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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

SEP 24 2014

Linda Snyder
Vice President of Operations
Tufts University
Trustees of Tufts College, Ballou Hall
Medford, MA 02155

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Tufts University High Performance Science and Engineering Center site located at 200 College Avenue, Medford, Middlesex County; Authorization # MAG910642

Dear Ms. Snyder:

Based on the review of a Notice of Intent (NOI) submitted by Ileen S. Gladstone, from GEI Consultants, Inc. on behalf of Trustees of Tufts College (Tufts), for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that your consultant has selected as "Believed Present". 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.

Your consultant has requested that the pH in the permit be reduced from the 6.5- 8.3 standard units (s.u.) to 5.0 to 8.3 s.u., due to naturally occurring low acid pH in the influent at the site. Section C.2., Footnote 9 of the RGP allows for the reduction of the

pH limits due to the acid nature of the influent. Therefore the pH has been changed to reflect the request.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the limited dilution at the Mystic River discharge point, 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 copper of 23.92 ug/L, lead of 5.98 ug/L, nickel of 133.4 ug/L, zinc of 306.36 ug/L and iron of 4,600 ug/L, are required to achieve permit compliance at your site. Please note that these metal limitations have increased above the 0-5 dilution factor range. The reason for the increase has to do with the new RGP regulations which allows for a limit increase based on the metal limit times the available dilution of the receiving stream not to exceed 5. The available dilution in this case is 4.6. See footnote eleven at the end of the "Summary of Monitoring Parameters" listed below for further explanation.

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

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on December 31, 2014. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul Gere, City Of Medford, DPW
Ileen S. Gladstone, GEI Consultants, Inc.

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910642**
Authorization Issued:	September, 2014
Facility/Site Name:	Tufts Performance Science and Engineering Center
Facility/Site Address:	200 College Avenue, Medford, MA 02155, Middlesex County
	Email address of owner: Linda.Snyder@Tutfs.edu
Legal Name of Operator:	Turner Construction
Operator contact name, title, and Address:	Gregory Eitas, Site Supervisor working under the supervision of Tufts University
	Email: geitas@tcco.com
Estimated date of the site's Completion:	December 31, 2014
Category and Sub-Category:	Category III. Contaminated Construction Dewatering. Sub-category A. General Urban Fill Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Mystic River

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

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

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

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

	Metal parameter	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)] Freshwater Limits	Minimum level=ML
	39. Antimony	5.6	ML 10
	40. Arsenic **	10	ML 20
	41. Cadmium **	0.2	ML 10
	42. Chromium III (trivalent) **	48.8	ML 15
	43. Chromium VI (hexavalent) **	11.4	ML 10
√	44. Copper **	5.2	ML 15
√	45. Lead **	1.3	ML 20
	46. Mercury **	0.9	ML 02
√	47. Nickel **	29	ML 20
	48. Selenium **	5	ML 20
	49. Silver	1.2	ML 10
√	50. Zinc **	66.6	ML 15
√	51. Iron	1,000	ML 20

	Other Parameters	Limit
√	52. Instantaneous Flow	Site specific in CFS
√	53. Total Flow	Site specific in CFS
√	54. pH Range for Class A & Class B Waters in MA	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 "Aroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological

September 5, 2014
Project 132862-0

Via E-mail: NPDES.Generalpermits@epa.gov

Environmental Protection Agency
RGP Processing
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912

Dear Sir or Madam:

Re: Notice of Intent
NPDES Remediation General Permit
High Performance Science and Engineering Center
Tufts University
Medford, Massachusetts

On behalf of the Trustees of Tufts College (Tufts), GEI Consultants, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit for Massachusetts (MAG910000). This NOI was prepared in accordance with the general requirements of the NPDES RGP under Federal Register, Vol. 75, No.174, dated September 9, 2010, and related guidance documentation provided by the U.S. Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

A check in the amount of $950, payable to the Commonwealth of Massachusetts to cover the Remediation and Miscellaneous Contaminated Sites General Permit (BRP WM 12), has been sent to the MassDEP lockbox. A copy of the transmittal form is in Appendix A.

Site Information

This NOI has been prepared for the discharge of dewatering effluent during construction of the proposed High Performance Science and Engineering Center (HPSEC) at the Tufts University campus in Medford, Massachusetts (Figs. 1 and 2). The proposed HPSEC will be constructed on an approximately 3-acre parcel located to the south of the intersection of College and Boston Avenues. The parcel currently includes a parking lot and landscaped walking areas between Anderson and Robinson Halls to the west and the Bromfield Pearson Building to the east. The HPSEC project includes construction of an approximately 20,000-square foot, 4-story building with a partial basement, and installation of associated utilities and ancillary structures. The parcel has historically been part of the Tufts University campus since at least the late 19th century.

The HPSEC is not currently a Massachusetts Department of Environmental Protection (MassDEP) disposal site.

GEI Consultants, Inc.
400 Unicorn Park, Woburn, MA 01801
781.721.4000 fax: 781.721.4073

Discharge and Receiving Surface Water Information

Some construction dewatering will be necessary to keep excavations dry during construction for the HPSEC. The intent of the project is to recharge groundwater on site. However, if this is not possible, it will be discharged to the nearby storm water drainage system in accordance with the RGP permit.

We evaluated the proposed influent by collecting a groundwater sample from within the general footprint of the proposed HPSEC. We collected the groundwater sample from monitoring well B6(OW) on August 25, 2014 (Fig. 2). The water sample was generally analyzed for the parameters required under the NPDES RGP. The laboratory testing results are in the laboratory data report in Appendix B. The pH of the proposed influent was measured in the field and by the laboratory to evaluate existing conditions.

The laboratory testing results in Appendix B indicate the presence of chloride and metals including copper, lead, nickel, selenium, and zinc. The pH of groundwater is approximately 6 standard units (s.u.; measured in the field as 5.96 s.u. and measured by the laboratory as 6.08 s.u.). This pH is outside the Dewatering General Permit (DGP) effluent limit for Massachusetts waters (6.5 to 8.3 s.u.). Therefore, we request an expanded effluent limit range of 5.0 to 8.3 s.u. due to the naturally low pH at the HPSEC.

During construction, the collected water will be treated to remove suspended solids prior to discharge. The proposed conceptual treatment system is shown in the process flow diagram in Fig. 3. The treated water will be discharged to one or more storm drains near the HPSEC. The storm drains are identified in the plans in Appendix C as Potential Discharge Points 1 and 2. Potential Discharge Points 1 and 2 are catch basins located east of the project area on Boston Avenue. According to information provided by Nitsch Engineering (Nitsch) of Boston, Massachusetts and the City of Medford Engineering Department, these storm drains are part of the City of Medford Stormwater Collection System that discharges to an outfall at the Mystic River, approximately 0.8 miles from the site. A copy of the City of Medford Engineering plan with annotations based on the information provided by Nitsch, showing the discharge path and ultimate discharge outfall at the Mystic River is in Appendix C.

Consultation with Federal Services

We reviewed the online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS), the Natural Heritage and Endangered Species Program (NHESP), the U.S. Fish and Wildlife Service –New England Field Office Endangered Species Reviews and Consultations, and the U.S. National Parks Service National Register of Historic Places (NPS). Based on this review, neither the site nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC), Habitats of Rare Wetland Wildlife, Habitats of Rare Species or Estimated Habitats of Rare Wildlife, or listed as a National Historic Place. A copy of a letter and supporting documentation from the U.S. Fish and Wildlife New England field office stating that there are no endangered species or critical habitats at the site is in Appendix D. Based on this information, further consultation with federal and/or state officials was deemed not necessary.

Coverage Under NPDES RGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP based on the requirements of the NPDES RGP and our evaluation of the available site-specific information. The current intent of project dewatering activities is to recharge groundwater on

site. However, if this is not possible, it will be discharged to the nearby storm water drainage system after treatment. On behalf of Tufts, we are requesting coverage under the NPDES RGP for the discharge of treated construction dewatering effluent to the surface waters of the Mystic River via the City of Medford storm water collection system.

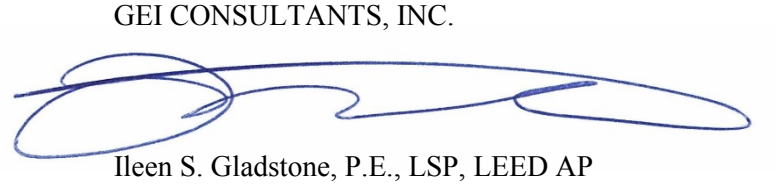
The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services (Appendix D). For this project, Tufts is the owner and has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications. Turner Construction of Boston, Massachusetts, contracted by Tufts, is the operator and will direct the personnel responsible for the implementation and day-to-day operations and activities that are necessary to ensure compliance with the NPDES RGP, including operation, inspection, monitoring, and reporting.

Discharge of treated water is scheduled to begin in September 2014, if recharge to on-site recharge pits is not possible.

Please contact me at 781.721.4012 or igladstone@geiconsultants.com, if you have any questions.

Very truly yours,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E., LSP, LEED AP
Senior Principal

HBH/ISG:jam
Enclosures
c: Michael Skeldon, Tufts University
Karl Neubauer, Leggat McCall Properties
Mathew McCullough, Turner Construction
Gregory Eitas, Turner Construction
Division of Watershed Management, MassDEP
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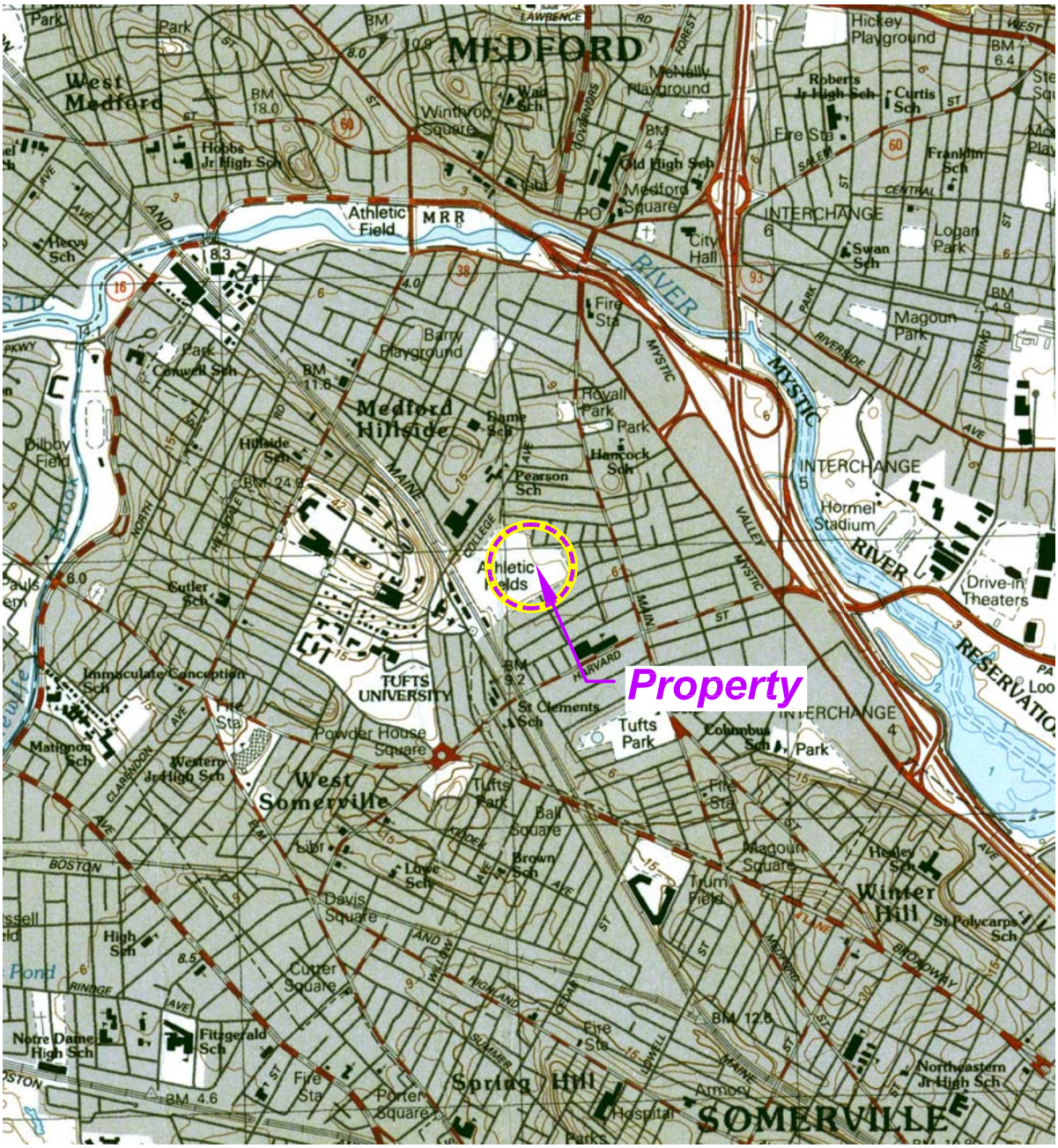
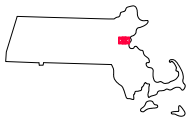


0 1000 2000 4000 6000

SCALE, FEET

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.



MASSACHUSETTS
QUADRANGLE LOCATION

DGP - Notice of Intent High Performance Science and Engineering Center Medford, Massachusetts	GEI Consultants	PROPERTY LOCATION MAP
Tufts University Medford, Massachusetts	Project 132862-0	September 2014 Fig. 1

M:\DRAFTING\2013\132862 Tufts\1328620-01

LEGEND:

- 2013 SOIL PRE-CHARACTERIZATION PROBE
- B6 (OW) — 2013 GEOTECHNICAL BORING WELL INSTALLED
- EXISTING WELL
- 2013 GEI TEST PIT
- PROPOSED UTILITY (Aprroximate)

NOTES:

1. BASE PLAN DATED 1-10-2014 PROVIDED BY PAYETTE, INC. JANUARY 2014.
2. VERTICAL DATUM: NAVD 88
3. HORIZONTAL DATUM: NAD 83.
4. EXCEPT FOR AREAS DESIGNATED AS CATEGORY B AND CATEGORY C, ALL OTHER SOIL IS CLASSIFIED AS CATEGORY A (<RCS-1 MATERIAL).

EP1 EP2 EP3 EP4 EP5 EP6 EP7 EP8 EP9 EP10
TP1 TP2 TP3 TP4
B-1 B-3 B-5 B-6 (OW) B-7 B-8
UTILITY-01 UTILITY-02
EMH206 EMH201 EMH205 EMH202 EMH203 EMH111
DS10-500 DS12-360 DS10-218

COLLEGE AVENUE (PUBLIC – 65' WIDE)
BOSTON AVENUE (PUBLIC – 50' WIDE)
ANDERSON HALL
ANDERSON HALL ANNEX
ANDERSON HALL 3 STORY BRICK BUILDING
ROBINSON HALL
BROMFIELD-PEARSON BUILDING
3 STORY BRICK
(CITY OF MEDFORD) (CITY OF SOMERVILLE)
LIMIT OF WORK
OUTLINE OF BASEMENT (Lower Level) OF PROPOSED BUILDING

0 40 80
SCALE, FEET

DGP - Notice of Intent
High Performance Science and Engineering Center
Medford, Massachusetts

Tufts University
Medford, Massachusetts

GEI Consultants

SITE PLAN

Project 132862-0 | September 2014 | Fig. 2

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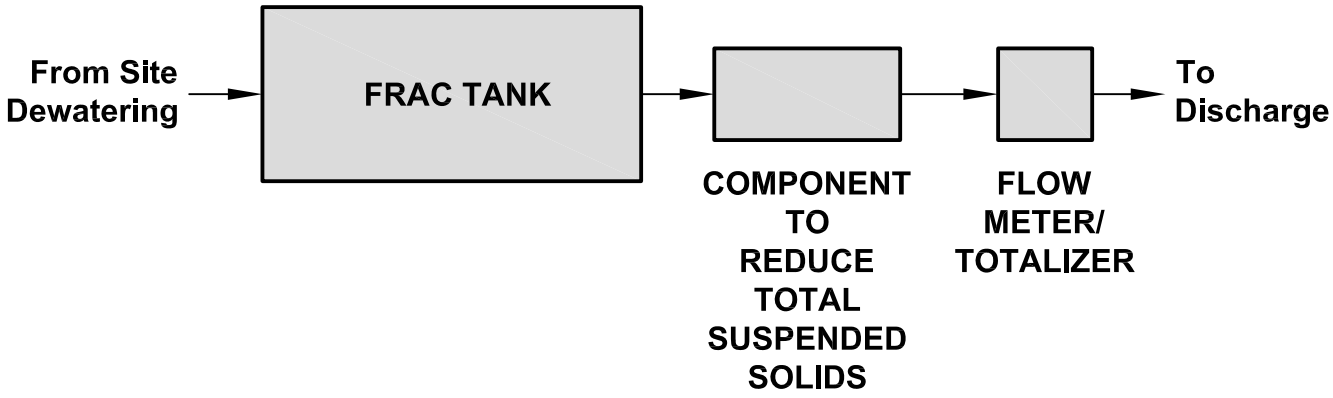

PROCESS FLOW DIAGRAM

Not to Scale

DGP - Notice of Intent High Performance Science and Engineering Center Medford, Massachusetts		GEI Consultants	PROCESS FLOW DIAGRAM
Tufts University Medford, Massachusetts		Project 132862-0	September 2014 Fig. 3

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Appendix A

Remediation General Permit
Notice of Intent

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**: Tufts University HPSEC		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 71.11653 latitude: 42.40584	Facility SIC code(s): 8221	Street: 200 College Avenue		
b) Name of **facility/site owner:**		Town: Medford		
Email address of facility/site owner: Linda.Snyder@Tufts.edu		State: MA	Zip: 02155	County: Middlesex
Telephone no. of facility/site **owner**: (617) 627-3334				
Fax no. of facility/site **owner**: Not available		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: Trustees of Tufts College, Ballou Hall				
Town: Medford	State: MA	Zip: 02155	County: Middlesex	
c) Legal name of **operator**:		**Operator** telephone no: (617) 839-0149		
Turner Construction		**Operator** fax no.: Not Available	**Operator** email: geitas@tcco.com	
Operator contact name and title: Gregory Eitas, Site Supervisor				
Address of **operator** (if different from owner):		Street: Two Seaport Lane, Suite 200		
Town: Boston	State: MA	Zip: 02210	County: Suffolk	

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

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ◉ N ○
If Y, please list:
1. site identification # assigned by the state of NH or MA: MassDEP BRP WM 12
2. permit or license # assigned: X262961
3. state agency contact information: name, location, and telephone number:
MassDEP Division of Watershed Management, 627 Main Street, 2nd Floor, Worcester, MA 01608

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ◉,
if Y, number:
2. Final Dewatering General Permit? Y ○ N ◉,
if Y, number:
3. EPA Construction General Permit? Y ◉ N ○,
if Y, number: MAR12AT64 & MAR12AT65
4. Individual NPDES permit? Y ○ N ◉,
if Y, number:
5. any other water quality related individual or general permit? Y ○ N ◉, if Y, number:

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

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

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

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

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

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

Construction dewatering of groundwater intrustion and/or storm water accumulation.

b) Provide the following information about each discharge:

1) Number of discharge points: 2

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.167 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.111 cfs Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 42.40568 long. 71.11605; pt.2: lat. ____ long. ____;
pt.3: lat. 42.40614 long. 71.11639; 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): NA

5) Is the discharge intermittent ◉ or seasonal ○?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start 09/15/2014 end 12/31/2014

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See attached report.

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☒	☐	1	Grab	2540D	5,000 ug/l	< 5,000	< 2.05	< 5,000	< 1.36
2. Total Residual Chlorine (TRC)		☒	☐	1	Grab	4500 CL-E	10 ug/l	< 10	< 0.004	< 10	< 0.003
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	Grab	1664A	5,000 ug/l	< 5,000	< 2.05	< 5,000	< 1.36
4. Cyanide (CN)	57125	☒	☐	1	Grab	4500 CN E	5,000 ug/l	< 5	< 0.002	< 5	< 0.001
5. Benzene (B)	71432	☒	☐	1	Grab	8260B	2 ug/l	< 1	< 0.0004	< 1	< 0.0003
6. Toluene (T)	108883	☒	☐	1	Grab	8260B	2 ug/l	< 1	< 0.0004	< 1	< 0.0003
7. Ethylbenzene (E)	100414	☒	☐	1	Grab	8260B	2 ug/l	< 1	< 0.0004	< 1	< 0.0003
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Grab	8260B	4 ug/l	< 2	< 0.0008	< 2	< 0.0005
9. Total BTEX [2]	n/a	☒	☐	1	Grab	8260B	4 ug/l	< 2	< 0.0008	< 2	< 0.0005
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	Grab	8011	0.01 ug/l	< 0.015	< 0.000006	< 0.015	< 0.000004
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	Grab	8260B	10 ug/l	< 1	< 0.0004	< 1	< 0.0003
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Grab	8260B	10 ug/l	< 25	< 0.010	< 25	< 0.007

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Grab	8260B	10 ug/l	< 1	< 0.0004	< 1	< 0.0003
14. Naphthalene	91203	☒	☐	1	Grab	8260B	2 ug/l	< 1	< 0.0004	< 1	< 0.0003
15. Carbon Tetrachloride	56235	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
18a. Total dichlorobenzene		☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
23. Methylene Chloride	75092	☒	☐	1	Grab	8260B	5 ug/l	< 2	< 0.0008	< 2	< 0.0005
24. Tetrachloroethene (PCE)	127184	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
27. Trichloroethene (TCE)	79016	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	Grab	8260B	5 ug/l	< 1	< 0.0004	< 1	< 0.0003
29. Acetone	67641	☒	☐	1	Grab	8260B	50 ug/l	< 10	< 0.004	< 10	< 0.003
30. 1,4 Dioxane	123911	☒	☐	1	Grab	8270D-SIM	50 ug/l	< 0.2	< 0.00008	< 0.2	< 0.00006
31. Total Phenols	108952	☒	☐	1	Grab	420.1	2 ug/l	< 100	< 0.041	< 100	< 0.027
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Grab	8270D-SIM	5 ug/l	< 0.86	< 0.0003	< 0.86	< 0.0002
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	Grab	8270D-SIM	5 ug/l	< 2.38	< 0.001	< 2.38	< 0.0006
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	Grab	8270D-SIM	5 ug/l	< 2.38	< 0.001	< 2.38	< 0.0006
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270D-SIM	N/A	N/A	N/A	N/A	N/A
a. Benzo(a) Anthracene	56553	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.00001
b. Benzo(a) Pyrene	50328	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.00001
c. Benzo(b)Fluoranthene	205992	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.000012
d. Benzo(k)Fluoranthene	207089	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.0000102
e. Chrysene	21801	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.00001
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.00001
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.05	< 0.00002	< 0.05	< 0.00001
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270D-SIM	N/A	N/A	N/A	N/A	N/A

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
i. Acenaphthylene	208968	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
j. Anthracene	120127	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
k. Benzo(ghi) Perylene	191242	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
l. Fluoranthene	206440	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
m. Fluorene	86737	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
n. Naphthalene	91203	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
o. Phenanthrene	85018	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
p. Pyrene	129000	☒	☐	1	Grab	8270D-SIM	0.1 ug/l	< 0.19	< 0.00008	< 0.19	< 0.00005
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	Grab	8082A	0.5 ug/l	< 0.10	< 0.00004	< 0.10	< 0.00003
38. Chloride	16887006	☐	☒	1	Grab	300.0	100 ug/l	280,000	115	280,000	76.4
39. Antimony	7440360	☒	☐	1	Grab	6020A	0.5 ug/l	< 0.200	< 0.00008	< 0.200	< 0.00005
40. Arsenic	7440382	☒	☐	1	Grab	7010	3 ug/l	< 2.5	< 0.001	< 2.5	< 0.0007
41. Cadmium	7440439	☒	☐	1	Grab	6020A	0.2 ug/l	< 0.200	< 0.00008	< 0.200	< 0.00005
42. Chromium III (trivalent)	16065831	☒	☐	1	Grab	6010C	15 ug/l	< 10	< 0.004	< 10	< 0.003
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Grab	7196A	10 ug/l	< 10	< 0.004	< 10	< 0.003
44. Copper	7440508	☐	☒	1	Grab	6020A	0.5 ug/l	1.48	0.0006	1.48	0.0004
45. Lead	7439921	☐	☒	1	Grab	6020A	0.2 ug/l	0.256	0.0001	0.256	0.00007
46. Mercury	7439976	☒	☐	1	Grab	7470A	0.2 ug/l	< 0.20	< 0.00008	< 0.20	< 0.00005
47. Nickel	7440020	☐	☒	1	Grab	6020A	0.2 ug/l	2.24	0.0009	2.24	0.0006
48. Selenium	7782492	☐	☒	1	Grab	6020A	2 ug/l	1.75	0.0007	1.75	0.0005
49. Silver	7440224	☒	☐	1	Grab	6020A	0.2 ug/l	< 0.2	< 0.00008	< 0.2	< 0.00005
50. Zinc	7440666	☐	☒	1	Grab	6010C	15 ug/l	10.3	0.004	10.3	0.003
51. Iron	7439896	☐	☒	1	Grab	6010C	20 ug/l	< 150	< 0.061	< 150	< 0.041
Other (describe):		☐	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ○ N ◉	If yes, which metals? Not Applicable
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: _____ DF: _____ Metal: _____ DF: _____ Metal: _____ DF: _____ Metal: _____ DF: _____ Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ○ N ◉ If Y, list which metals:

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

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

See attached report

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☐	GAC filter ☐
	Chlorination ☐	De-chlorination ☐	Other (please describe):	Component to reduce total suspended solids: 20' pipe section lined with poly, jute fabric and floc sock.		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 50 gpm Maximum flow rate of treatment system 75 gpm
Design flow rate of treatment system 75 gpm

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

None planned.

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

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

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

Discharge will be through off-site catch basins to the Mystic River.

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

d) Provide the state water quality classification of the receiving water B/WW (CSO)

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.600 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)?
metals, pesticides, algal growth, pathogens, dissolved oxygen saturation, PCBs, and nutrients
Is there a final TMDL? Y ○ N ⊙ If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

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

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

A ◉ B ○ C ○ D ○ E ○ F ○

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

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

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

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

1 ○ 2 ◉ 3 ○

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

7. Supplemental information.

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

See attached report.

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:	Tufts University - HPSEC
Operator signature:	Matt McCullough
Printed Name &Title:	MATT MCCullough Senior PM
Date:	8/4/14

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:	Tufts University - HPSEC
Owner signature:	Linda L. Snyder
Printed Name &Title:	Linda L. Snyder, VP Operations
Date:	Sept. 5, 2014

Remediation General Permit – Notice of Intent

Dilution Factor Calculation

Dilution Factor:

To calculate the dilution factor the following formula was used:

DF = (Qd + Qs)/Qd where: Qd = Maximum flow rate of discharge in cubic feet per second (cfs)

Qs = Receiving water 7Q10 flow in cfs

DF = (0.167 cfs + 0.600 cfs)/ 0.167 cfs = 5

Note: The 7Q10 of the Mystic River at Medford, Massachusetts was obtained from the USGS National Water Information System (NWIS) online database for Massachusetts at gauge 01103015 Mill Brook at Arlington, MA. The lowest average monthly discharge of 0.600 cfs was taken from the year 1988 with the lowest average yearly discharge between 1973 and 2001.

Enter your transmittal number → X262961 (Transmittal Number)

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml

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

BRPWM 12 Remediation & Miscelleaneous Contaminated Sites
1. Name of Permit Category

NPDES General Permits
2. Name of Permit Category

Construction Dewatering at a Non-Contaminated (Non-MCP) site
3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Trustees of Tufts College
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

Ballou Hall
5. Street Address

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Medford	MA	02155	(617)627-3320	

11. Contact Person	12. e-mail address (optional)
Linda Snyder	lsnyder@tufts.edu

C. Facility, Site or Individual Requiring Approval

Tufts University - High Performance Science and Engineering Center
1. Name of Facility, Site Or Individual

200 College Avenue
2. Street Address

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Medford	MA	02155		

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)
Not Applicable	Not Applicable	Not Applicable

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

GEI Consultants, Inc.
1. Name of Firm Or Individual

400 Unicorn Park Drive
2. Address

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Woburn	MA	01801	(781) 721-4000	

8. Contact Person	9. LSP Number (BWSC Permits only)
Ileen Gladstone, P.E., LSP, LEED AP	9719

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

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **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.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	Dollar Amount	Date
711239	$950	9/3/2014

Appendix B

Laboratory Data Report

CERTIFICATE OF ANALYSIS

Sarah Moseley
GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201
Glastonbury, CT 06033

RE: Tufts SEC - DGP (132862-0)
ESS Laboratory Work Order Number: 1408039

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 1:46 pm, Aug 19, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

SAMPLE RECEIPT

The following samples were received on August 04, 2014 for the analyses specified on the enclosed Chain of Custody Record.

The samples and analyses listed below were analyzed in accordance with the 2014 Dewatering General Permit (DGP) under the National Pollutant Discharge Elimination System (NPDES).

Lab Number	Sample Name	Matrix	Analysis
1408039-01	1328620-B-6 OW	Ground Water	200.7, 300.0, 4500 H+ B, 6010C, 6020A, 7010, 7196A, 7470A

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

PROJECT NARRATIVE

Classical Chemistry

1408039-01 **The maximum holding time listed in 40 CFR Part 136 Table II for pH, Dissolved Oxygen, Sulfite and Residual Chlorine is fifteen minutes.**

Dissolved Metals

CH40506-BSD1 **Blank Spike recovery is above upper control limit (B+).**
Mercury (165% @ 80-120%)

CH40506-BSD1 **Relative percent difference for duplicate is outside of criteria (D+).**
Mercury (53%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP
Client Sample ID: 1328620-B-6 OW
Date Sampled: 08/04/14 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1408039
ESS Laboratory Sample ID: 1408039-01
Sample Matrix: Ground Water
Units: ug/L

Extraction Method: 3005A/200.7

Dissolved Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Antimony	ND (0.500)		6020A		10	NAR	08/15/14 15:35	50	25	CH40910
Arsenic	ND (2.5)		7010		1	JP	08/16/14 4:18	50	25	CH40909
Cadmium	ND (2.50)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Chromium	ND (10.0)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Copper	ND (10.0)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Iron	ND (25)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Lead	ND (10.0)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Mercury	ND (0.20)		7470A		1	KJK	08/06/14 1:00	20	40	CH40506
Nickel	ND (10)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Selenium	ND (5.0)		7010		1	JP	08/15/14 22:25	50	25	CH40909
Silver	ND (5)		6010C		1	JP	08/13/14 21:03	50	25	CH40909
Zinc	**15.0** (10.0)		6010C		1	JP	08/13/14 21:03	50	25	CH40909

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP
Client Sample ID: 1328620-B-6 OW
Date Sampled: 08/04/14 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1408039
ESS Laboratory Sample ID: 1408039-01
Sample Matrix: Ground Water
Units: ug/L

Extraction Method: [CALC]

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Hardness	**209000** (662)		200.7		1	KJK	08/06/14 18:57	1	1	[CALC]

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP
Client Sample ID: 1328620-B-6 OW
Date Sampled: 08/04/14 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1408039
ESS Laboratory Sample ID: 1408039-01
Sample Matrix: Ground Water

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Chloride	**287** (50.0)		300.0		100	EEM	08/08/14 12:37	mg/L	CH40812
Dissolved Hexavalent Chromium	ND (10)		7196A		1	EEM	08/04/14 17:40	ug/L	CH40433
pH	**6.08** (N/A)		4500 H+ B		1	MJV	08/04/14 17:59	S.U.	CH40417
pH Sample Temp	**Aqueous pH measured in water at 16.2 ºC.** (N/A)								

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Dissolved Metals										
Batch CH40506 - 245.1/7470A										
Blank										
Mercury	ND	0.20	ug/L							
LCS										
Mercury	5.77	0.20	ug/L	6.000		96	80-120			
LCS Dup										
Mercury	9.89	0.20	ug/L	6.000		165	80-120	53	20	B+, D+
Batch CH40909 - 3005A/200.7										
Blank										
Arsenic	ND	5.0	ug/L							
Cadmium	ND	5.00	ug/L							
Chromium	ND	20.0	ug/L							
Copper	ND	20.0	ug/L							
Iron	ND	50	ug/L							
Lead	ND	20.0	ug/L							
Nickel	ND	20	ug/L							
Selenium	ND	10.0	ug/L							
Silver	ND	10	ug/L							
Zinc	ND	20.0	ug/L							
LCS										
Arsenic	509	100	ug/L	500.0		102	80-120			
Cadmium	256	5.00	ug/L	250.0		102	80-120			
Chromium	518	20.0	ug/L	500.0		104	80-120			
Copper	509	20.0	ug/L	500.0		102	80-120			
Iron	2560	50	ug/L	2500		102	80-120			
Lead	522	20.0	ug/L	500.0		104	80-120			
Nickel	527	20	ug/L	500.0		105	80-120			
Selenium	916	200	ug/L	1000		92	80-120			
Silver	254	10	ug/L	250.0		102	80-120			
Zinc	523	20.0	ug/L	500.0		105	80-120			
LCS Dup										
Arsenic	508	100	ug/L	500.0		102	80-120	0.3	20	
Cadmium	258	5.00	ug/L	250.0		103	80-120	0.9	20	
Chromium	516	20.0	ug/L	500.0		103	80-120	0.4	20	
Copper	512	20.0	ug/L	500.0		102	80-120	0.6	20	
Iron	2560	50	ug/L	2500		102	80-120	0.02	20	
Lead	527	20.0	ug/L	500.0		105	80-120	1	20	
Nickel	532	20	ug/L	500.0		106	80-120	0.9	20	
Selenium	893	200	ug/L	1000		89	80-120	3	20	
Silver	254	10	ug/L	250.0		102	80-120	0.04	20	
Zinc	526	20.0	ug/L	500.0		105	80-120	0.5	20	
Batch CH40910 - 3005A/200.7										
Blank										
Antimony	ND	0.500	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Dissolved Metals										
Batch CH40910 - 3005A/200.7										
LCS										
Antimony	23.1	1.00	ug/L	25.00		92	80-120			
LCS Dup										
Antimony	24.8	1.00	ug/L	25.00		99	80-120	7	20	
Classical Chemistry										
Batch CH40433 - General Preparation										
Blank										
Dissolved Hexavalent Chromium	ND	10	ug/L							
LCS										
Dissolved Hexavalent Chromium	0.5		mg/L	0.4998		99	90-110			
LCS Dup										
Dissolved Hexavalent Chromium	0.5		mg/L	0.4998		99	90-110	0.2	20	
Batch CH40812 - General Preparation										
Blank										
Chloride	ND	0.5	mg/L							
LCS										
Chloride	2.4		mg/L	2.500		96	90-110			

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

Notes and Definitions

Z16	Aqueous pH measured in water at 16.2 ºC.
U	Analyte included in the analysis, but not detected
HT	The maximum holding time listed in 40 CFR Part 136 Table II for pH, Dissolved Oxygen, Sulfite and Residual Chlorine is fifteen minutes.
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
B+	Blank Spike recovery is above upper control limit (B+).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Tufts SEC - DGP

ESS Laboratory Work Order: 1408039

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Attachment B
SOP 10_0001

Sample and Cooler Receipt Checklist

Client: GEI Consultants Inc
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14080039
Date Project Due: ~~8/11/2014~~ 8/12/14 8/4/14 ~~8/7/14~~
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **5.3**		16. Are ESS labels on correct containers?	Yes | No
Iced With: **Ice**		17. Were samples received intact?	Yes | No
6. Was COC included with samples?	Yes	ESS Sample IDs:	
7. Was COC signed and dated by client?	Yes	Sub Lab:	
8. Does the COC match the sample	Yes	Analysis:	
9. Is COC complete and correct?	Yes	TAT:	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?:_____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	1 L Plastic	1	NP
1	Yes	250 ml Plastic	1	HNO3
1	Yes	250 ml Plastic	1	NP

Completed By: _____ Date/Time: 8/4/14 1638
Reviewed By: _____ Date/Time: 8/4/14 1731

Chain-of-Custody Record

Laboratory: **ESS**

Laboratory Job # (Lab use only): 1408039

GEI Consultants

400 Unicorn Park Drive
Woburn, MA 01801
PH: 781.721.4000
FX: 781.721.4073

Project Information

Project Name: Tufts SEC

Project Number: 132862-0

Project Location: Medford, MA

Project Manager: H. Haley
(781) 721-4063 office or (857) 345-2100

Send Report to: Sarah Moseley

Send EDD to: labdata@geiconsultants.com

MCP PRESUMPTIVE CERTAINTY REQUIRED -- **YES** NO

If Yes, Are MCP Analytical Methods Required? **YES** NO NA

If Yes, Are Drinking Water Samples Submitted? YES **NO** NA

If Yes, Have You Met Minimum Field QC Requirements? **YES** NO NA

Sample Handling

Samples Field Filtered: **YES** NO NA

Sampled Shipped With Ice: **YES** NO

Lab Sample Number	GEI Sample ID	Collection Date	Collection Time	Matrix	No. of Bottles	Sampler(s) Initials	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative	Sample Specific Remarks
							HNO3	None	None	None	HNO3							
							Analysis											
				GW			Dissolved Metals[1,2]	Dissolved Hex CR[2]	Chloride	pH	Hardness							
							x	x	x	x	x							
1	1328620-B-6(OW)	8/4/14	1210	GW	3	ALM	X	X	X	X	X							

MCP Level Needed: GEI requires the most stringent Method 1 MCP standard be met for all analytes whenever possible.

Relinquished by sampler: (signature)	Date:	Time:	Received by: (signature)
1	8/4/14	1355	1
Relinquished by: (signature)	Date:	Time:	Received by: (signature)
2	8/4/14	1520	2 8/4/14 1615
Relinquished by: (signature)	Date:	Time:	Received by: (signature)
3			3.
Relinquished by: (signature)	Date:	Time:	Received by: (signature)
4.			4.

Turnaround Time (Business days):

Normal ____ Other ____

10-Day ____ 7-Day ____

5-Day __X__ 3-Day ____

Before submitting rush turnaround samples, you must notify the laboratory to confirm that the TAT can be achieved.

Additional Requirements/Comments/Remarks:

(1) Metals: antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc, and iron.

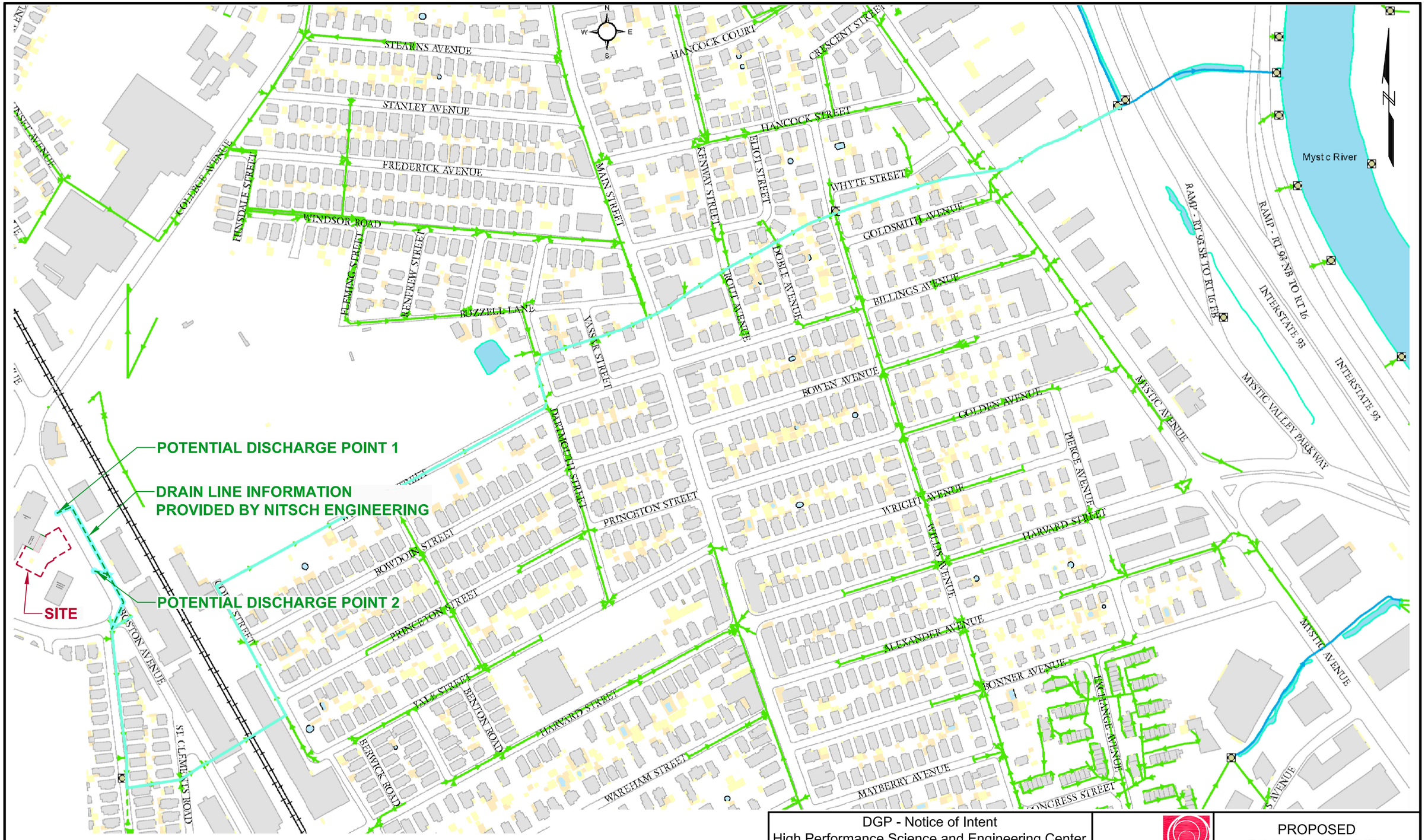
(2)Dissolved metals and dissolved hex. CR field filtered.

(3) Please use EPA Dewatering General Permit (DGP) methods and detection limits specified in attached Appendix VIII of the DGP Permit

Temp: 5.3 Ice KH

Appendix C

Detailed Plans of Proposed Discharge Points



NOTES:

1. BASE PLAN FROM CITY OF MEDFORD ENGINEERING, DATED AUGUST 2014.

0 300 600

APPROXIMATE SCALE, FEET

DGP - Notice of Intent
High Performance Science and Engineering Center
Medford, Massachusetts

Tufts University
Medford, Massachusetts

GEI Consultants

Project 132862-0

PROPOSED
DISCHARGE POINTS
AND DISCHARGE PATH

September 2014 Fig. C-1

M:\DRAFTING\2013\132862 Tufts\1328620-07

POTENTIAL DISCHARGE POINT 1

DRAIN LINE INFORMATION PROVIDED BY NITSCH ENGINEERING

POTENTIAL DISCHARGE POINT 2

OUTLINE OF BASEMENT (Lower Level) OF PROPOSED BUILDING

LEGEND:

- 2013 SOIL PRE-CHARACTERIZATION PROBE
- B6 (OW) — 2013 GEOTECHNICAL BORING WELL INSTALLED
- EXISTING WELL
- 2013 GEI TEST PIT
- PROPOSED UTILITY (Aprroximate)

NOTES:

1. BASE PLAN DATED 1-10-2014 PROVIDED BY PAYETTE, INC. JANUARY 2014.
2. VERTICAL DATUM: NAVD 88
3. HORIZONTAL DATUM: NAD 83.
4. EXCEPT FOR AREAS DESIGNATED AS CATEGORY B AND CATEGORY C, ALL OTHER SOIL IS CLASSIFIED AS CATEGORY A (<RCS-1 MATERIAL).

SCALE, FEET: 0 40 80

DGP - Notice of Intent
High Performance Science and Engineering Center
Medford, Massachusetts

Tufts University
Medford, Massachusetts

GEI Consultants

Project 132862-0

PROPOSED DISCHARGE POINTS

September 2014 Fig. C-2

M:\DRAFTING\2013\132862 Tufts\1328620-06

Appendix D

Endangered Species Review Documents

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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

January 7, 2014

To Whom It May Concern:

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

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

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

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

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

New England Field Office

Conserving the Nature of New England

Friday, August 15, 2014

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Endangered Species Consultation

Project Review for Projects with Federal Involvement (authorizing, funding or carrying out the project)

The following information is designed to assist applicants or project sponsors in determining whether a federally-listed, proposed and/or candidate species may occur within the proposed project area and whether it is appropriate to contact our office for additional coordination or consultation. We encourage you to print out all materials used in the analyses of effects on listed, proposed or candidate species for your records or submission to the appropriate federal agency or our office.

Step 1. - Determine whether any listed, proposed, or candidate species (T/E species) are likely to occur within the proposed project **action area** based on location of the proposed project:

A. Choose your state list below and review for Towns in which federally-listed species occur:

Connecticut - 12 species (29 KB)
Massachusetts - 14 species (41 KB)
New Hampshire - 13 species (31 KB)
Rhode Island - 8 species (22 KB)
Vermont - 10 species (25 KB)

B. You should contact your state Natural Heritage Program or Endangered Species Program (see list below) for additional information on federally and state-listed species:

Rhode Island Natural Heritage Program
Connecticut Endangered Species Program
Massachusetts **Natural Heritage and Endangered Species Program**
Vermont **Non-Game and Natural Heritage**
New Hampshire **Fish and Game's Non-game and Endangered Wildlife Program**
New Hampshire Natural Heritage Bureau's **Home Page**

Please note that these agencies provide information on known occurrences; this information does not replace field surveys, especially for plants, as most project sites have not been previously surveyed specifically for listed species.

C. If the project falls within a Town where the endangered dwarf wedgemussel is known to occur, check the appropriate map to determine whether your project is in the vicinity of its known range.

Massachusetts - **Connecticut River Watershed** (912 KB)
New Hampshire/Vermont - Connecticut River Watershed
Upper Connecticut River (872 KB)
Middle Connecticut River (1.07 MB)
Lower Connecticut River (1.56 MB)
New Hampshire - **Ashuelot River Watershed** (886 KB)
Connecticut - **Connecticut River Watershed** (2.04 MB)

D. If the project falls within a Town where the endangered northern red-bellied cooter is known to occur, or if the project occurs in Plymouth County, Massachusetts, check the map to determine whether your project is in the vicinity of its known range or critical habitat. **NRBC_MAP** (59 KB)

E. If a proposed project occurs in a Town with no known listed, proposed or candidate species present, no further coordination with the Service is needed. You may download a **"no species present" letter** (158 KB) stating "no species are known to occur in the project area".

F. If the proposed project occurs in a Town with known occurrences of T/E species, proceed to Step 2.

Step 2. - Determine whether any listed or proposed New England Species are likely to occur within the proposed project area by comparing the habitat present within the proposed project action area with habitat that is suitable for the species.

A. Review the information we have provided on the species list information from the appropriate state agency, and any other sources of information available to you to determine types of habitat the species use. A description of suitable habitat for New England's federally-listed species may be found in **New England Species**' profiles and fact sheets.
B. Determine whether your proposed project action area has any potential for listed species habitat (e.g., are suitable roost trees present? - Indiana bats; are wetlands present? - bog turtles or Northeastern bulrush; will project affect a waterway? – dwarf wedgemussel). After this initial coarse review, determine whether any more detailed surveys may be appropriate (e.g., survey for dwarf wedgemussels).
C. If your state Natural Heritage Program or Endangered Species Program does not identify any listed species for the proposed project AND there is no potential habitat for any listed species within the action area, no further

coordination with the Service is required. You may download a **"no species present" letter** (158 KB) stating "no species are known to occur in the project area".

D. If you have identified that potential listed species habitat is present although the species has not been documented from that specific location, further coordination with our office is recommended. Please send the results of your assessment including any habitat surveys to:

Supervisor
U.S. Fish and Wildlife Service
70 Commercial St., Suite 300
Concord, NH 03301

Include in your letter:
A detailed description of the proposed project, including approximate proposed project construction schedule and project activities (e.g., land clearing, utilities, stormwater management). Site plans are often helpful in our evaluation process.

- A description of the natural characteristics of the property and surrounding area (e.g., forested areas, freshwater wetlands, open waters, and soils). Photographs are often helpful in assessing the habitat. Additionally, please include a description of surrounding land use (residential, agricultural, or commercial).
- The location of the above referenced property and extent of any project related activities or discharges clearly indicated on a copy of a USGS 7.5 Minute Topographic Quadrangle (Quad) with the name of the Quad(s) and latitude/longitude clearly labeled.
- A description of conservation measures to avoid or minimize impacts to listed species.

Why does this matter?- In a case where no habitat is present, a quick and easy determination can be made that further coordination is not necessary. In a case where habitat is present, but you believe that the project activities will not impact listed species, it is important to coordinate with us to ensure that all project activities and all potential effects (direct and indirect) have been considered.

(Please allow 30 days following our receipt of your request for processing.)

Step 3. - Based on the results of the habitat survey and a description of the proposed project (including information as to whether any potential habitat may be directly or indirectly affected), the involved Federal agency may determine:

- The proposed project will result in no effect to any T/E species and no further coordination or consultation with the Service is required;
- Additional information (e.g., surveys) is required to determine whether any T/E species are likely to occur within the proposed project area; or
- The proposed project "may affect" a T/E species and consultation with the Service is required.

Files in PDF format will require Acrobat Reader to access the content. If you do not have a copy, please select the link [or click the image] to take you to the Adobe website where you can download a free copy. Get Adobe Acrobat Reader

Last updated: March 3, 2014