



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

NOV 02 2011

Joe Cruz,
Site Superintendent
J. Derenzo Company
338 Howard Street
Brockton, MA 02302

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Chestnut Hill Square site located at 200-230 Boylston Street, Newton, MA
02459, Middlesex County; Authorization # MAG910507

Dear Mr. Cruz:

Based on the review of a Notice of Intent (NOI) submitted on behalf of NED Chestnut Hill LLC, by your firm J. Derenzo Co., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, the metals limits included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the limited dilution (1.45) at Saw Mill Brook, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities)

Therefore, the limits for arsenic of 14.5 ug/L, cadmium of 0.29 ug/L, trivalent chromium of 70.76 ug/L, copper of 7.54 ug/L, lead of 1.89 ug/L, nickel of 42.05 ug/L, selenium of 7.25 ug/L, zinc of 96.57 ug/L and iron of 1,450 ug/L, are required to achieve permit compliance at your site. Please note the above limits are higher than the base limits, this is to reflect RGP provisions made for discharges to low (1-5) dilution. For more information on the limits increase see Footnote 11 indicated at the end of the attached permit list.

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

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on January 1, 2012. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,


David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP
Bradd Biagini, J. Derenzo Co.

**2010 Remediation General Permit
Summary of Monitoring Parameters¹¹**

| | |
|--|--|
| NPDES Authorization Number: | MAG910507 |
| Authorization Issued: | October, 2011 |
| Facility/Site Name: | Chestnut Hill Square |
| Facility/Site Address: | 200-300 Boylston Street, Newton, MA 02459, Middlesex County |
| | Email address of owner: jkeefe@nedevlopment.com |
| Legal Name of Operator: | J. Derenzo Company |
| Operator contact name, title, and Address: | Joe Cruz, Site Superintendent, 338 Howard Street, Brockton, MA 02302, Plymouth Company |
| | Email: jcruz@jderenzo.com |
| Estimated Date of Completion: | January 1, 2012 |
| Category and Sub-Category: | Petroleum Related Site Remediation. Subcategory B. Fuel Oils and Other Oils Sites, Also, Contaminated Construction Dewatering. Sub-category A and B. General Urban Fill Sites and Known Contaminated Sites, respectively |
| RGP Permit Termination Date: | September 10, 2015 |
| Receiving Water: | Saw Mill Brook in Brookline MA |
| | |

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

| | <u>Parameter</u> | <u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit) |
|---|---|---|
| ✓ | 1. Total Suspended Solids (TSS) | 30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing **, Me#60.2/ML5ug/L |
| | 2. Total Residual Chlorine (TRC) ¹ | Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L |
| ✓ | 3. Total Petroleum Hydrocarbons (TPH) | 5.0 mg/L/ Me# 1664A/ML 5.0mg/L |
| ✓ | 4. Cyanide (CN) ^{2, 3} | Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L |
| | 5. Benzene (B) | 5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L |
| | 6. Toluene (T) | (limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L |
| | 7. Ethylbenzene (E) | (limited as ug/L total BTEX) Me#8260C/ ML 2ug/L |
| | 8. (m,p,o) Xylenes (X) | (limited as ug/L total BTEX) Me#8260C/ ML 2ug/L |
| | 9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes | 100 ug/L/ Me#8260C/ ML 2ug/L |

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

| <u>Parameter</u> | <u>Effluent Limit/Method# /ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit) |
|--|--|
| a. Benzo(a) Anthracene ⁷ | 0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| b. Benzo(a) Pyrene ⁷ | 0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| c. Benzo(b)Fluoranthene ⁷ | 0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| d. Benzo(k)Fluoranthene ⁷ | 0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| e. Chrysene ⁷ | 0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| f. Dibenzo(a,h)anthracene ⁷ | 0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L |
| g. Indeno(1,2,3-cd) Pyrene ⁷ | 0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L |
| 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH) | 100 ug/L |
| h. Acenaphthene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| i. Acenaphthylene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| j. Anthracene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| k. Benzo(ghi) Perylene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| l. Fluoranthene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| m. Fluorene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| n. Naphthalene ⁵ | 20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| o. Phenanthrene | X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| p. Pyrene | X/Me#8270D/ML5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L |
| 37. Total Polychlorinated Biphenyls (PCBs) ^{8, 9} | 0.000064 ug/L/Me# 608/ ML 0.5 ug/L |
| ✓ 38. Chloride | Monitor only/Me# 300.0/ ML 0.1ug/L |

| <u>Metal parameter</u> | <u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ^{11/12}</u> | <u>Minimum level=ML</u> |
|------------------------|--|-------------------------|
| | <u>Freshwater</u> | |
| 39. Antimony | 5.6/ML 10 | |

| | Metal parameter | Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)^{11/12} | | Minimum level=ML |
|---|---------------------------------|---|--|-------------------------|
| | | Freshwater | | |
| ✓ | 40. Arsenic ** | 14.5/ML20 | | |
| ✓ | 41. Cadmium ** | 0.29/ML10 | | |
| ✓ | 42. Chromium III (trivalent) ** | 70.76/ML15 | | |
| | 43. Chromium VI (hexavalent) ** | 11.4/ML10 | | |
| ✓ | 44. Copper ** | 7.54/ML15 | | |
| ✓ | 45. Lead ** | 1.89/ML20 | | |
| | 46. Mercury ** | 0.9/ML0.2 | | |
| ✓ | 47. Nickel ** | 42.05/ML20 | | |
| ✓ | 48. Selenium ** | 7.25/ML20 | | |
| ✓ | 49. Silver | 1.74/ML10 | | |
| ✓ | 50. Zinc ** | 96.57/ML15 | | |
| ✓ | 51. Iron | 1,450/ML 20 | | |

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

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds (not including the #34, Bis (2-Ethylhexyl) Phthalate). The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Orochlor analyses." Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, etc. not to exceed the DF=5.

¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1

J. DERENZO CO.

338 Howard Street
Brockton, MA 02302
Bus: 508-427-6441

MAG9/0507

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

October 14, 2011
File No. 1856.11

Re: Notice of Intent for the Remediation General Permit
Temporary Construction Dewatering at Chestnut Hill Square for
Site Redevelopment and Remediation
Chestnut Hill Square, Newton, Massachusetts

Dear Sir/Madam:

On behalf of NED Chestnut Hill LLC, J. Derenzo Company, (Derenzo) has submitted this Notice of Intent (NOI) to the USEPA for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) MAG910000. This letter and supporting documentation were prepared in accordance with the U.S. EPA guidance for construction dewatering under the RGP program. Derenzo is the earthwork contractor for the project and will have direct responsibility for the dewatering activities within various sub-areas of the Project Site. All subcontractors working for Derenzo on the project will be required to meet the requirements of this NOI and the RGP. The location of storm drain outfall is shown on Figure 1 and the extent of the Project Site is shown on Figure 2.

Construction activities associated with the redevelopment of the Project Site and remediation in one small portion of the Project Site are planned for the Chestnut Hill Square development, which is located south of Route 9 in Newton, Massachusetts (Figure 1). The redevelopment activities include the installation of new utility systems and the earthwork required to prepare the Project Site for the construction of three new buildings and a parking garage. In one portion of the Project Site, it is anticipated that soils contaminated with fuel oil and potentially free phase fuel oil will be encountered in the subsurface. The Massachusetts Department of Environmental Protection (DEP) has assigned a Release Tracking Number (RTN) 3-25099 to this property under the Massachusetts Contingency Plan (310 CMR 40.0000). A soil remediation excavation is planned on the Project Site in the vicinity of a former 5,000-gallon fuel oil UST, which was removed from the Project Site in November 2005. The anticipated fuel oil remediation area is shown on Figure 2. The oil and/or hazardous material (OHM) observed at this RTN is light non-aqueous phase liquid (LNAPL), which was observed in a monitoring well installed in June 2006 in the vicinity of the former UST.

According to the Massachusetts Geographical Information System (MassGIS), the excavation activities will not impact Areas of Critical Environmental Concern (ACEC) or

FIGURES



NOTES:
 Base map taken from "Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs"
 7.5 minute USGS Quadrangle Maps: Newton, Massachusetts, REV: 1987

Drawn By: R.Hirtle
 Designed By: L.Garvey
 Reviewed By: P.Pinto
 Project No: 1856.11
 Date: October 2011

SCALE: 1:25,000



FIGURE 1
Locus Plan
 Notice of Intent for
 Remediation General Permit

NED Chestnut Hill LLC
 Newton, Massachusetts

Figure No. 2

**Location of Proposed Excavation
Notice of Intent for
Remediation General Permit**

NED Chestnut Hill LLC
Newton, Massachusetts

Drawn By: R. Hilde
Designed By: R. Cook
Reviewed By: J. Hilde
Project No.: 18519
Date: October 2011

Figure Narrative

The base plan was adapted from a plan prepared by Harry R. Feldman, Inc. (Feldman) of Boston, MA, entitled "Topographic Site Plan", dated September 25, 2002 and was provided to Sanborn, Head & Associates, Inc. of Westford, MA on March 2, 2005 by Daveberry-Goodland, Inc. of Boston, MA.

The location of the site and site features shown should be considered approximate.

The monitoring well designated GZA-2 was completed by GZA Geoenvironmental, Inc. of Newton Upper Falls, MA, in October 2000.

The locations of the soil test borings and auger probes are based on local measurements from existing site features shown on the Feldman plan. The elevations of the soil test borings and auger probes were estimated by Sanborn Head by interpolating between ground surface contours of the existing topography shown on the Feldman plan. The locations of test borings designated SH-1, SH-101, SH-201 were surveyed by Feldman. The locations of the GZA borings were taken from a plan prepared by the same firm on May 15, 2005 and prepared by ATC Associates, Inc. (ATC).

Legend

- Test borings completed by Sanborn Head in August 2002 & April 2005
- Auger probes completed by Sanborn Head in February 2003
- Test borings completed by GZA Geoenvironmental Inc. in October 2000
- Monitoring well installed by CYN
- Monitoring well installed by Sanborn Head in June 2006
- Soil vapor screening location
- Confirmatory soil sampling location
- Monitoring well installed by ATC (1876)
- Groundwater elevations observed on June 24, 2011



Figure No. 3

Proposed Groundwater Treatment Schematic

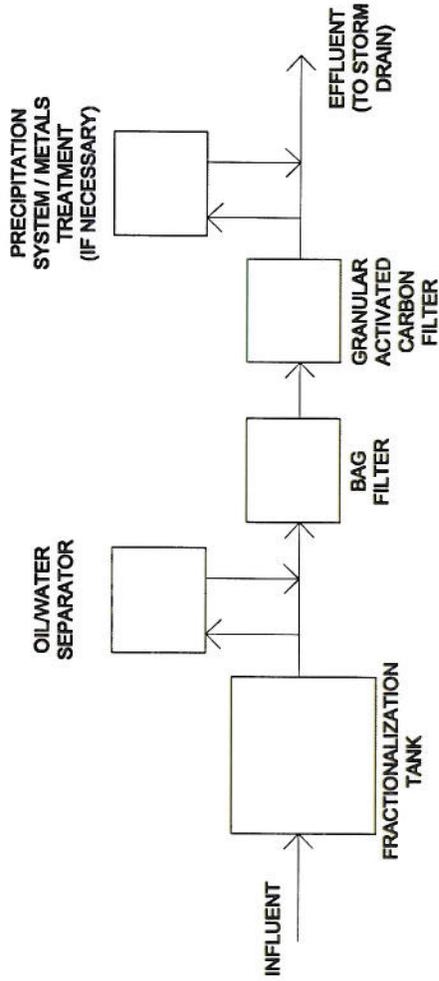
Notice of Intent for Remediation General Permit

NED Chestnut Hill LLC
Newton, Massachusetts

Drawn By: R.Hindle
Designed By: L.Garvey
Reviewed By: D.Wood
Project No: 7896.11
Date: October 2011

Notes

Details of treatment system may vary from the system indicated on lot. Specific means and methods of treatment are to be selected by the subcontractor. Water discharged at the effluent point shall meet required effluent standards as specified in Appendix III and IV of the RGP.



NOT TO SCALE

APPENDIX A
NOTICE OF INTENT FORM

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

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

| | | | |
|--|-----------------------|--|--|
| a) Name of facility/site: Chestnut Hill Square | | Facility/site mailing address: | |
| Location of facility/site: | | Street: Facility: 200-230 Boylston Street | |
| longitude: -71.175996 | Facility SIC code(s): | Mailing: NED Chestnut Hill LLC | |
| latitude: 42.319429 | N/A | One Wells Avenue, Newton Center, MA 02459 | |
| b) Name of facility/site owner: NED Chestnut Hill LLC | | Town: Newton | |
| Email address of facility/site owner: | | State: MA | |
| jkeefe@neddevelopment.com | | Zip: 02459 | |
| Telephone no. of facility/site owner: 617-965-8700 | | County: Middlesex | |
| Fax no. of facility/site owner: 617-243-7315 | | Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/> | |
| Address of owner (if different from site): | | 3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe: | |
| Street: One Wells Avenue | | | |
| Town: Newton Center | | State: MA | |
| Zip: 02459 | | County: Middlesex | |
| c) Legal name of operator: | | Operator telephone no.: 781-858-7930 | |
| J. Derenzo Company | | Operator fax no.: 508-427-6488 | |
| Operator contact name and title: Joe Cruz, Site Superintendent | | Operator email: jcruz@jderenzo.com | |
| Address of operator (if different from owner): | | Street: 338 Howard Street | |
| Town: Brockton | | State: MA | |
| Zip: 02302 | | County: Plymouth | |

| | |
|--|---|
| <p>d) Check Y for "yes" or N for "no" for the following:</p> <p>1. Has a prior NPDES permit exclusion been granted for the discharge? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, date and tracking #: <input type="text"/></p> <p>3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y <input type="radio"/> N <input checked="" type="radio"/></p> <p>4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y <input checked="" type="radio"/> N <input type="radio"/></p> | |
| <p>e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y <input checked="" type="radio"/> N <input type="radio"/></p> <p>If Y, please list:</p> <p>1. site identification # assigned by the state of NH or MA: <input type="text" value="RTN-25099"/></p> <p>2. permit or license # assigned: <input type="text"/></p> <p>3. state agency contact information: name, location, and telephone number: <input type="text"/></p> <p>MassDEP Northeast Region Wilmington, Massachusetts 978-694-3200</p> | <p>f) Is the site/facility covered by any other EPA permit, including:</p> <p>1. Multi-Sector General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>2. Final Dewatering General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>3. EPA Construction General Permit? Y <input checked="" type="radio"/> N <input type="radio"/>, if Y, number: <input type="text" value="MAR10D553"/></p> <p>4. Individual NPDES permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>5. any other water quality related individual or general permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> |
| <p>g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y <input type="radio"/> N <input checked="" type="radio"/></p> | |
| <p>h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.</p> | |
| <p>Activity Category</p> <p>I - Petroleum Related Site Remediation</p> | <p>Activity Sub-Category</p> <p>A. Gasoline Only Sites <input type="checkbox"/></p> <p>B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input checked="" type="checkbox"/></p> <p>C. Petroleum Sites with Additional Contamination <input type="checkbox"/></p> |
| <p>II - Non Petroleum Site Remediation</p> | <p>A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/></p> <p>B. VOC Sites with Additional Contamination <input type="checkbox"/></p> <p>C. Primarily Heavy Metal Sites <input type="checkbox"/></p> |
| <p>III - Contaminated Construction Dewatering</p> | <p>A. General Urban Fill Sites <input checked="" type="checkbox"/></p> <p>B. Known Contaminated Sites <input checked="" type="checkbox"/></p> |

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

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

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

Temporary construction dewatering in support of MCP remediation efforts required to prepare site for a redevelopment project.

b) Provide the following information about each discharge:

| | |
|---|--|
| 1) Number of discharge points: 1 | 2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow 0.22 Is maximum flow a design value? Y <input type="radio"/> N <input checked="" type="radio"/> Average flow (include units) 0.11 Is average flow a design value or estimate? Estimate |
| 3) Latitude and longitude of each discharge within 100 feet: | |
| pt.1: lat 42.316344 long -71.170264 | pt.2: lat: long: |
| pt.3: lat: long: | pt.4: lat: long: |
| pt.5: lat: long: | pt.6: lat: long: |
| pt.7: lat: long: | pt.8: lat: long: |
| | etc. |
| 4) If hydrostatic testing, total volume of the discharge (gals) <input type="text"/> | 5) Is the discharge intermittent <input type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input checked="" type="radio"/> N <input type="radio"/> |
| c) Expected dates of discharge (mm/dd/yy): start October 24, 2011 end January 1, 2012 | |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units, and 4. discharge points and receiving waters(s) <input type="text"/> See attached figure | |

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

| Parameter * | CAS Number | Believed Absent | Believed Present | # of Samples | Sample Type (e.g. grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Average daily value | |
|---|---|-------------------------------------|-------------------------------------|--------------|-------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
| | | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 1. Total Suspended Solids (TSS) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 2540D | 10,000 | 190,000 | | | |
| 2. Total Residual Chlorine (TRC) | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 4500CL-D | 20 | ND | | | |
| 3. Total Petroleum Hydrocarbons (TPH) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 1664A | 4,400 | 13,200 | | | |
| 4. Cyanide (CN) | 57125 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | | | | | | |
| 5. Benzene (B) | 71432 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 6. Toluene (T) | 108883 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 7. Ethylbenzene (E) | 100414 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 8. (m,p,o) Xylenes (X) | 108883; 106423; 95476; 1330207 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 3.0 | ND | | | |
| 9. Total BTEX ² | n/a | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 6.0 | ND | | | |
| 10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³ | 106934 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 504.1 | 0.010 | ND | | | |
| 11. Methyl-tert-Butyl Ether (MtBE) | 1634044 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 20 | ND | | | |
| 12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol) | 75650 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 100 | ND | | | |

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

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

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

| Parameter * | CAS Number | Believed Absent | Believed Present | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Average daily value | |
|-----------------------------------|------------|-------------------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
| | | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 13. tert-Amyl Methyl Ether (TAME) | 9940508 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 20 | ND | | | |
| 14. Naphthalene | 91203 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| 15. Carbon Tetrachloride | 56235 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 16. 1,2 Dichlorobenzene (o-DCB) | 95501 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 5.0 | ND | | | |
| 17. 1,3 Dichlorobenzene (m-DCB) | 541731 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 5.0 | ND | | | |
| 18. 1,4 Dichlorobenzene (p-DCB) | 106467 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 5.0 | ND | | | |
| 18a. Total dichlorobenzene | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 5.0 | ND | | | |
| 19. 1,1 Dichloroethane (DCA) | 75343 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.5 | ND | | | |
| 20. 1,2 Dichloroethane (DCA) | 107062 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.5 | ND | | | |
| 21. 1,1 Dichloroethene (DCE) | 75354 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 22. cis-1,2 Dichloroethene (DCE) | 156592 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |
| 23. Methylene Chloride | 75092 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 5.0 | ND | | | |
| 24. Tetrachloroethene (PCE) | 127184 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.5 | ND | | | |
| 25. 1,1,1 Trichloro-ethane (TCA) | 71556 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 2.0 | ND | | | |
| 26. 1,1,2 Trichloro-ethane (TCA) | 79005 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.5 | ND | | | |
| 27. Trichloroethene (TCE) | 79016 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 1.0 | ND | | | |

| Parameter * | CAS Number | Believed Absent | Believed Present | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | | Average daily value | |
|--|------------|-------------------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
| | | | | | | | | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 28. Vinyl Chloride (Chloroethene) | 75014 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 2.0 | ND | | | |
| 29. Acetone | 67641 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 10 | ND | | | |
| 30. 1,4 Dioxane | 123911 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 624 | 2,000 | ND | | | |
| 31. Total Phenols | 108952 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 420.1 | 150 | ND | | | |
| 32. Pentachlorophenol (PCP) | 87865 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 16 | ND | | | |
| 33. Total Phthalates (Phthalate esters) ⁴ | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C | 15 | ND | | | |
| 34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate] | 117817 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C | 15 | ND | | | |
| 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH) | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| a. Benzo(a) Anthracene | 56553 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| b. Benzo(a) Pyrene | 50328 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| c. Benzo(b)Fluoranthene | 205992 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| d. Benzo(k)Fluoranthene | 207089 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| e. Chrysene | 21801 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| f. Dibenzo(a,h)anthracene | 53703 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| g. Indeno(1,2,3-cd) Pyrene | 193395 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH) | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |

⁴ The sum of individual phthalate compounds.

| Parameter * | CAS Number | Believed Absent | Believed Present | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | mass (kg) | Average daily value | mass (kg) |
|--|---|-------------------------------------|-------------------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
| | | | | | | | | concentration (ug/l) | | concentration (ug/l) | |
| h. Acenaphthene | 83329 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| i. Acenaphthylene | 208968 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| j. Anthracene | 120127 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| k. Benzo(ghi) Perylene | 191242 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| l. Fluoranthene | 206440 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| m. Fluorene | 86737 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| n. Naphthalene | 91203 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| o. Phenanthrene | 85018 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| p. Pyrene | 129000 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 8270C-SIM | 4.0 | ND | | | |
| | 85687; 84742; 117840; 84662; 131113; 117817. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 608 | 0.250 | ND | | | |
| 37. Total Polychlorinated Biphenyls (PCBs) | | | | | | | | | | | |
| 38. Chloride | 16887006 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 300.0 | 12,000 | 520,000 | | | |
| 39. Antimony | 7440360 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 6020A | 1.0 | ND | | | |
| 40. Arsenic | 7440382 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 8.8 | | | |
| 41. Cadmium | 7440439 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.2 | 0.3 | | | |
| 42. Chromium III (trivalent) | 16065831 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 9.0 | | | |
| 43. Chromium VI (hexavalent) | 18540299 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 7196A | 10 | ND | | | |
| 44. Copper | 7440508 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 45.4 | | | |
| 45. Lead | 7439921 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 20.6 | | | |
| 46. Mercury | 7439976 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | Composite | 6020A | 0.2 | ND | | | |
| 47. Nickel | 7440020 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 5.0 | | | |
| 48. Selenium | 7782492 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 1 | 1 | | | |
| 49. Silver | 7440224 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.4 | 0.4 | | | |
| 50. Zinc | 7440666 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 0.5 | 100.4 | | | |
| 51. Iron | 7439896 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Composite | 6020A | 50 | 19,000 | | | |
| Other (describe): | | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | |

| Parameter * | CAS Number | Believed Absent | Believed Present | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value | Average daily value |
|-------------|------------|--------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|---------------------|
| | | | | | | | | concentration (ug/l) | mass (kg) |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | |

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y N

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

| | | |
|----------------|----------|--|
| Metal: Cadmium | DF: 1.45 | If yes, which metals? Cadmium, copper, lead, zinc, iron |
| Metal: Copper | DF: 1.45 | |
| Metal: Lead | DF: 1.45 | |
| Metal: Zinc | DF: 1.45 | |
| Etc. Iron | 1.45 | |

Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?
 Y N If Y, list which metals:
 Cadmium, copper, lead, zinc, iron

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

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

Groundwater encountered during construction activities will be pumped to a treatment system prior to discharge into a storm drain. The first element of the treatment system will be a fractionalization tank where solids will settle out. The effluent will then be passed through the following as necessary: an oil/water separator, a bag filter, a granular activated carbon filter, and a precipitation system/metals treatment. The effluent will then be discharged to the existing storm drain system.

b) Identify each applicable treatment unit (check all that apply):

| | | | | | |
|--|--|---|---|--|--|
| Frac. tank <input checked="" type="checkbox"/> | Air stripper <input type="checkbox"/> | Oil/water separator <input checked="" type="checkbox"/> | Equalization tanks <input type="checkbox"/> | Bag filter <input checked="" type="checkbox"/> | GAC filter <input checked="" type="checkbox"/> |
| Chlorination <input type="checkbox"/> | De-chlorination <input type="checkbox"/> | Other (please describe): Precipitation system/metals treatment (as needed) | | | |

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

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

None

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

| | | | | | |
|------------------------------------|--|--|---|-----------------------------------|--|
| a) Identify the discharge pathway: | Direct to receiving water <input type="checkbox"/> | Within facility (sewer) <input type="checkbox"/> | Storm drain <input checked="" type="checkbox"/> | Wetlands <input type="checkbox"/> | Other (describe): <input type="text"/> |
|------------------------------------|--|--|---|-----------------------------------|--|

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
 Dewatering effluent will enter existing storm drains on-site. Storm drains lead to Saw Mill Brook in Brookline, MA, via an existing drainline and drainage swale.

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

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

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

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y N If yes, for which pollutant(s)?
 Chloride, Escherichia coli, Oxygen (dissolved), Organic Enrichment (Sewage) Biological Indicators, Phosphorus (Total)
 Is there a final TMDL? Y N If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

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

| |
|---|
| <p>a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit? A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/></p> <p>b) If you selected Criterion D or F, has consultation with the federal services been completed? Y <input type="radio"/> N <input type="radio"/> Underway <input type="radio"/></p> <p>c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y <input checked="" type="radio"/> N <input type="radio"/></p> <p>d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.</p> <p>e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit? 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/></p> <p>f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.</p> |
|---|

7. Supplemental information.

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

| |
|--|
| <p>Appendix B includes the analytical data collected by Sanborn, Head & Associates, Inc. on June 24, 2011.</p> <p>Appendix C includes calculations for the 7Q10 flows and the dilution factor for metals.</p> <p>Appendix D includes correspondence from the National Oceanic and Atmospheric Administration and the US Fish and Wildlife Service.</p> <p>Appendix E includes a list of Historic Places in Newton, Massachusetts.</p> <p>Appendix F includes the Best Management Practices Plan.</p> |
|--|

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

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

| | |
|-----------------------|-------------------------------|
| Facility/Site Name: | Chestnut Hill Square |
| Operator signature: | |
| Printed Name & Title: | Joe Cruz, Site Superintendent |
| Date: | |

APPENDIX B
ANALYTICAL DATA

Table 1
Summary of Groundwater Analytical Data
 Chestnut Hill Square
 Newton, MA

DRAFT

| SAMPLE ID | NPDES RGP Effluent Limits | Units | NPDES COMPOSITE 1 |
|---------------------------------------|------------------------------|-------|-------------------|
| SAMPLING DATE | | | 6/24/2011 |
| Anions | | | |
| Chloride | Monitor Only | mg/l | 520 |
| General Chemistry | | | |
| Solids, Total Suspended | 30 | mg/l | 190 |
| Cyanide, Total | 5.2 | ug/l | <5 |
| Chlorine, Total Residual ¹ | 11 | ug/l | <20 |
| TPH | 5 | mg/l | 13.2 |
| Phenolics, Total | 300 | ug/l | <150 |
| Metals | | | |
| Antimony, Total | 8.1 | ug/l | <1 |
| Arsenic, Total | 15 | ug/l | 8.8 |
| Cadmium, Total | 0.3 | ug/l | 0.30 |
| Chromium, Total ² | 71 | ug/l | 9.0 |
| Chromium, Hexavalent | 17 | ug/l | <10 |
| Copper, Total | 7.5 | ug/l | 45.4 |
| Iron, Total | 1,450 | ug/l | 19,000 |
| Lead, Total | 1.9 | ug/l | 20.6 |
| Mercury, Total | 1.3 | ug/l | <0.2 |
| Nickel, Total | 42 | ug/l | 6.0 |
| Selenium, Total | 7.3 | ug/l | 1.0 |
| Silver, Total | 1.7 | ug/l | 0.40 |
| Zinc, Total | 97 | ug/l | 100.4 |
| Pesticides | | | |
| 1,2-Dibromoethane | 0.05 | ug/l | <0.01 |
| Volatile Organics | | | |
| 1,1,1-Trichloroethane | 200 | ug/l | <2 |
| 1,1,2-Trichloroethane | 5.0 | ug/l | <1.5 |
| 1,1-Dichloroethane | 70 | ug/l | <1.5 |
| 1,1-Dichloroethene | 3.2 | ug/l | <1 |
| 1,2-Dichlorobenzene | 600 | ug/l | <5 |
| 1,2-Dichloroethane | 5.0 | ug/l | <1.5 |
| 1,3-Dichlorobenzene | 320 | ug/l | <5 |
| 1,4-Dichlorobenzene | 5.0 | ug/l | <5 |
| 1,4-Dioxane ³ | Monitor Only | ug/l | <2,000 |
| Acetone | Monitor Only | ug/l | <10 |
| Benzene | see Total BTEX | ug/l | <1 |
| Carbon tetrachloride | 4.4 | ug/l | <1 |
| cis-1,2-Dichloroethene | 70 | ug/l | <1 |
| Ethylbenzene | see Total BTEX | ug/l | <1 |
| Methyl tert butyl ether | 70.0 | ug/l | <20 |
| Methylene chloride | 4.6 | ug/l | <5 |
| o-xylene | see Total BTEX | ug/l | <1 |
| p/m-Xylene | see Total BTEX | ug/l | <2 |
| Tert-Butyl Alcohol | Monitor Only | ug/l | <100 |
| Tertiary-Amyl Methyl Ether | Monitor Only | ug/l | <20 |
| Tetrachloroethene | 5.0 | ug/l | <1.5 |
| Toluene | see Total BTEX | ug/l | <1 |
| Trichloroethene | 5.0 | ug/l | <1 |
| Vinyl chloride | 2.0 | ug/l | <2 |
| Xylene (Total) | see Total BTEX | ug/l | <2 |
| Total BTEX ⁴ | 100 | ug/l | <6 |

Table 1
Summary of Groundwater Analytical Data
 Chestnut Hill Square
 Newton, MA

| SAMPLE ID SAMPLING DATE | NPDES RGP Effluent Limits | Units | NPDES COMPOSITE 1 |
|--|------------------------------|-------|-------------------|
| | | | 6/24/2011 |
| Semivolatile Organics | | | |
| Bis(2-Ethylhexyl)phthalate | 6.0 | ug/l | <15 |
| Pentachlorophenol | 1.0 | ug/l | <16 |
| Butyl benzyl phthalate ⁵ | See Total Phthalates | ug/l | <25 |
| Diethyl phthalate ⁵ | See Total Phthalates | ug/l | <25 |
| Dimethyl phthalate ⁵ | See Total Phthalates | ug/l | <25 |
| Di-n-butylphthalate ⁵ | See Total Phthalates | ug/l | <25 |
| Di-n-octylphthalate ⁵ | See Total Phthalates | ug/l | <25 |
| Total Phthalates (Phthalate esters) ⁶ | 3.0 | ug/l | <25 |
| Benzo(a)anthracene ⁷ | 0.2 | ug/l | <4 |
| Benzo(a)pyrene ⁷ | 0.2 | ug/l | <4 |
| Benzo(b)fluoranthene ⁷ | 0.2 | ug/l | <4 |
| Benzo(k)fluoranthene ⁷ | 0.2 | ug/l | <4 |
| Chrysene ⁷ | 0.2 | ug/l | <4 |
| Dibenzo(a,h)anthracene ⁷ | 0.2 | ug/l | <4 |
| Indeno(1,2,3-cd)Pyrene ⁷ | 0.2 | ug/l | <4 |
| Total Group I PAHs ⁸ | 10 | ug/l | <4 |
| Acenaphthene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Acenaphthylene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Anthracene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Benzo(ghi)perylene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Fluoranthene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Fluorene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Naphthalene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Phenanthrene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Pyrene ⁹ | see Total Group II PAHs | ug/l | <4 |
| Total Group II PAHs ¹⁰ | 100 | ug/l | <4 |
| Polychlorinated Biphenyls | | | |
| Aroclor 1016 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1221 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1232 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1242 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1248 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1254 ¹¹ | 0.5 | ug/l | <0.25 |
| Aroclor 1260 ¹¹ | 0.5 | ug/l | <0.25 |
| Total PCBs ¹² | 0.5 | ug/l | <0.25 |

Table 1
Summary of Groundwater Analytical Data

Chestnut Hill Square
 Newton, MA

Notes:

1. The Laboratory Reporting Limit (RL) meets the requirements of Appendix VI of the National Pollutant Discharge Elimination System (NPDES) even though the RL exceeds RGP Effluent Limit.
2. Hexavalent chromium was not detected above RLs, so total chromium concentration was assumed to be trivalent chromium and compared to the trivalent chromium effluent limit.
3. RL achieved by laboratory was above the RL required in Appendix VI of the RGP and above the Effluent Limit. Please see attached correspondence between EPA and laboratory regarding analytical requirements.
4. Total BTEX = Sum of benzene, toluene, ethylbenzene, and total xylenes.
5. Individual phthalate compound
6. "Total phthalates" is the sum of individual phthalate compounds; According to RGP Q&A #37, the RL for total phthalates is the highest reported phthalate RL; RL is less than the requirements in Appendix VI of RGP, even though RL exceeds RGP Effluent Limit.
7. Group I PAHs; Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level of the test method used as listed in Appendix VI (i.e. 0.20 ug/l for Method 8270 SIM).
8. Sum of Group I PAHs.
9. Group II PAHs
10. Sum of Group II PAHs.
11. Individual PCB congener
12. Total of PCB congeners; Although the maximum value for total PCB's is 0.000064 ug/l, the compliance limit is equal to the minimum level of the test method used as listed in Appendix VI (i.e. 0.5 ug/l for Method 608).
13. Shaded values indicate exceedences of the NPDES RGP Effluent Limits, which were taken from Appendix III for Category III Contaminated Construction Dewatering of the RGP. NPDES RGP Effluent Limits for metals have been adjusted using the dilution factor calculated for the discharge water body. ' $<$ ' = analyte not detected above laboratory reporting limits
 'NS' = Not Specified
14. Sample was collected by Sanborn, Head & Associates, Inc. on the date shown and submitted to Alpha Analytical Laboratories, Inc. of Westborough, Massachusetts for analysis. The sample is a composite from wells MW-1, SH-301, and SH-302.
15. Monitor Only means that the subject compound is not subject to a (criteria) limit, however, the permittee may be required to monitor and report the effluent concentration.

APPENDIX C

SAW MILL BROOK DILUTION CALCULATION

PURPOSE:

To calculate the dilution factor (DF) for metal concentrations in a potential discharge from on-site construction dewatering activities.

METHOD:

$$DF = (Qd + Qs)/Qd$$

Where: DF = Dilution Factor

Qd = Maximum flow rate of the discharge in cubic feet per second (cfs)

Qs = Receiving water 7Q10 flow (cfs) where 7Q10 is the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years

GIVEN:

1.0 gpm = 0.00223 cfs

Qd = 100 gpm from the system = 0.223 cfs

Qs = 0.1 cfs of flow in the Sawmill Brook [Reference 1]

CALCULATION:

$$DF = (0.223cfs + 0.1cfs) / 0.223cfs$$

$$DF = 1.45$$

RESULTS:

The resulting dilution factor to be used when discharging to the Sawmill Brook is equal to 1.45.

REFERENCES:

- [1] Wandle, S.W., Jr., 1984, Gazetteer of Hydrologic Characteristics of Streams in Massachusetts – Coastal River Basins of the North Shore and Massachusetts Bay: U.S. Geological Survey Water-Resources Investigations Report 84-4281, p. 52. (Refer to Attachment A)

Attachment A

Table 5.—Summary of 7-day low-flow characteristics, drainage area, and period of record for low-flow partial-record stations and miscellaneous sites (Continued)

| Number in figures 2-8 | Station number | Station name | Location | Period of record | Drainage area, in square miles | Estimated annual minimum 7-day mean low flow, in cubic feet per second, at indicated recurrence interval | |
|---------------------------------|-------------------|---|---|------------------------|--|---|---------|
| | | | | | | 2-year | 10-year |
| CHARLES RIVER BASIN (Continued) | | | | | | | |
| 133 | 01103980 | Charles River at Dedham, Mass. | Ames Street | 1944-45 | -- | -- | -- |
| 134 | 01103990 | Lowder Brook at Dedham, Mass. | U.S. Route 1 | 1971 | 4.04 | -- | -- |
| 136 | 01104050 | Sawmill Brook near West Roxbury, Mass. | Baker Street | 1968-71 | 1.97 | 0.5 | 0.1 |
| 137 | 01104055 | ¹ Sawmill Brook at mouth, near West Roxbury, Mass. | Mouth | 1970 | -- | -- | -- |
| 138 | 01104100 | South Meadow Brook at Newton, Mass. | Parker Street | 1970 | -- | -- | -- |
| 140 | 01104250 | Rosemary Brook at Wellesley, Mass. | Wellesley Avenue | 1970 | -- | -- | -- |
| 141 | 01104255 | Rosemary Brook near Wellesley, Mass. | Oakland Street | 1967 | -- | -- | -- |
| 142 | 01104300 | ² Stony Brook near Weston, Mass. | Merriam Street | 1968-71 | 5.64 | .2 | <.1 |
| 143 | 01104350 | Cherry Brook near Weston, Mass. | Conant Road | 1968-71 | 2.13 | .4 | .2 |
| 144 | 01104395 | Hobbs Brook tributary near Lincoln, Mass. | Concord Turnpike | 1970 | -- | -- | -- |
| 145 | 01104400 | Hobbs Brook near Lincoln, Mass. | Abandoned road 750 feet north of Concord Turnpike | 1969-71 | 1.31 | .0 | .0 |
| 146 | 01104450 | ¹ Stony Brook at Waltham, Mass. | Railroad at Waltham city boundary | 1970 | -- | -- | -- |
| NEPONSET RIVER BASIN | | | | | | | |
| 149 | 01104800 | Neponset River near Foxborough, Mass. | North Street | 1967 | 1.92 | -- | -- |
| 150 | 01104820 | Neponset River near South Walpole, Mass. | South Street | 1967 | 7.62 | -- | -- |
| 151 | 01104830 | ³ School Meadow Brook near Walpole, Mass. | Washington Street | 1966-67 | 2.80 | -- | -- |

APPENDIX D
FEDERAL CORRESPONDENCE



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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

January 3, 2011

To Whom It May Concern:

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

(<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>)

Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

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

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

Patricia M. Pinto
Sanborn, Head & Associates, Inc.
1 Technology Park Drive
Westford, Massachusetts 01886

Re: NPDES RGP, Saw Mill Brook, Brookline, MA

Dear Ms. Pinto,

This is in response to your letter dated July 1, 2011, requesting information on the presence of species listed by NOAA's National Marine Fisheries Service (NMFS) in the vicinity of Saw Mill Brook, Brookline, Massachusetts.

No species listed under the jurisdiction of NOAA's National Marine Fisheries Service (NMFS) are known to occur in the vicinity of your proposed project. As such, NMFS Protected Resources Division does not intend to offer additional comments on this proposal. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. If you have any questions regarding these comments, please contact Danielle Palmer at (978) 282-8468.

Sincerely,

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources



APPENDIX E

**NATIONAL REGISTER OF HISTORICAL PLACES,
NEWTON, MASSACHUSETTS**

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|--|--|--------------------|
| Adams, Amos, House | 37 Park Ave. | 9/4/1986 |
| Adams, Seth, House | 72 Jewett St. | 9/4/1986 |
| Agudas Achim Anshei Sfarad Synagogus | 168 Adams St. | 2/16/1990 |
| Allen, Nathaniel Topliff, Homestead | 25 Webster St. | 1/9/1978 |
| Auburndale Congregational Church | 64 Hancock St. | 9/4/1986 |
| Bartlett--Hawkes Farm | 15 Winnetaska Rd. | 9/4/1986 |
| Bayley House | 16 Fairmont Ave. | 9/4/1986 |
| Bemis Mill | 1--3 Bridge St. | 9/4/1986 |
| Bigelow, Dr. Henry Jacob, House | 742 Dedham St. | 1/1/1976 |
| Bigelow, Henry, House | 15 Bigelow Terr. | 9/4/1986 |
| Blodgett, William, House | 645 Centre St. | 9/4/1986 |
| Boston Edison Power Station | 374 Homer St. | 2/16/1990 |
| Brackett House | 621 Centre St. | 9/4/1986 |
| Brae-Burn Historic District | Brae Burn and Windmere Rds. | 2/16/1990 |
| Brandeis University President's House | 66 Beaumont Ave. | 8/19/1998 |
| Bruner, Mayall, House | 36 Magnolia Ave. | 2/16/1990 |
| Buckingham, John, House | 33--35 Waban St. | 9/4/1986 |
| Building at 1--6 Walnut Terrace | 1--6 Walnut Terr. | 9/4/1986 |
| Central Congregational Church | 218 Walnut St. | 9/4/1986 |
| Chestnut Hill, The | 219 Commonwealth Ave. | 9/4/1986 |
| Childs, Mayor Edwin O., House | 340 California St. | 2/16/1990 |
| Church, William L., House | 145 Warren St. | 2/21/1990 |
| City Stable and Garage | 74 Elliot St. | 2/16/1990 |
| Clafin School | 110-112 Washington Park | 8/16/1984 |
| Clafin, Adams, House | 156 Grant Ave. | 9/4/1986 |
| Clark House | 379 Central St. | 9/4/1986 |
| Colby Hall | 141 Herrick Rd. | 1/30/1978 |
| Collins, Frederick, House | 1734 Beacon St. | 9/4/1986 |
| Commonwealth Avenue Historic District | Roughly Commonwealth Ave. from Walnut St. to Waban Hill Rd. | 2/16/1990 |
| Crafts Street City Stable | 90 Crafts St. | 12/18/2009 |
| Crimmins, Thomas A., House | 19 Dartmouth St. | 2/16/1990 |
| Crystal Lake and Pleasant Street Historic District | Roughly bounded by Sudbury Aqueduct, Pleasant Ave., Lake Ave., and Crystal St. and Webster Ct. | 9/4/1986 |
| Curtis, Allen Crocker, House--Pillar House | 26 Quinobequin Rd. | 9/4/1986 |
| Curtis, William, House | 2330 Washington St. | 9/4/1986 |
| Davis, Seth, House | 32 Eden Ave. | 9/4/1986 |
| Day Estate Historic District | Commonwealth Ave. and Dartmouth St. | 2/16/1990 |
| Dupee Estate | 400 Beacon St. | 9/4/1986 |
| Durant, Capt. Edward, House | 286 Waverly Ave. | 5/13/1976 |
| East Parish Burying Ground | Centre and Cotton Sts. | 11/23/1983 |
| Echo Bridge | Spans Charles River | 4/9/1980 |
| Eddy, George W., House | 85 Bigelow Rd. | 2/16/1990 |

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|---|--|--------------------|
| Elliott, Charles D., House | 7 Colman St. | 9/4/1986 |
| Eminence, The | 122 Islington Rd. | 9/4/1986 |
| Estabrook, Rufus, House | 33 Woodland Rd. | 9/4/1986 |
| Evangelical Baptist Church | 23 Chapel St. | 9/4/1986 |
| Farlow and Kendrick Parks Historic District | Roughly bounded by Franklin, Park, Church, Center and Wesley Sts. and Maple Ave. | 7/8/1982 |
| Farlow and Kendrick Parks Historic District (Boundary Increase) | 223, 226, 234, 237, 242, 243, 248, and 256 Park St. | 9/4/1986 |
| Farlow Hill Historic District | Roughly bounded by Shornecliffe Rd., Franklin St., Chamberlain Rd., Huntington Rd., and Farlow Rd. | 2/21/1990 |
| Farquhar, Samuel, House | 7 Channing St. | 9/4/1986 |
| Fenno, John A., House | 171 Lowell Ave. | 9/4/1986 |
| Fessenden, Reginald A., House | 45 Waban Hill Rd. | 1/7/1976 |
| First Baptist Church in Newton | 848 Beacon St. | 4/15/1982 |
| First Unitarian Church | 1326 Washington St. | 9/4/1986 |
| Fuller, Capt. Edward, Farm | 59--71 North St. | 9/4/1986 |
| Gane, Henry, House | 121 Adena Rd. | 9/4/1986 |
| Goodbar, Lafayette, House | 614 Walnut St. | 2/16/1990 |
| Gray Cliff Historic District | 35, 39, 43, 53, 54, 64, 65, and 70 Gray Cliff Rd | 9/4/1986 |
| Gray Cliff Historic District (Boundary Increase) | The Ledges and Bishopsgate Rds. | 2/16/1990 |
| Gunderson, Jos., House | 983 Centre St. | 9/4/1986 |
| Hammond House | 9 Old Orchard Rd. | 3/9/1990 |
| Hammond, E. C., House | 35 Groveland St. | 2/16/1990 |
| Harbach, John, House | 303 Ward St. | 9/4/1986 |
| Harding House--Walker Missionary Home | 161--163 Grove St. | 9/4/1986 |
| Harriman, Henry I., House | 825 Centre St. | 2/16/1990 |
| Harrison, C. Lewis, House | 14 Eliot Memorial Rd. | 2/16/1990 |
| Haskell, Charles, House | 27 Sargent St. | 9/4/1986 |
| Hayward, Fred R., House | 1547 Centre St. | 2/16/1990 |
| Hopewell, Frank B., House | 301 Waverley Ave. | 2/16/1990 |
| House at 1008 Beacon Street | 1008 Beacon St. | 9/4/1986 |
| House at 102 Staniford Street | 102 Staniford St. | 9/4/1986 |
| House at 107 Waban Hill Road | 107 Waban Hill Rd. | 9/4/1986 |
| House at 115--117 Jewett Street | 115--117 Jewett St. | 9/4/1986 |
| House at 15 Davis Avenue | 15 Davis Ave. | 9/4/1986 |
| House at 152 Suffolk Road | 152 Suffolk Rd. | 9/4/1986 |
| House at 170 Otis Street | 170 Otis St. | 9/4/1986 |
| House at 173--175 Ward Street | 173--175 Ward St. | 9/4/1986 |
| House at 203 Islington Road | 203 Islington Rd. | 9/4/1986 |
| House at 215 Brookline Street | 215 Brookline St. | 9/4/1986 |

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|--|---|-------------|
| House at 2212 Commonwealth Avenue | 2212 Commonwealth Ave. | 9/4/1986 |
| House at 230 Melrose Street | 230 Melrose St. | 9/4/1986 |
| House at 230 Winchester Street | 230 Winchester St. | 9/4/1986 |
| House at 3 Davis Avenue | 3 Davis Ave. | 9/4/1986 |
| House at 307 Lexington Street | 307 Lexington St. | 9/4/1986 |
| House at 309 Waltham Street | 309 Waltham St. | 9/4/1986 |
| House at 31 Woodbine Street | 31 Woodbine St. | 9/4/1986 |
| House at 41 Middlesex Road | 41 Middlesex Rd. | 9/4/1986 |
| House at 47 Sargent Street | 47 Sargent St. | 9/4/1986 |
| House at 511 Watertown Street | 511 Watertown St. | 9/4/1986 |
| House at 60 William Street | 60 William St. | 9/4/1986 |
| House at 68 Maple Street | 68 Maple St. | 9/4/1986 |
| House at 729 Dedham Street | 729 Dedham St. | 9/4/1986 |
| House at 81--83 Gardner Street | 81--83 Gardner St. | 9/4/1986 |
| Howes, C. G., Dry Cleaning--Carley Real Estate | 1173 Washington St. | 2/16/1990 |
| Hyde Avenue Historic District | 36, 42, 52, 59, and 62 Hyde Ave. | 12/23/1986 |
| Hyde House | 27 George St. | 9/4/1986 |
| Hyde, Eleazer, House | 401 Woodward St. | 9/4/1986 |
| Hyde, Gershom, House | 29 Greenwood St. | 9/4/1986 |
| Jackson Homestead | 527 Washington St. | 6/4/1973 |
| Jackson House | 125 Jackson St. | 9/4/1986 |
| Jackson, Samuel, Jr., House | 137 Washington St. | 9/4/1986 |
| Jennison, Joshua, House | 11 Thornton St. | 9/4/1986 |
| Judkins, Amos, House | 8 Central Ave. | 9/4/1986 |
| Kessler, William F., House | 211 Highland St. | 2/16/1990 |
| King House | 328 Brookline St. | 9/4/1986 |
| Kingsbury House | 137 Suffolk St. | 9/4/1986 |
| Kistler House | 945 Beacon St. | 9/4/1986 |
| Lasell Neighborhood Historic District | Roughly bounded by Woodland and Studio Rds., Aspen and Seminary Aves., and Grove St. | 9/4/1986 |
| Luke, Arthur F., House | 221 Prince St. | 2/16/1990 |
| Maynard, Charles, House | 459 Crafts St. | 4/4/1996 |
| Merriam, Galen, House | 102 Highland St. | 9/4/1986 |
| Monadnock Road Historic District | Roughly Monadnock Rd., Wachusett Rd., Hudson St., Tudor Rd., Beacon St., and Hobart Rd. | 2/16/1990 |
| Morton Road Historic District | Morton Rd. at Morton St. | 2/16/1990 |
| Mount Pleasant | 15 Bracebridge Rd. | 9/4/1986 |
| Myrtle Baptist Church Neighborhood Historic District | Roughly Curve St. and Prospect St. | 12/11/2008 |
| Needham Street Bridge | Needham St. at Charles River | 9/4/1986 |
| Newton Centre Branch Library | 1294 Centre St. | 2/16/1990 |

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|---|--|--------------------|
| Newton City Hall and War Memorial | 1000 Commonwealth Ave. | 2/16/1990 |
| Newton Cottage Hospital Historic | 2014 Washington St. | 2/21/1990 |
| Newton Highlands Historic District | Roughly bounded by Lincoln and Hartford Sts., Erie Ave., and Woodward St. | 9/4/1986 |
| Newton Highlands Historic District (Boundary Increase) | Roughly Lincoln St., Hartford St., Erie Ave., and Woodward St. | 2/16/1990 |
| Newton Lower Falls Historic District | Roughly bounded by Hagar, Grove, Washington, and Concord Sts. | 9/4/1986 |
| Newton Street Railway Car barn | 1121 Washington St. | 9/4/1986 |
| Newton Theological Institution Historic District | Roughly bounded by Braeland Ave., Ripley St. and Langley Rd., Bowdoin School Access Rd., and Cypress St. | 9/4/1986 |
| Newton Upper Falls Historic District | Roughly bounded by Boylston, Elliot, and Oak Sts., and the Charles River | 9/4/1986 |
| Newtonville Historic District | Roughly bounded by Highland Ave., Walnut Mill St., Otis St., and Lowell Ave. | 9/4/1986 |
| Newtonville Historic District (Boundary Increase) | Roughly Highland and Lowell Aves., Otis St., and Birch Hill Rd., and Walnut St. from Newtonville to Washington | 2/16/1990 |
| Nichols House | 140 Sargent St. | 9/4/1986 |
| Noves, Charles W., House | 271 Chestnut St. | 2/16/1990 |
| Old Chestnut Hill Historic District | Along Hammond St. and Chestnut Hill Rd. roughly bounded by Beacon St. and Essex Rd., and Suffolk Rd. | 9/4/1986 |
| Old Chestnut Hill Historic District (Boundary Increase) | Roughly Chestnut Hill, Essex, and Gate House; Middlesex, Hammond, and Longwood; and Suffolk and Old Orchard | 2/16/1990 |
| Old Chestnut Hill Historic District (Boundary Increase) | Suffolk Rd. | 7/8/1999 |
| Old Shephard Farm | 1832 Washington St. | 9/4/1986 |
| Our Lady Help of Christians Historic District | Adams and Washington Sts. | 9/4/1986 |
| Page, H. P., House | 110 Jewett St. | 9/4/1986 |
| Parsons, Edward, House | 56 Cedar St. | 9/4/1986 |
| Peabody--Williams House | 7 Norman Rd. | 9/4/1986 |
| Peirce School | 87 Chestnut St. | 12/6/1978 |
| Pierce, F. Lincoln, Houses | 231--237 Mill St. | 2/16/1990 |
| Pine Ridge Road--Plainfield Street Historic District | Roughly Pine Ridge Rd., Upland Rd., Plainfield St., and Chestnut St. | 2/16/1990 |
| Plummer Memorial Library | 375 Auburn St. | 2/16/1990 |
| Potter Estate | 65--71 Walnut Pk. | 12/23/1986 |
| Prescott Estate | 770 Centre St. | 9/4/1986 |
| Putnam Street Historic District | Roughly bounded by Winthrop, Putnam, Temple, and Shaw Sts. | 9/4/1986 |

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|---|---|-------------|
| Railroad Hotel | 1273--1279 Washington St. | 9/4/1986 |
| Rawson Estate | 41 Vernon St. | 9/4/1986 |
| Richards, James Lorin, House | 47 Kirkstall and 22 Oakwood Rds. | 9/4/1986 |
| Riley, Charles, House | 93 Bellevue St. | 9/4/1986 |
| Riverside Concrete Company--Lamont's Market | 2 Charles St. | 2/16/1990 |
| Sacco--Pettee Machine Shops | 156 Oak St. | 12/23/1986 |
| Saco-Lowell Shops Housing Historic District | Oak, William, Butts, and Saco Sts. | 2/16/1990 |
| Salisbury, Jonas, House | 85 Langley Rd. | 9/4/1986 |
| Salisbury, Jonas, House | 62 Walnut Pk. | 9/4/1986 |
| Sawyer, C. A., House (Second) | 221 Prince St. | 2/16/1990 |
| Second Church of Newton | 60 Highland St. | 2/16/1990 |
| Simpson House | 57 Hunnewell Ave. | 9/4/1986 |
| Smith, Curtis S., House | 56 Fairmont Ave. | 9/4/1986 |
| Smith--Peterson House | 32 Farlow Rd. | 9/4/1986 |
| South Burying Ground | Winchester St. | 11/27/2004 |
| Souther, John, House | 43 Fairmont St. | 9/4/1986 |
| St. Mary's Church and Cemetery | 258 Concord St. | 4/16/1980 |
| Staples--Crafts--Wiswall Farm | 1615 Beacon St. | 9/4/1986 |
| Stewart, Frank H., House | 41 Montvale Rd. | 2/21/1990 |
| Stone, Joseph L., House | 77--85 Temple St. | 9/4/1986 |
| Stratton, Edward B., House | 25 Kenmore St. | 2/16/1990 |
| Strong's Block | 1637--1651 Beacon St | 9/4/1986 |
| Sumner and Gibbs Streets Historic District | Roughly Sumner St. between Willow St. and Cotswold Terr. and 184 Gibbs St. | 9/4/1986 |
| Thaxter, Celia, House | 524 California St. | 9/4/1986 |
| Thayer House | 17 Channing St. | 9/4/1986 |
| Towle, Loren, Estate | 785 Centre St. | 2/16/1990 |
| Union Street Historic District | Roughly Union St. between Langley Rd. and Herrick St., and 17--31 Herrick St. | 9/4/1986 |
| Waban Branch Library | 1608 Beacon St. | 2/16/1990 |
| Walker Home for Missionary Children | 161--63, 165, 167 Grove St., 136, 138, 144 Hancock St. | 6/4/1992 |
| Ward, Ephraim, House | 121 Ward St. | 9/4/1986 |
| Ware Paper Mill | 2276 Washington St. | 5/22/1978 |
| Warren, Dr. Samuel, House | 432 Cherry St. | 1/3/1985 |
| Warren, Levi, Jr., High School | 1600 Washington St. | 2/16/1990 |
| Washington Park Historic District | 4-97 Washington Park & 5,15 Park Place | 3/12/2008 |
| Webster Park Historic District | Along Webster Pk. and Webster St. between Westwood St. and Oak Ave. | 9/4/1986 |
| Weeks Junior High School | 7 Hereward Rd. | 10/23/1984 |
| West Newton Hill Historic District | Roughly bounded by Highland Ave., Lenox, Hampshire, and Chestnut Sts. | 9/4/1986 |

Appendix E
National Register of Historic Places
Research Documentation
Chestnut Hill Square, Newton, Massachusetts

DRAFT

| Site Name | Address | Date Listed |
|---|---|--------------------|
| West Newton Village Center Historic District | Roughly Washington St. from Putnam to Davis Ct. | 2/16/1990 |
| West Parish Burying Ground | River and Cherry Sts. | 11/13/2004 |
| Wheat, Samuel, House | 399 Waltham St. | 9/4/1986 |
| Whittemore's Tavern | 473 Auburn St. | 9/4/1986 |
| Windsor Road Historic District | Windsor and Kent Rds. | 2/16/1990 |
| Winslow-Haskell Mansion | 53 Vista Ave. | 10/25/1979 |
| Woodland, Newton Highlands, and Newton Centre Railroad Stations, and Baggage and Express Building | 1897 Washington St., 18 Station Ave., 80 and 50 Union St. | 6/3/1976 |
| Woodward, John, House | 50 Fairlee Rd. | 9/4/1986 |
| Working Boys Home | 333 Nahanton St. | 9/4/1986 |

Notes:

Sanborn, Head & Associates, Inc. (Sanborn Head) conducted a review of the National Register of Historic Places within Newton, Massachusetts. The search returned 189 results, none of which are located at or abutting the site.

APPENDIX F
BEST MANAGEMENT PRACTICES PLAN

APPENDIX F: BEST MANAGEMENT PRACTICES PLAN

Notice of Intent for the Remediation General Permit Temporary Construction Dewatering at Chestnut Hill Square for Site Redevelopment and Remediation Newton, Massachusetts

This Best Management Practices Plan (BMPP) has been prepared in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) for Massachusetts (MAG910000). This BMPP is in support of an RGP application for dewatering during redevelopment construction and remedial activities in the Chestnut Hill Square area of Newton, Massachusetts. The dewatering discharge will be conveyed through the existing storm drains and discharged to the Saw Mill Brook in Brookline, MA.

The following practices will be adhered to during the construction dewatering at the site.

Site Security

During construction activities, the dewatering system will be secured using standard construction practices. The fractionalization tank will be located in a fenced area to limit access. All associated piping will be secured and checked regularly. Any system failure, vandalism, or other incidents will be addressed in a timely manner to prevent the discharge of oil or hazardous materials from exceeding the limits of the RGP.

Minimizing Sediment in Influent

Crushed stone sumps constructed as far as possible from the active excavation area will be used as the suction points for the dewatering system intakes. Efforts will be made to manage the pumping such that the amount of sediment in the influent to the treatment system is minimized.

Management of Generated Wastes

Portions of the construction excavations and the remediation excavations will be conducted within the limits of a Massachusetts Contingency Plan (MCP) release site. As such the wastes that are generated during the operation of the dewatering treatment system will be managed as MCP wastes. The anticipated wastes are sediment sludge that accumulates in the fractionalization tank, used bag filters, spent activated carbon, (possibly) free phase petroleum that is separated in the oil water separator, and miscellaneous wastes associated with water quality sampling activities. The sediment sludge will be tested and disposed of at a licensed facility that is permitted to accept material with the documented physical and chemical characteristics of the sludge. The used bag filters and the miscellaneous sampling wastes will be appropriately disposed of as solid or contaminated wastes, based on their characteristics. The spent activated carbon will be processed and recycled by the company providing the fresh carbon. Free phase product, if any, that is collected as a liquid will be transported to a licensed waste oil processing facility for characterization and disposal.

Prohibition of Discharge Exceeding Design Flow

The subcontractor providing the treatment system will provide the Operator with information on the design capacity of the treatment system and the features included in the design to monitor the flow rate to ensure that the capacity is not exceeded. The system will be monitored with a continuous flow meter such that the overall system flow does not exceed the lowest design capacity of an individual treatment system unit.

Preventative Maintenance Required

The treatment system will likely include two activated carbon units in series with a monitoring point between the tanks. Systematic sampling will take place at the intermediate sampling point. If the data at that point indicates that "breakthrough" has occurred, the downstream carbon tank will be moved to the upstream position and the carbon in the upstream unit will be changed out and then placed in service at the downstream side. The bag filters will be replaced whenever the pressure drop across the filters exceeds the system's design criteria. The subcontractor will be responsible for developing and implementing a preventative maintenance plan and schedule based on the specific design of the treatment system.

Employee Training

The field staff of the Operator and the subcontractor will be instructed regarding the water quality limits contained in the RGP and the critical need to operate the treatment system as designed. The staff will also be provided guidance on how to reduce the sediment content and minimize the volume of free product, if any, that is pumped into the treatment system. Personnel who have responsibilities related to the dewatering efforts will be informed of the contents of the RGP, this BMPP and the NOI.

Management of Run-on and Runoff

The overburden soil and fill material that is located above the contaminated layer will be used to construct a berm around the perimeter of the excavation area to prevent rainfall runoff from migrating into the excavation. The stockpiles of the contaminated soils will be placed on plastic sheets and then covered with sheeting and bermed with hay bales until the off-site transport occurs.

Erosion, Scouring and Sediment Control

Considering the design flow of the system and the planned duration of the discharge relative to the size and flow of the storm drain where it discharges to the Saw Mill Brook, it is not anticipated that the dewatering discharge will cause erosion, stream scouring at the discharge point, or additional sedimentation in the Saw Mill Brook.