



MASSACHUSETTS WATER RESOURCES AUTHORITY

Chelsea Facility
2 Griffin Way
Chelsea, Massachusetts 02150

Telephone: (617) 242-6000
Facsimile: (617) 305-5990

Frederick A. Laskey
Executive Director

September 19, 2008

Mr. Robert Kubit
Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

SEP 29 2008
MUNICIPAL ASSISTANCE UNIT

SEP 29 2008

MUNICIPAL ASSISTANCE UNIT

Dear Mr. Kubit:

**Re: NPDES General Permit Coverage, Dewatering Activity Discharges
Brattle Street at Mill Brook
Arlington, Massachusetts**

This letter provides information to support an application for permission from the U.S. Environmental Protection Agency (EPA), and the Massachusetts Department of Environmental Protection (DEP) to temporarily dewater and discharge groundwater intrusion and/or stormwater accumulation into the Town of Arlington's stormwater system, and ultimately into Mill Brook and the Mystic River. The construction dewatering and discharge will take place on Brattle Street at Mill Brook in Arlington, Massachusetts (the Site), as part of the Massachusetts Water Resources Authority's (MWRA) Section 28, Suction to Brattle Court Pump Station, Project to rehabilitate a water main (the Project; Figure 1).

We are aware that the National Pollutant Discharge Elimination System (NPDES) Construction Site Dewatering Permit expired on September 23, 2007 and is no longer available, but we are proceeding at your recommendation. We are submitting our application for the Draft NPDES General Permit for Dewatering Activity Discharges (a.k.a. Dewatering General Permit or DGP) without the application fee. We understand that the Final DGP is forthcoming and we will resubmit the application with the \$385.00 application fee once the Final DGP becomes effective.

The original transmittal form for the permit application is being submitted with this letter. A copy of the transmittal form and Form BRP WM 10 Request for General Permit Coverage, as required by the DEP, are in Attachment A.

1. Property Description and Use

The Project is comprised of rehabilitating approximately 6,300 linear feet of 20-inch diameter water main from the intersection of Broadway and Massachusetts Avenue (Mass Ave), along Mass Ave up to and along Brattle Street to Brattle Court in Arlington, including modifications to water main connections, replacement of pipeline appurtenances and abandoning and removing two meters. The work will improve the hydraulic performance of the pipeline.



2. Planned Construction Description

Dewatering will be required to rehabilitate the water main in two access pits located on Brattle Street on either side of Mill Brook in Arlington. The excavations will be approximately 8 feet wide, 10 feet long and up to 8 feet deep. Water is expected to infiltrate into the excavation at these locations.

3. Water to be Discharged

Approval is requested to discharge dewatering effluent generated during the rehabilitation of the water main. Groundwater data from two monitoring wells installed along the Project alignment is summarized in Table 1. There is no evidence that the water contains contaminants above the Massachusetts Effluent Limits for Remediation and Construction or above Massachusetts Contingency Plan reportable concentrations for the applicable groundwater category (RCGW-2).

4. Pumping Treatment and Discharge

Dewatering will occur at Brattle Street during rehabilitation of the MWRA water main. We anticipate that dewatering and discharge will begin in January 2009 and will last approximately 11 months.

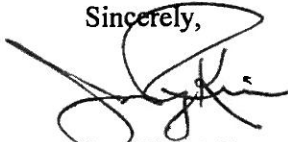
The water will be pumped to a fractionation (frac) or sedimentation tank to treat for grit and total suspended solids (TSS). The water will be passed through a bag filter assembly before discharge.

The treated water will be discharged to a Town of Arlington catch basin. The catch basin then flows to the municipal storm sewer and to a discharge point in the Mill Brook.

We will sample the tank effluent for TSS, pH, and oil and grease on a weekly basis in accordance with the DGP.

We would very much appreciate your review of this application as soon as possible. Please call the MWRA Design Manager, Lisa Hamilton (617-570-5439) if you have any questions.

Sincerely,



Jae Kim, P.E.

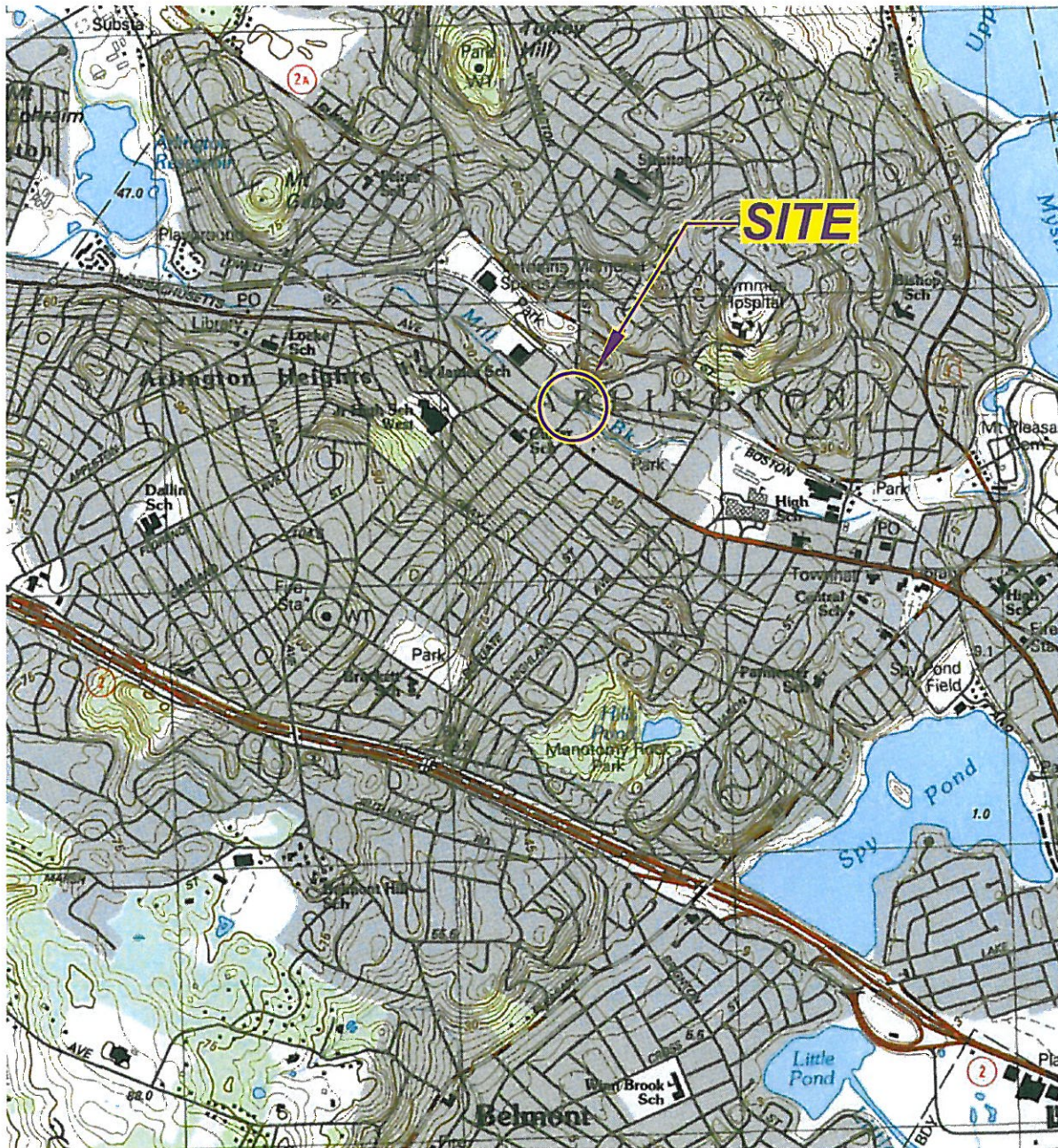
Director, Water Engineering

Attachments

Cc: Lisa Hamilton, P.E.

Mary White

Olga Vergara, EPA New England



This Image provided by MassGIS is from U.S.G.S.
 Topographic 7.5 X 15 Minute Series
 Boston North, MA Quadrangle, 1985.
 Datum is National Geodetic Vertical Datum (NGVD).
 Contour Interval is 3 Meters.



Section 28 Suction to Brattle Court Pump Station
 Work Plan
 Arlington, Massachusetts

Green International Affiliates, Inc.
 Medford, Massachusetts



Project 06496-0

SITE LOCATION MAP

September 2008

Fig. 1

APPENDIX A

DEP Notice of Intent



Enter your transmittal number

W228178

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml> or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits,
enter the LSP.

A. Permit Information

BRP WM 10

EPA General Permit

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Construction Site Dewatering

3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Massachusetts Water Resources Authority

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

2 Griffin Way

5. Street Address

Chelsea

MA

02150

617-570-5441

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Jae Kim

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

MWRA's Section 28 Suction to Brattle Court Pump Station Rehabilitation Project at Mill Brook

1. Name of Facility, Site Or Individual

Adjacent to 24-26 Brattle Street

2. Street Address

Arlington

MA

02476

617-570-5441

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

GEI Consultants, Inc

1. Name of Firm Or Individual

400 Unicorn Park Drive

2. Address

Woburn

MA

01801

781-721-4108

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Sean DiBartolo

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

- ☐ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
- ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
- ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
- ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program

W228178

Transmittal Number

BRP WM 10

Request for General Permit Coverage Construction Site Dewatering

Date Received

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Project owner:

Massachusetts Water Resources Authority

Name

2 Griffin Way

Street/PO Box:

MA

State

Jae Kim

Contact Person

Chelsea

City

02150

Zip Code

617-570-5441

Telephone Number

2. Project operator (if different from above):

Name

Street/PO Box:

City

State

Zip Code

Contact Person

Telephone Number

3. Facility Data (attach topographic map or other map showing facility location):

MWRA's Section 28 Suction to Brattle Court Pump Station Rehabilitation Project at Mill Brook

Name

Adjacent to 24-26 Brattle Street

Street/PO Box

Arlington

City

MA

State

02476

Zip Code

Email address (optional)

617-570-5441

Telephone Number

Jae Kim

Contact Person

4. Standard Industrial Code (SIC) and description:

N/A

Standard Industrial Code (SIC)

Active roadway. Water main rehabilitation project.

Description

5. Describe any storage of petroleum and chemicals on site:

N/A. The site is an active, public roadway. Therefore, no petroleum or chemical are stored on site.



BRP WM 10

Request for General Permit Coverage Construction Site Dewatering

Date Received

A. Facility Information (continued)

6. Describe the history of land use at the site:

A water line was first installed at the site in 1899. Land use near the site is primarily mixed use (small businesses and residences).

B. Effluent Characteristics (Refer to general permit in Federal Register Volume 67, Number 184, September 28, 2002, page 59503-59519)

No. of Discharge Points	Duration	Volume	Rate
1	~10.5 months	NA	NA
Outfall No.			
Outfall No.			
Outfall No.			
Estimated start and completion dates for construction:		1/5/2009 Start Date	11/15/2009 Completion Date

Description of any wastewater treatment:

None. Groundwater chemical testing results were below Massachusetts Effluent Limits for Remediation and Construction and below Massachusetts Contingency Plan reportable concentrations for the applicable groundwater category (RCGW-2).

Receiving waterbody:

Mill Brook and the Mystic River

Is the site located within Indian country?

☐ Yes ☒ No

Are any listed or proposed threatened or endangered species or designated critical habitat in proximity to the discharge site?

☐ Yes ☒ No

Was the US Fish & Wildlife Service and/or the National Marine Fisheries Service contact in determining eligibility under the Endangered Species Act requirements? If yes, submit copy of written concurrence, where applicable.

☐ Yes ☒ No



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program

W228178

Transmittal Number

BRP WM 10

Request for General Permit Coverage Construction Site Dewatering

Date Received

B. Effluent Characteristics (continued)

Is any historic property listed or eligible for listing on the National Register of Historic Places located on the facility or in proximity to the discharge?

☐ Yes

☒ No

Was the State Historic Preservation Officer or Tribal Historic Preservation Officer contacted in determining eligibility?

☐ Yes

☒ No

C. Certification

I certify that each discharge for which I am seeking coverage under the general permit consists solely of effluent from discharges from the construction dewatering activities; and, based on the instruction at 1.C.1c, Limitations of Coverage, I have met the eligibility criteria under the Endangered Species Act and the National Historic Preservation Act. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Jae Kim, Director, Water Engineering

Printed Name and Title

NOI Preparer:

GEI Consultants, Inc.

Name

400 Unicorn Park Dr

Address

MA

State

Sean DiBartolo

Contact Person

Woburn

City

01801

Zip Code

781-721-4108

Telephone Number

Table 1- Listing of Endangered Species
Section 28 Suction to Brattle Court Pump Station
MWRA Contract Number 7083
Arlington, Massachusetts

Town	Taxonomic Group	Scientific Name	Common Name	State Rank	Most Recent Observation	In Proximity to Site or Discharge Point?
ARLINGTON	Amphibian	<i>Ambystoma laterale</i>	Blue-spotted Salamander	SC	1895	No
ARLINGTON	Amphibian	<i>Ambystoma opacum</i>	Marbled Salamander	T	1800's	No
ARLINGTON	Beetle	<i>Cicindela duodecimguttata</i>	Twelve-spotted Tiger Beetle	SC	1923	No
ARLINGTON	Beetle	<i>Cicindela rufiventris hentzii</i>	Hentz's Redbelly Tiger Beetle	T	1930	No
ARLINGTON	Bird	<i>Circus cyaneus</i>	Northern Harrier	T	1879	No
ARLINGTON	Bird	<i>Cistothorus platensis</i>	Sedge Wren	E	1868	No
ARLINGTON	Bird	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	E	1874	No
ARLINGTON	Butterfly/Moth	<i>Eacles imperialis</i>	Imperial Moth	T	1903	No
ARLINGTON	Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC	1900	No
ARLINGTON	Vascular Plant	<i>Aristida purpurascens</i>	Purple Needlegrass	T	1913	No
ARLINGTON	Vascular Plant	<i>Cyperus engelmannii</i>	Engelmann's Umbrella-sedge	T	2002	No
ARLINGTON	Vascular Plant	<i>Sagittaria montevidensis</i> ssp.	Estuary Arrowhead	E	1876	No
ARLINGTON	Vascular Plant	<i>Houstonia longifolia</i> var. <i>longifolia</i>	Long-leaved Bluet	E	1898	No
ARLINGTON	Vascular Plant	<i>Galium boreale</i>	Northern Bedstraw	E	1890	No
ARLINGTON	Vascular Plant	<i>Asclepias verticillata</i>	Linear-leaved Milkweed	T	1854	No

<http://www.mass.gov/dfwele/dfw/nhesp/towna.htm>

Definitions

SC	Special Concern	Any species of plant or animal which has been documented by biological research and inventory to have suffered a decline that could threaten the species if allowed to continue unchecked or that occurs in such small numbers or with such a restricted distribution or specialized habitat requirements that it could easily become threatened within Massachusetts.
T	Threatened	Any species of plant or animal likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and any species declining or rare as determined by biological research and inventory and likely to become endangered in the foreseeable future.
E	Endangered	Any species of plant or animal in danger of extinction throughout all or a significant portion of its range and species of plants or animals in danger of extirpation as documented by biological research and inventory.

Table 2- Listing of Historic Properties
Section 28 Suction to Brattle Court Pump Station
MWRA Contract Number 7083
Arlington, Massachusetts

No.	Resource Name	Address	City	Listed	In Pathway of Discharges from Site?
1	Allyn House	94 Oakland Ave.	Arlington	9/27/1985	No
2	Arlington Center Historic District	Bounded by Massachusetts Ave. and Academy, Pleasant and Maple Sts.	Arlington	7/18/1974	No
3	Arlington Center Historic District (Boundary Increase)	Roughly bounded by Jason St., Massachusetts Ave., Pleasant and Gray Sts.	Arlington	9/27/1985	No
4	Arlington Coal & Lumber	41 Park Ave.	Arlington	4/18/1985	No
5	Arlington Gaslight Company	Grove St. Town Yard	Arlington	4/18/1985	No
6	Arlington Pumping Station	Brattle Court off Brattle St.	Arlington	4/18/1985	No
7	Arlington Reservoir	Park Circle	Arlington	9/27/1985	No
8	Baptist Society Meeting House	3--5 Brattle St.	Arlington	4/18/1985	No
9	Bassett, Maria, House	8 College Ave.	Arlington	9/27/1985	No
10	Butterfield-Whittemore House	54 Massachusetts Ave.	Arlington	3/30/1978	No
11	Call-Bartlett House	216 Pleasant St.	Arlington	4/18/1985	No
12	Calvary Methodist Church	300 Massachusetts Ave.	Arlington	6/23/1983	No
13	Capitol Theater Building	202--208 Massachusetts Ave.	Arlington	4/18/1985	No
14	Chapel of St. Anne	Claremont Ave.	Arlington	4/18/1985	No
15	Cushman House	104 Bartlett Ave.	Arlington	4/18/1985	No
16	Cutter, Ephraim, House	4 Water St.	Arlington	3/29/1978	No
17	Cutter, Gershom, House	1146 Massachusetts Ave.	Arlington	11/12/1999	No
18	Cutter, Jefferson, House	1 Whittemore Park	Arlington	1/23/1992	No
19	Cutter, Second, A. P., House	89 Summer St.	Arlington	4/18/1985	No
20	Damon House	275 Broadway	Arlington	4/18/1985	No
21	Farmer, Kimball, House	1173 Massachusetts Ave.	Arlington	4/18/1985	No
22	First Parish Church Parsonage	232--234 Pleasant St.	Arlington	4/18/1985	No
23	Fowle-Reed-Wyman House	64 Old Mystic St.	Arlington	4/14/1975	No
24	Greek Orthodox Church	735 Massachusetts Ave.	Arlington	6/23/1983	No
25	Hall, Edward, House	187 Pleasant St.	Arlington	4/18/1985	No
26	Highland Hose House	1007 Massachusetts Ave.	Arlington	4/18/1985	No
27	Hill, Addison, House	83 Appleton St.	Arlington	9/27/1985	No
28	Hornblower, Edward, House and Barn	200 Pleasant St.	Arlington	4/18/1985	No
29	House at 45 Claremont Avenue	45 Claremont Ave.	Arlington	4/18/1985	No
30	House at 5 Willow Court	5 Willow Court	Arlington	4/18/1985	No
31	House at 5--7 Winter Street	5--7 Winter St.	Arlington	4/18/1985	No
32	Kensington Park Historic District	Roughly bounded by Kensington Park, Brantwood and Kensington Rds.	Arlington	9/27/1985	No
33	Kimball, W.W., House	13 Winter St.	Arlington	4/18/1985	No
34	Locke School	88 Parke Ave.	Arlington	9/27/1985	No
35	Locke, Capt. Benjamin, House	21 Appleton St.	Arlington	7/21/1978	No
36	Locke, Lt. Benjamin, Store	11--13 Lowell St.	Arlington	4/18/1985	No
37	Milestone	Appleton St. and Paul Revere Rd.	Arlington	9/27/1985	No
38	Mystic Valley Parkway, Metropolitan Park System of Greater Boston MPS	Mystic Valley Parkway	Arlington	1/18/2006	No
39	Old Schwamb Mill	17 Mill Lane and 29 Lowell St.	Arlington	10/7/1971	No
40	Orvis Road Historic District	Roughly bounded by Massachusetts Ave., Freeman, Randolph and Newcomb Sts. on Orvis Rd.	Arlington	9/27/1985	No
41	Pierce Farm Historic District	Roughly bounded by Claremont and Oakland Aves.	Arlington	9/27/1985	No
42	Pleasant Street Congregational Church	75 Pleasant St.	Arlington	6/23/1983	No
43	Prentiss, William, House	252 Gray St.	Arlington	9/27/1985	No
44	Prentiss-Payson House	224--226 Pleasant St.	Arlington	4/18/1985	No
45	Prince Hall Mystic Cemetery	Address Restricted	Arlington	11/25/1998	No
46	Proctor, William, House	390 Massachusetts Ave.	Arlington	4/18/1985	No
47	Rawson, Warren, Building	68--74 Franklin St.	Arlington	9/27/1985	No
48	Rawson, Warren, House	37--49 Park St.	Arlington	4/18/1985	No
49	Robindreau, Alfred E., House	28 Lafayette St.	Arlington	4/18/1985	No
50	Robinson House	19 Winter St.	Arlington	4/18/1985	No
51	Robinson-Lewis-G. F. Fessenden House	40 Westminster Ave.	Arlington	4/18/1985	No
52	Russell Common	2--10 Park Terrace	Arlington	4/18/1985	No
53	Russell, Jason House	7 Jason St.	Arlington	10/9/1974	No
54	Shattuck, Ralph W., House	274--276 Broadway	Arlington	9/27/1985	No
55	Sterling, Ella Mahalla Cutter, House	93 Summer St.	Arlington	4/18/1985	No
56	Swadkins, Thomas, House	160 Westminster Ave.	Arlington	4/18/1985	No
57	Swan, Henry, House	418 Massachusetts Ave.	Arlington	9/27/1985	No
58	Symmes, Stephen, Jr., House	215 Crosby St.	Arlington	4/18/1985	No
59	Taylor-Dallin House	69 Oakland Ave.	Arlington	9/27/1985	No
60	US Post Office--Arlington Main	10 Court St.	Arlington	6/18/1986	No
61	Wayside Inn	393 Massachusetts Ave.	Arlington	9/27/1985	No
62	Whittemore House	267 Broadway	Arlington	4/18/1985	No
63	Winn Farm	57 Summer St.	Arlington	4/18/1985	No

Table 3 - Chemical Testing Results: Groundwater Samples

Section 28 Suction to Brattle Court Pump Station

MWRA Contract Number 7083

Arlington, Massachusetts

Analyte	Method	Unit	Massachusetts General Permit Effluent Limitations (Remediation & Construction)	MCP Reportable Concentrations RCGW-2	Well ID: Sample ID:	
					SEC28-7(MW)	
					064960-SEC28- 7(MW)	064960-SEC28- 7B(MW)
					Screened Interval (ft bgs): Sample Date:	Screened Interval (ft bgs): Sample Date:
					4.5-14.5 9/24/2007	4.5-14.5 9/24/2007
Volatile Organic Compounds (VOCs)	8260	ug/L				
Tetrachloroethene			5.0	30	1.3	1.4
Volatile Petroleum Hydrocarbons (VPH)	MAVPH	ug/L				
C5-C8 Aliphatics			5000 ⁽¹⁰⁾	3000	< 50	< 50
C9-C10 Aromatics			5000 ⁽¹⁰⁾	7000	< 50	< 50
C9-C12 Aliphatics			5000 ⁽¹⁰⁾	5000	< 50	< 50
Semi-Volatile Organic Compounds (SVOCs)	8270	ug/L				
Total SVOCs			10.0 ⁽¹¹⁾		ND	ND
Extractable Petroleum Hydrocarbons (EPH)	MAEPH	ug/L				
C11-C22 Aromatics			5000 ⁽¹⁰⁾	5000	< 110	< 110
C9-C18 Aliphatics			5000 ⁽¹⁰⁾	5000	< 110	< 110
C19-C36 Aliphatics			5000 ⁽¹⁰⁾	50000	< 110	< 110
Metals (Unfiltered)	6010/7470	ug/L				
Total Unfiltered Metals			Varies for each analyte	NS	ND	ND
Metals (Filtered)	6010/7470	ug/L				
Total Filtered Metals			Varies for each analyte	NS	ND	ND
Other						
Solids, Total Suspended	2540	mg/L	30	NS	< 4.0	< 4.0
Total Residual Chlorine	4500	mg/L	0.050 ⁽¹²⁾	NS	< 0.050	< 0.050

General Notes:

1. In general, analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
3. MCP = 310 CMR 40.0000 Massachusetts Contingency Plan with revisions effective December 14, 2007.
4. RCs = MCP Reportable Concentrations.
5. ND = The analyte was not detected above the laboratory reporting limit. See the laboratory data sheets for the laboratory reporting limit.
6. NS = No MCP standard has been established for this analyte.
7. ug/L = micrograms per liter.
8. mg/L = milligrams per liter.
9. bgs = below ground surface.
10. TPH General Permit standards are listed for the purpose of comparison with EPH and VPH.
11. PAH General Permit standards are listed as the most appropriate standard for SVOCs.
12. Total Residual Chlorine General Permit standards are equal to the minimum level of the test method.