18 09:00	04/18/18
L1813424-02	RECEIVING	WATER	EAST BOSTON, MA	04/18/18 10:30	04/18/18

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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: 99 SUMMER STREET **Lab Number:** L1813424
Project Number: 4256.00 **Report Date:** 04/24/18

Case Narrative (continued)

Total Metals

The WG1107812-3 MS recovery for iron (0%), performed on L1813424-01, does not apply because the sample concentration is greater than four times the spike amount added.

The WG1107812-4 Laboratory Duplicate RPD for iron (55%), performed on L1813424-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Chlorine, Total Residual

The WG1107706-4 MS recovery (0%), performed on L1813424-01, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 04/24/18

ORGANICS

VOLATILES

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/20/18 07:29
Analyst: KD

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

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
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1

Project Name: 99 SUMMER STREET **Lab Number:** L1813424

Project Number: 4256.00 **Report Date:** 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01 Date Collected: 04/18/18 09:00

Client ID: INFLUENT Date Received: 04/18/18

Sample Location: EAST BOSTON, MA Field Prep: Field Filtered (Dissolved Metals)

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
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

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
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	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	101		70-130

Project Name: 99 SUMMER STREET
Lab Number: L1813424
Project Number: 4256.00
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 04/20/18 07:29
Analyst: MM

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

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: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA

Sample Depth:
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 04/19/18 15:04
Analyst: AWS

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Extraction Method: EPA 504.1
Extraction Date: 04/19/18 11:03

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: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 04/19/18 11:47
Analyst: AWS

Extraction Method: EPA 504.1
Extraction Date: 04/19/18 11:03

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG1107889-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 04/20/18 05:49
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1108305-5					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/20/18 05:49
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1108322-5					
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	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/20/18 05:49
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1108322-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/20/18 05:49
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1108322-5					
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01		Batch: WG1107889-2						
1,2-Dibromoethane	108		-		80-120	-			A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1108305-3 WG1108305-4								
1,4-Dioxane	96		87		70-130	10		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1108322-3 WG1108322-4								
Methylene chloride	98		98		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	120		110		63-132	9		20
1,2-Dichloropropane	99		110		70-130	11		20
Dibromochloromethane	96		94		63-130	2		20
1,1,2-Trichloroethane	88		99		70-130	12		20
Tetrachloroethene	100		87		70-130	14		20
Chlorobenzene	96		96		75-130	0		25
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	89		100		70-130	12		20
cis-1,3-Dichloropropene	96		100		70-130	4		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	89		85		54-136	5		20
1,1,2,2-Tetrachloroethane	79		99		67-130	**22**	Q	20
Benzene	96		100		70-130	4		25
Toluene	94		100		70-130	6		25
Ethylbenzene	95		100		70-130	5		20
Chloromethane	98		110		64-130	12		20
Bromomethane	97		92		39-139	5		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1108322-3 WG1108322-4								
Vinyl chloride	100		110		55-140	10		20
Chloroethane	110		120		55-138	9		20
1,1-Dichloroethene	93		93		61-145	0		25
Trichloroethene	100		100		70-130	0		25
1,2-Dichlorobenzene	92		93		70-130	1		20
1,3-Dichlorobenzene	94		92		70-130	2		20
1,4-Dichlorobenzene	93		93		70-130	0		20
Methyl tert butyl ether	95		100		63-130	5		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		100		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,4-Dichlorobutane	86		120		70-130	**33**	Q	20
1,2,3-Trichloropropane	84		110		64-130	**27**	Q	20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	89		110		58-148	**21**	Q	20
Carbon disulfide	79		100		51-130	**23**	Q	20
2-Butanone	96		120		63-138	**22**	Q	20
Vinyl acetate	120		**140**	Q	70-130	15		20
4-Methyl-2-pentanone	75		94		59-130	**22**	Q	20
2-Hexanone	80		100		57-130	**22**	Q	20
Ethyl methacrylate	80		96		70-130	18		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1108322-3 WG1108322-4								
Acrylonitrile	94		110		70-130	16		20
Bromochloromethane	110		99		70-130	11		20
Tetrahydrofuran	93		110		58-130	17		20
2,2-Dichloropropane	120		120		63-133	0		20
1,2-Dibromoethane	91		93		70-130	2		20
1,3-Dichloropropane	89		100		70-130	12		20
1,1,1,2-Tetrachloroethane	100		96		64-130	4		20
Bromobenzene	94		93		70-130	1		20
n-Butylbenzene	89		110		53-136	**21**	Q	20
sec-Butylbenzene	93		100		70-130	7		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	91		110		70-130	19		20
p-Chlorotoluene	91		110		70-130	19		20
1,2-Dibromo-3-chloropropane	79		77		41-144	3		20
Hexachlorobutadiene	85		74		63-130	14		20
Isopropylbenzene	94		100		70-130	6		20
p-Isopropyltoluene	96		100		70-130	4		20
Naphthalene	82		85		70-130	4		20
n-Propylbenzene	91		110		69-130	19		20
1,2,3-Trichlorobenzene	86		79		70-130	8		20
1,2,4-Trichlorobenzene	88		80		70-130	10		20
1,3,5-Trimethylbenzene	93		100		64-130	7		20
1,2,4-Trimethylbenzene	94		100		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1108322-3 WG1108322-4								
trans-1,4-Dichloro-2-butene	83		120		70-130	**36**	Q	20
Ethyl ether	100		110		59-134	10		20
Tert-Butyl Alcohol	84		92		70-130	9		20
Tertiary-Amyl Methyl Ether	92		98		66-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		112		70-130
Toluene-d8	96		104		70-130
4-Bromofluorobenzene	94		112		70-130
Dibromofluoromethane	107		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1107889-3 QC Sample: L1813006-01 Client ID: MS Sample													
1,2-Dibromoethane	ND	0.25	0.239	96		-	-		80-120	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.25	0.236	94		-	-		80-120	-		20	A

SEMIVOLATILES

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/19/18 20:46
Analyst: CB

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)
Extraction Method: EPA 3510C
Extraction Date: 04/19/18 00:26

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
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	3.3		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
Biphenyl	ND		ug/l	2.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1

Project Name: 99 SUMMER STREET
Lab Number: L1813424
Project Number: 4256.00
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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	3.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	102		41-149

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/20/18 16:09
Analyst: DV

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)
Extraction Method: EPA 3510C
Extraction Date: 04/19/18 00:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	0.11		ug/l	0.10	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	0.10		ug/l	0.10	--	1
1-Methylnaphthalene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: 99 SUMMER STREET **Lab Number:** L1813424

Project Number: 4256.00 **Report Date:** 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01 Date Collected: 04/18/18 09:00

Client ID: INFLUENT Date Received: 04/18/18

Sample Location: EAST BOSTON, MA Field Prep: Field Filtered (Dissolved Metals)

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	74		41-149

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/18/18 20:29
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 04:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1107401-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/18/18 20:29
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 04:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1107401-1					
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/18/18 20:29
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 04:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1107401-1					
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	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	3.5	--
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/18/18 20:29
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 04:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1107401-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	104		41-149

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/20/18 12:42
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 23:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1107727-1					
Acenaphthene	ND		ug/l	0.10	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.10	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
1-Methylnaphthalene	ND		ug/l	0.10	--
2-Methylnaphthalene	ND		ug/l	0.10	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/20/18 12:42
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/18/18 23:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1107727-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	82		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1107401-2 WG1107401-3								
Acenaphthene	90		84		37-111	7		30
Benzidine	29		38		10-75	27		30
1,2,4-Trichlorobenzene	75		77		39-98	3		30
Hexachlorobenzene	102		97		40-140	5		30
Bis(2-chloroethyl)ether	74		80		40-140	8		30
2-Chloronaphthalene	86		84		40-140	2		30
1,2-Dichlorobenzene	71		74		40-140	4		30
1,3-Dichlorobenzene	69		73		40-140	6		30
1,4-Dichlorobenzene	70		71		36-97	1		30
3,3'-Dichlorobenzidine	79		76		40-140	4		30
2,4-Dinitrotoluene	118		111		48-143	6		30
2,6-Dinitrotoluene	111		103		40-140	7		30
Azobenzene	105		99		40-140	6		30
Fluoranthene	98		93		40-140	5		30
4-Chlorophenyl phenyl ether	94		90		40-140	4		30
4-Bromophenyl phenyl ether	100		96		40-140	4		30
Bis(2-chloroisopropyl)ether	73		75		40-140	3		30
Bis(2-chloroethoxy)methane	80		83		40-140	4		30
Hexachlorobutadiene	78		78		40-140	0		30
Hexachlorocyclopentadiene	89		84		40-140	6		30
Hexachloroethane	71		75		40-140	5		30
Isophorone	84		86		40-140	2		30
Naphthalene	80		80		40-140	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1107401-2 WG1107401-3								
Nitrobenzene	86		89		40-140	3		30
NDPA/DPA	97		92		40-140	5		30
n-Nitrosodi-n-propylamine	83		83		29-132	0		30
Bis(2-ethylhexyl)phthalate	118		112		40-140	5		30
Butyl benzyl phthalate	108		102		40-140	6		30
Di-n-butylphthalate	104		98		40-140	6		30
Di-n-octylphthalate	107		99		40-140	8		30
Diethyl phthalate	100		95		40-140	5		30
Dimethyl phthalate	94		91		40-140	3		30
Benzo(a)anthracene	101		96		40-140	5		30
Benzo(a)pyrene	104		98		40-140	6		30
Benzo(b)fluoranthene	94		88		40-140	7		30
Benzo(k)fluoranthene	108		105		40-140	3		30
Chrysene	92		90		40-140	2		30
Acenaphthylene	96		90		45-123	6		30
Anthracene	98		91		40-140	7		30
Benzo(ghi)perylene	97		93		40-140	4		30
Fluorene	97		92		40-140	5		30
Phenanthrene	93		87		40-140	7		30
Dibenzo(a,h)anthracene	99		93		40-140	6		30
Indeno(1,2,3-cd)pyrene	105		100		40-140	5		30
Pyrene	95		87		26-127	9		30
Biphenyl	90		87		40-140	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1107401-2 WG1107401-3								
Aniline	40		44		40-140	10		30
4-Chloroaniline	70		71		40-140	1		30
1-Methylnaphthalene	88		86		41-103	2		30
2-Nitroaniline	110		109		52-143	1		30
3-Nitroaniline	81		76		25-145	6		30
4-Nitroaniline	99		91		51-143	8		30
Dibenzofuran	94		89		40-140	5		30
2-Methylnaphthalene	84		82		40-140	2		30
n-Nitrosodimethylamine	34		39		22-74	14		30
2,4,6-Trichlorophenol	102		102		30-130	0		30
p-Chloro-m-cresol	**101**	Q	**99**	Q	23-97	2		30
2-Chlorophenol	84		89		27-123	6		30
2,4-Dichlorophenol	93		94		30-130	1		30
2,4-Dimethylphenol	94		92		30-130	2		30
2-Nitrophenol	106		110		30-130	4		30
4-Nitrophenol	**86**	Q	79		10-80	8		30
2,4-Dinitrophenol	122		117		20-130	4		30
4,6-Dinitro-o-cresol	129		120		20-164	7		30
Pentachlorophenol	93		87		9-103	7		30
Phenol	48		51		12-110	6		30
2-Methylphenol	78		80		30-130	3		30
3-Methylphenol/4-Methylphenol	80		85		30-130	6		30
2,4,5-Trichlorophenol	107		104		30-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

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: WG1107401-2 WG1107401-3								
Benzoic Acid	35		30		10-164	15		30
Benzyl Alcohol	76		77		26-116	1		30
Carbazole	98		93		55-144	5		30
Pyridine	21		26		10-66	21		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		61		21-120
Phenol-d6	49		51		10-120
Nitrobenzene-d5	90		94		23-120
2-Fluorobiphenyl	94		95		15-120
2,4,6-Tribromophenol	115		114		10-120
4-Terphenyl-d14	108		105		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

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: WG1107727-2 WG1107727-3								
Acenaphthene	60		64		40-140	6		40
2-Chloronaphthalene	57		62		40-140	8		40
Fluoranthene	65		66		40-140	2		40
Hexachlorobutadiene	58		66		40-140	13		40
Naphthalene	58		66		40-140	13		40
Benzo(a)anthracene	67		68		40-140	1		40
Benzo(a)pyrene	66		67		40-140	2		40
Benzo(b)fluoranthene	68		70		40-140	3		40
Benzo(k)fluoranthene	64		66		40-140	3		40
Chrysene	68		69		40-140	1		40
Acenaphthylene	62		68		40-140	9		40
Anthracene	65		66		40-140	2		40
Benzo(ghi)perylene	52		54		40-140	4		40
Fluorene	64		67		40-140	5		40
Phenanthrene	63		64		40-140	2		40
Dibenzo(a,h)anthracene	61		63		40-140	3		40
Indeno(1,2,3-cd)pyrene	59		61		40-140	3		40
Pyrene	66		67		40-140	2		40
1-Methylnaphthalene	60		66		40-140	10		40
2-Methylnaphthalene	58		64		40-140	10		40
Pentachlorophenol	78		81		40-140	4		40
Hexachlorobenzene	69		71		40-140	3		40
Hexachloroethane	**28**	Q	**34**	Q	40-140	19		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

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: WG1107727-2 WG1107727-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	38		44		21-120
Phenol-d6	30		36		10-120
Nitrobenzene-d5	60		68		23-120
2-Fluorobiphenyl	70		78		15-120
2,4,6-Tribromophenol	61		64		10-120
4-Terphenyl-d14	78		80		41-149

PCBS

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA

Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/23/18 16:57
Analyst: HT

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Extraction Method: EPA 608
Extraction Date: 04/18/18 23:36
Cleanup Method: EPA 3665A
Cleanup Date: 04/19/18
Cleanup Method: EPA 3660B
Cleanup Date: 04/19/18

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	97		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/19/18 05:46
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 04/18/18 00:51
Cleanup Method: EPA 3665A
Cleanup Date: 04/18/18
Cleanup Method: EPA 3660B
Cleanup Date: 04/18/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1107369-1						
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	86		30-150	A
Decachlorobiphenyl	87		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

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: WG1107369-2									
Aroclor 1016	86		-		30-150	-		30	A
Aroclor 1260	80		-		30-150	-		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92				30-150	A
Decachlorobiphenyl	91				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET

Project Number: 4256.00

Lab Number: L1813424

Report Date: 04/24/18

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: WG1107369-3 QC Sample: L1800004-75 Client ID: MS Sample													
Aroclor 1016	ND	3.12	2.53	81		-	-		40-126	-		30	A
Aroclor 1260	ND	3.12	2.27	73		-	-		40-127	-		30	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89				30-150	A
Decachlorobiphenyl	85				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107369-4 QC Sample: L1800004-75 Client ID: DUP Sample							
Aroclor 1016	ND	ND	ug/l	NC		30	A
Aroclor 1221	ND	ND	ug/l	NC		30	A
Aroclor 1232	ND	ND	ug/l	NC		30	A
Aroclor 1242	ND	ND	ug/l	NC		30	A
Aroclor 1248	ND	ND	ug/l	NC		30	A
Aroclor 1254	ND	ND	ug/l	NC		30	A
Aroclor 1260	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	97		92		30-150	A
Decachlorobiphenyl	96		88		30-150	A

METALS

Project Name: 99 SUMMER STREET
Lab Number: L1813424
Project Number: 4256.00
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Arsenic, Total	0.02106		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Cadmium, Total	0.00156		mg/l	0.00020	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Chromium, Total	0.1208		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Copper, Total	0.3293		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Iron, Total	80.8		mg/l	0.050	--	1	04/19/18 08:20	04/20/18 09:50	EPA 3005A	19,200.7	PE
Lead, Total	1.327		mg/l	0.00050	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Mercury, Total	0.00292		mg/l	0.00020	--	1	04/19/18 11:07	04/19/18 14:46	EPA 245.1	3,245.1	MG
Nickel, Total	0.06046		mg/l	0.00200	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Silver, Total	0.00042		mg/l	0.00040	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
Zinc, Total	1.159		mg/l	0.01000	--	1	04/19/18 08:20	04/19/18 14:35	EPA 3005A	3,200.8	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.12		mg/l	0.010	--	1		04/19/18 14:35	NA	107,-	

Project Name: 99 SUMMER STREET
Lab Number: L1813424
Project Number: 4256.00
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-02
Client ID: RECEIVING
Sample Location: EAST BOSTON, MA
Sample Depth:
Matrix: Water

Date Collected: 04/18/18 10:30
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Arsenic, Total	0.00166		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Chromium, Total	0.00304		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Copper, Total	0.00275		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Iron, Total	0.412		mg/l	0.050	--	1	04/19/18 08:20	04/20/18 11:59	EPA 3005A	19,200.7	PE
Lead, Total	0.00296		mg/l	0.00050	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	04/19/18 11:07	04/19/18 14:51	EPA 245.1	3,245.1	MG
Nickel, Total	ND		mg/l	0.00200	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	04/19/18 08:20	04/19/18 14:39	EPA 3005A	3,200.8	AM

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1107811-1										
Antimony, Total	ND		mg/l	0.00400	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Lead, Total	ND		mg/l	0.00050	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	04/19/18 08:20	04/19/18 14:08	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1107812-1										
Iron, Total	ND		mg/l	0.050	--	1	04/19/18 08:20	04/20/18 09:41	19,200.7	PE

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1107895-1										
Mercury, Total	ND		mg/l	0.00020	--	1	04/19/18 11:07	04/19/18 14:42	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1107811-2								
Antimony, Total	104		-		85-115	-		
Arsenic, Total	107		-		85-115	-		
Cadmium, Total	106		-		85-115	-		
Chromium, Total	100		-		85-115	-		
Copper, Total	99		-		85-115	-		
Lead, Total	105		-		85-115	-		
Nickel, Total	102		-		85-115	-		
Selenium, Total	105		-		85-115	-		
Silver, Total	97		-		85-115	-		
Zinc, Total	106		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1107812-2								
Iron, Total	106		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1107895-2								
Mercury, Total	109		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107811-3 QC Sample: L1813534-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.5945	119		-	-		70-130	-		20
Arsenic, Total	0.00278	0.12	0.1294	106		-	-		70-130	-		20
Cadmium, Total	0.00020	0.051	0.05407	106		-	-		70-130	-		20
Chromium, Total	0.00193	0.2	0.1977	98		-	-		70-130	-		20
Copper, Total	0.00858	0.25	0.2604	101		-	-		70-130	-		20
Lead, Total	0.03406	0.51	0.5580	103		-	-		70-130	-		20
Nickel, Total	0.01388	0.5	0.5174	101		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1306	109		-	-		70-130	-		20
Silver, Total	ND	0.05	0.04783	96		-	-		70-130	-		20
Zinc, Total	0.06496	0.5	0.5761	102		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107812-3 QC Sample: L1813424-01 Client ID: INFLUENT												
Iron, Total	80.8	1	45.5	**0**	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107812-7 QC Sample: L1813534-01 Client ID: MS Sample												
Iron, Total	47.5	1	44.3	**0**	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107895-3 QC Sample: L1813424-01 Client ID: INFLUENT												
Mercury, Total	0.00292	0.005	0.00742	90		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107895-5 QC Sample: L1813424-02 Client ID: RECEIVING												
Mercury, Total	ND	0.005	0.00482	96		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107811-4 QC Sample: L1813534-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00278	0.00278	mg/l	0		20
Cadmium, Total	0.00020	ND	mg/l	NC		20
Chromium, Total	0.00193	0.00193	mg/l	0		20
Copper, Total	0.00858	0.00784	mg/l	9		20
Lead, Total	0.03406	0.03366	mg/l	1		20
Nickel, Total	0.01388	0.01385	mg/l	0		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.06496	0.06401	mg/l	1		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107812-4 QC Sample: L1813424-01 Client ID: INFLUENT						
Iron, Total	80.8	45.8	mg/l	**55**	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107812-8 QC Sample: L1813534-01 Client ID: DUP Sample						
Iron, Total	47.5	44.9	mg/l	6		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107895-4 QC Sample: L1813424-01 Client ID: INFLUENT						
Mercury, Total	0.00292	0.00250	mg/l	15		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1107895-6 QC Sample: L1813424-02 Client ID: RECEIVING						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-01
Client ID: INFLUENT
Sample Location: EAST BOSTON, MA

Sample Depth:
Matrix: Water

Date Collected: 04/18/18 09:00
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	2300		mg/l	100	NA	20	-	04/19/18 12:00	121,2540D	JT
Cyanide, Total	ND		mg/l	0.005	--	1	04/19/18 07:30	04/19/18 14:13	121,4500CN-CE	LH
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	04/18/18 21:16	121,4500CL-D	AS
Nitrogen, Ammonia	0.654		mg/l	0.375	--	5	04/19/18 03:00	04/19/18 21:44	121,4500NH3-BH	AT
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/21/18 09:00	04/21/18 11:00	74,1664A	KZ
Phenolics, Total	ND		mg/l	0.030	--	1	04/19/18 08:44	04/19/18 12:04	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	--	1	04/18/18 23:24	04/19/18 00:12	1,7196A	UN
Anions by Ion Chromatography - Westborough Lab										
Chloride	125.		mg/l	12.5	--	25	-	04/19/18 20:22	44,300.0	AU

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

SAMPLE RESULTS

Lab ID: L1813424-02
Client ID: RECEIVING
Sample Location: EAST BOSTON, MA

Sample Depth:
Matrix: Water

Date Collected: 04/18/18 10:30
Date Received: 04/18/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	21		SU	2.0	--	1	-	04/18/18 22:30	121,2520B	AS
pH (H)	7.9		SU	-	NA	1	-	04/18/18 21:48	121,4500H+-B	AS
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	04/19/18 03:00	04/19/18 21:45	121,4500NH3-BH	AT

Project Name: 99 SUMMER STREET
Project Number: 4256.00
Lab Number: L1813424
Report Date: 04/24/18

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: WG1107706-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	04/18/18 21:16	121,4500CL-D	AS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1107732-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	04/18/18 23:24	04/19/18 00:08	1,7196A	UN
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1107765-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	04/19/18 03:00	04/19/18 21:29	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1107792-1										
Cyanide, Total	ND		mg/l	0.005	--	1	04/19/18 07:30	04/20/18 10:54	121,4500CN-CE	LH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1107890-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/19/18 12:00	121,2540D	JT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1107913-1										
Phenolics, Total	ND		mg/l	0.030	--	1	04/19/18 08:44	04/19/18 12:02	4,420.1	BR
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1108472-1										
Chloride	ND		mg/l	0.500	--	1	-	04/19/18 17:34	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1108575-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/21/18 09:00	04/21/18 11:00	74,1664A	KZ

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1107706-2								
Chlorine, Total Residual	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1107708-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1107715-1								
SALINITY	99		-			-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1107732-2								
Chromium, Hexavalent	94		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1107765-2								
Nitrogen, Ammonia	90		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1107792-2								
Cyanide, Total	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1107913-2								
Phenolics, Total	92		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1108472-2					
Chloride	99	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1108575-2					
TPH	82	-	64-132	-	34

Matrix Spike Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

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: WG1107706-4 QC Sample: L1813424-01 Client ID: INFLUENT												
Chlorine, Total Residual	ND	0.248	ND	**0**	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107732-4 QC Sample: L1813424-01 Client ID: INFLUENT												
Chromium, Hexavalent	ND	0.1	0.099	99		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1107765-4 QC Sample: L1813534-02 Client ID: MS Sample												
Nitrogen, Ammonia	20.7	4	24.7	100		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107792-4 QC Sample: L1813424-01 Client ID: INFLUENT												
Cyanide, Total	ND	0.2	0.187	94		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107913-4 QC Sample: L1813505-02 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.40	100		-	-		70-130	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1108472-3 QC Sample: L1813572-01 Client ID: MS Sample												
Chloride	131	20	155	**119**	Q	-	-		90-110	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1108575-4 QC Sample: L1813936-01 Client ID: MS Sample												
TPH	ND	20	11.7	**58**	Q	-	-		64-132	-		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107706-3 QC Sample: L1813424-01 Client ID: INFLUENT						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1107708-2 QC Sample: L1813424-02 Client ID: RECEIVING						
pH (H)	7.9	7.9	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1107715-2 QC Sample: L1813424-02 Client ID: RECEIVING						
SALINITY	21	21	SU	0		
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107732-3 QC Sample: L1813424-01 Client ID: INFLUENT						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1107765-3 QC Sample: L1813534-02 Client ID: DUP Sample						
Nitrogen, Ammonia	20.7	20.4	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107792-3 QC Sample: L1813424-01 Client ID: INFLUENT						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107890-2 QC Sample: L1813424-01 Client ID: INFLUENT						
Solids, Total Suspended	2300	2300	mg/l	0		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1107913-3 QC Sample: L1813505-02 Client ID: DUP Sample						
Phenolics, Total	ND	0.032	mg/l	NC		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1108472-4 QC Sample: L1813572-01 Client ID: DUP Sample						
Chloride	131	132	mg/l	1		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1108575-3 QC Sample: L1813936-01 Client ID: DUP Sample					
TPH	ND	ND	mg/l	NC	34

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1813424-01A	Vial HCl preserved	A	NA		4.0	Y	Absent		8260-SIM(14),8260(14)
L1813424-01B	Vial HCl preserved	A	NA		4.0	Y	Absent		8260-SIM(14),8260(14)
L1813424-01C	Vial HCl preserved	A	NA		4.0	Y	Absent		8260-SIM(14),8260(14)
L1813424-01D	Vial Na2S2O3 preserved	A	NA		4.0	Y	Absent		504(14)
L1813424-01E	Vial Na2S2O3 preserved	A	NA		4.0	Y	Absent		504(14)
L1813424-01F	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)
L1813424-01G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180)
L1813424-01H	Plastic 250ml NaOH preserved	A	>12	>12	4.0	Y	Absent		TCN-4500(14)
L1813424-01I	Plastic 500ml H2SO4 preserved	A	<2	<2	4.0	Y	Absent		NH3-4500(28)
L1813424-01J	Plastic 950ml unpreserved	A	7	7	4.0	Y	Absent		CL-300(28),HEXCR-7196(1),TRC-4500(1)
L1813424-01K	Amber 1000ml unpreserved	A	7	7	4.0	Y	Absent		8270TCL(7),8270TCL-SIM(7)
L1813424-01L	Amber 1000ml unpreserved	A	7	7	4.0	Y	Absent		8270TCL(7),8270TCL-SIM(7)
L1813424-01M	Amber 1000ml H2SO4 preserved	A	<2	<2	4.0	Y	Absent		TPHENOL-420(28)
L1813424-01N	Amber 1000ml Na2S2O3	A	7	7	4.0	Y	Absent		PCB-608(7)
L1813424-01O	Amber 1000ml Na2S2O3	A	7	7	4.0	Y	Absent		PCB-608(7)
L1813424-01P	Plastic 950ml unpreserved	A	7	7	4.0	Y	Absent		TSS-2540(7)
L1813424-01Q	Amber 1000ml HCl preserved	A	NA		4.0	Y	Absent		TPH-1664(28)
L1813424-01R	Amber 1000ml HCl preserved	A	NA		4.0	Y	Absent		TPH-1664(28)
L1813424-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)
L1813424-02A	Plastic 60ml unpreserved	A	7	7	4.0	Y	Absent		PH-4500(.01)
L1813424-02B	Amber 250ml unpreserved	A	7	7	4.0	Y	Absent		SALINITY(28)

*Values in parentheses indicate holding time in days

Project Name: 99 SUMMER STREET
Project Number: 4256.00

Lab Number: L1813424
Report Date: 04/24/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1813424-02C	Plastic 250ml unpreserved	A	7	7	4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)
L1813424-02D	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180)
L1813424-02E	Plastic 500ml H2SO4 preserved	A	<2	<2	4.0	Y	Absent		NH3-4500(28)
L1813424-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)

*Values in parentheses indicate holding time in days

Project Name:	99 SUMMER STREET	**Lab Number:**	L1813424
Project Number:	4256.00	**Report Date:**	04/24/18

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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

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.

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

Report Format: Data Usability Report

Project Name:	99 SUMMER STREET	**Lab Number:**	L1813424
Project Number:	4256.00	**Report Date:**	04/24/18

Data Qualifiers

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

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

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

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

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

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

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

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:	99 SUMMER STREET	**Lab Number:**	L1813424
Project Number:	4256.00	**Report Date:**	04/24/18

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.

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

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

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
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.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, 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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, 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, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4-18-18

ALPHA Job #: L1813424

ALPHA
8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: Sanborn, Head & Associates
Address: 1 Technology Park Drive
Westford, MA 01886
Phone: (978) 392-0900
Email: qpratt@sanbornhead.com

Project Information

Project Name: 99 Summer Street
Project Location: East Boston, MA
Project #: 4256.CC
Project Manager: Quincy Pratt
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

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

Additional Project Information:
*Do NOT run ethanol
HexCr, TriCr (lab calc.)
NPDES RGP minimum levels (detection limits) must be met, see attached

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
NPDES RGP
Total RGP Package*
Dissolved RGP Metals
pH
Salinity
Ammonia

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Sample Comments	TOTAL # BOTTLES
13424 - 01	Influent	4/18/18	9:00	GW	LMZ	Hold Dissolved metals	18
02	Receiving	4/18/18	10:30	SW	LMZ	Hold Dissolved metals	5
	~~Trip Blank~~ LMZ					Hold LMZ	

Container Type						
Container Type	P	P	P	A	P	
Preservative	C	A	A	A	D	

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
Leah Grisolia	4/18/18 11:46	[signature] ALPHA	4/18/18 1146
[signature]	4/18/18 1240	[signature]	4/18/18 1240

All samples submitted are subject to Alpha's Terms and Conditions
See reverse side
FORM NO. 01-01 (rev. 12-Mar-2012)

Parameter	Chemical Abstracts Service (CAS) Number(s)	Inorganic Test Methods				
		ICP/AES[1] 200.7	ICP/MS[2] 200.8	GFAA[3] 200.9	Other	Notes
						Digestion
a. Inorganics						
Ammonia					SM[4] 4500 B and D (0.1 mg/L) 350.1 (0.01 mg/L)	
Chloride	16887006				300.0, SM[4] 4110 B (0.1 mg/L)	
Total Residual Chlorine	7782-50-5				SM[4] 4500-Cl D (200 µg/L) SM[4] 4500-Cl G (50 µg/L) SM[4] 4500-Cl E	
Total Suspended Solids					160.2 SM[4] 2540D (5 mg/L)	
Antimony	7440360	20 µg/L	0.5 µg/L	3 µg/L		200
Arsenic	7440382	20 µg/L	1 µg/L	3 µg/L		206.5
Cadmium	7440439	10 µg/L	0.2 µg/L	0.5 µg/L		200
Chromium III	7440473	20 µg/L	1 µg/L	1 µg/L		200
Chromium VI	18540299				7196 A (10 µg/L) 218.6, 1636 (1 µg/L)	
Copper	7440508	20 µg/L	0.2 µg/L	3 µg/L		200
Iron	7439896	40 µg/L	55 µg/L			200
Lead	7439921	20 µg/L	0.2 µg/L	3 µg/L		200
Mercury	7439976				245.1, 7470 A (0.2 µg/L) 245.7, 1631 (0.001 µg/L)	3112 B
Nickel	7440020	20 µg/L	0.2 µg/L	5 µg/L		200
Selenium	7782492	40 µg/L	1 µg/L	5 µg/L		200
Silver	7440224	10 µg/L	0.2 µg/L	5 µg/L		200
Zinc	7440666	15 µg/L	2 µg/L			200
Cyanide	57125				335.4 (5 µg/L)	4500-CN OIA-1677 (5 µg/L)

Parameter	CAS Number(s)	Organic Test Methods				
		GC[5]	GC/MS[6]	HPLC[7]	State Methods[8]	Other[9]
1,2 Dichloroethane	107-06-2	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
1,1 Dichloroethylene	75-35-4	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
Ethylene Dibromide[17]	106-93-4	8011, 504.1 (0.01 µg/L) 618 (1 µg/L)	SIM[10] (0.1 µg/L)			524.2 (1 µg/L) 8260 (10 µg/L)
Methylene Chloride	75-09-2	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
1,1,1 Trichloroethane	71-55-6	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
1,1,2 Trichloroethane	79-00-5	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
Trichloroethylene	79-01-6	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
Tetrachloroethylene	127-18-4	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
cis-1,2 Dichloroethylene	156-59-2	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
Vinyl Chloride	75-01-4	601 (0.5 µg/L)	624 (1 µg/L)			8260 (5 µg/L) 524.2 (0.5 µg/L)
d. Non-Halogenated Semi-Volatile Organic Compounds						
Total Phthalates	85-68-7 + 84-742 + 117-84-0 + 84-66-2 + 131-11-3 + 117-81-7	606 (10 µg/L)	625 (2.5 µg/L) 1625 (5 µg/L)			8270 (5 µg/L) 525.2 (0.5 µg/L)
Diethylhexyl phthalate	117-81-7	606 (10 µg/L)	625 (2.5 µg/L) 1625 (5 µg/L)			8270 (5 µg/L) 525.2 (0.5 µg/L)

Parameter	CAS Number(s)	Organic Test Methods				
		GC[5]	GC/MS[6]	HPLC[7]	State Methods[8]	Other[9]
Total Group II Polycyclic Aromatic Hydrocarbons	83-32-9 + 208-96-8 + 120-12-7 + 191-24-2 + 206-44-0 + 86-73-7 + 91-20-3 + 85-01-8 + 129-00-0	610 (5 µg/L)	625 (0.5-2.5 µg/L)	610 (0.5-2 µg/L)	MA EPH (5 µg/L)	8270 (5 µg/L) SIM[10] (0.1 µg/L) 525.2 (0.5 µg/L)
Naphthalene	91-20-3	610 (5 µg/L)	625 (0.5 µg/L)	610 (2 µg/L)	MA VPH (5 µg/L) MA EPH (5 µg/L)	8270 (5 µg/L) SIM[10] (0.1 µg/L) 524.2 (0.5 µg/L) 8260 (2 µg/L)
e. Halogenated Semi-Volatile Organic Compounds						
Total Polychlorinated Biphenyls	1336-36-3A	608 (0.5 µg/L)				8082 (0.5 µg/L) 1668B (0.00005 µg/L)
Pentachlorophenol	87-86-5	604 (10 µg/L)	625 (5 µg/L)			8270 525 (5 µg/L)
f. Fuels Parameters						
Total Petroleum Hydrocarbons					1664A (5 mg/L)	
Ethanol	64-17-5					1666/1671/D3695
Methyl-tert-Butyl Ether	1634-04-4		524.2 (10 µg/L)		MA VPH (5 µg/L)	8260 (10 µg/L)
tert-Butyl Alcohol	75-65-0		524.2 (10 µg/L)			624, 8260 (10 µg/L)
tert-Amyl Methyl Ether	994-05-08		524.2 (10 µg/L)			624, 8260 (10 µg/L)

APPENDIX E

ENVIRONMENTAL RECEPTORS

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

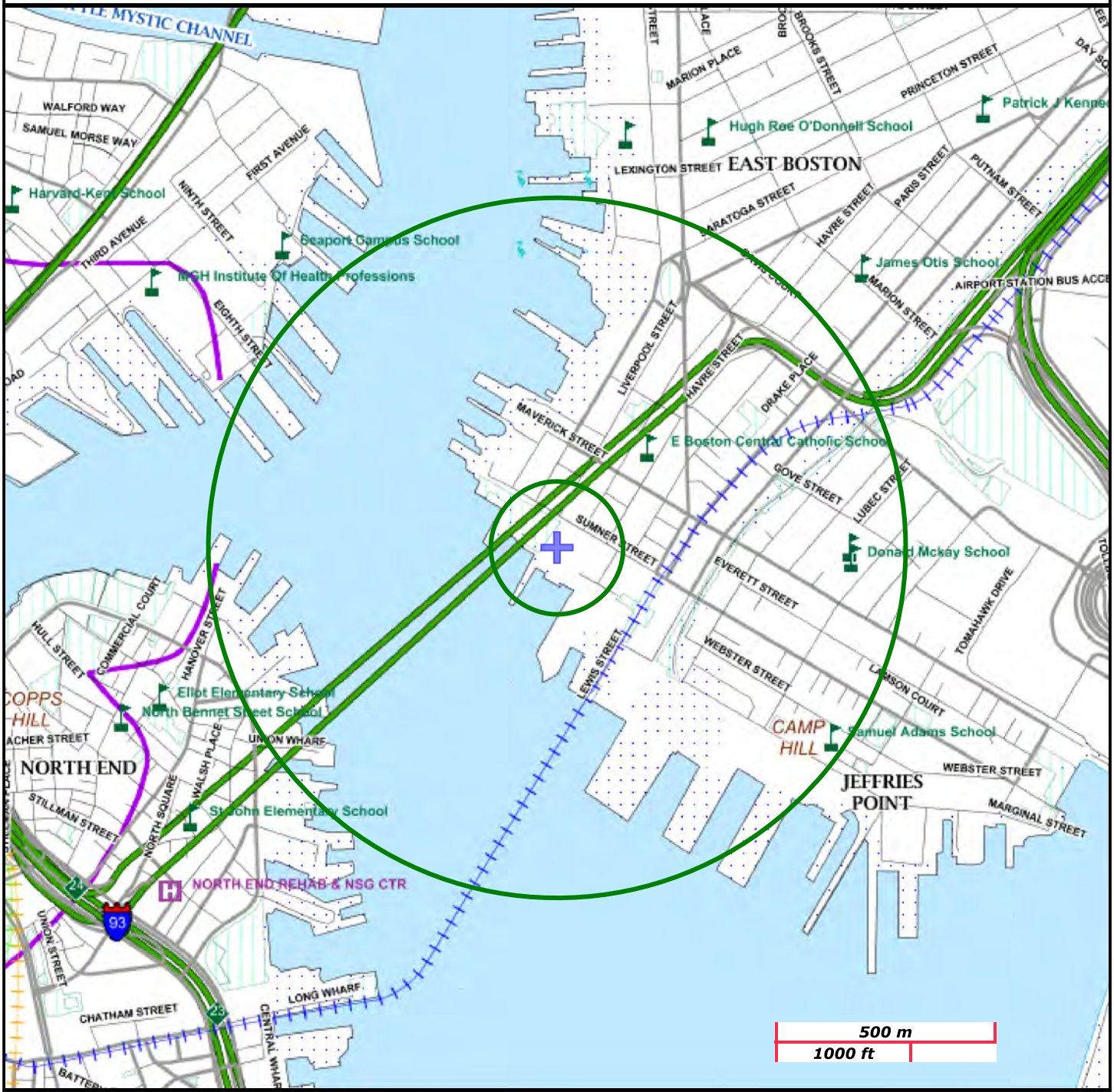
Site Information:

99 SUMNER STREET BOSTON, MA

NAD83 UTM Meters:
4692817mN , 331813mE (Zone: 19)
May 15, 2018

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible 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.

Leah Zivalic

From: Christine Vaccaro - NOAA Federal <christine.vaccaro@noaa.gov>
Sent: Wednesday, May 09, 2018 9:27 AM
To: Leah Zivalic
Subject: Re: Boston, MA RGP

Although Atlantic sturgeon, sea turtles, and whales may frequent Massachusetts Bay, based on the location and nature of your discharge, we would not expect any of these species to be exposed to the effects of this project.

Cheers,
Chris

Chris Vaccaro
Fisheries Biologist
Protected Resources Division
NOAA Fisheries, Greater Atlantic Region
Gloucester, MA
Phone: 978-281-9167
Email: christine.vaccaro@noaa.gov

For additional ESA Section 7 information and Critical Habitat guidance, please see:
www.greateratlantic.fisheries.noaa.gov/protected/section7

On Wed, May 9, 2018 at 9:25 AM, Leah Zivalic <lzivalic@sanbornhead.com> wrote:

> Good Morning Chris,
>
> I am requesting information to be included as part of a Notice of Intent (NOI) for a Remediation General Report (RGP). The NOI is for construction dewatering during excavation activities at 99 Sumner Street in East Boston, Massachusetts. Effluent, after passing through a fractionalization tank and bag filters, will
>
> be discharged to the Inner Boston Harbor in East Boston, Massachusetts via an outfall.
>
> As part of the application to the USEPA for the RGP, we need to investigate whether this proposed temporary discharge has the potential to adversely affect any federally listed species in the reach of the Boston Inner Harbor located downstream of the discharge point.
>
> Thank you in advance for your assistance, and please let me know if there is any additional information that I can provide.

-Leah

Leah Zivalic
Project Engineer
_____

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www.sanbornhead.com

Click here to follow us on LinkedIn / Twitter / Facebook

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2018-SLI-1825
Event Code: 05E1NE00-2018-E-04220
Project Name: 99 Sumner Street

May 14, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-1825

Event Code: 05E1NE00-2018-E-04220

Project Name: 99 Sumner Street

Project Type: DEVELOPMENT

Project Description: East Boston, Massachusetts 02128

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.368816960647436N71.04283558191793W

Counties: Suffolk, MA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX F

NATIONAL REGISTER OF HISTORICAL PLACES

Appendix F
National Register of Historic Places
Research Documentation
99 Sumner Street
East Boston, Massachusetts

Site Name	Address	Date Listed
East Boston High School, Old	127 Marion St.	3/15/2006
Eagle Hill Historic District	Roughly bounded by Border, Lexington, Trenton, and Falcon Sts.	2/26/1998
Donald McKay House	78-80 White St.	6/2/1982

Notes:
Sanborn, Head & Associates, Inc. (Sanborn Head) conducted a review of the National Register of Historic Places within East Boston, Massachusetts. The search returned 3 results. The Site is not listed in the National Register of Historical Places.