

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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

OCT 2 1 2013

Jamie Noon Project Manager John Moriarty & Associates 3 Church Street Winchester, MA 01890

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Building redevelopment site located at 30-40 and 180 Guest Street, in Brighton, MA 02135, Suffolk County; Authorization # MAG910598

Dear Mr. Noon:

Based on the review of a Notice of Intent (NOI) submitted by you, representing John Moriarty & Associates, Inc., for work to be done on behalf of Mr. Brian Howe the owner of the properties 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 and other parameters which you have marked "Believed Present" even though your laboratory reports indicated these were present above the minimum level of detection but below the compliance limit established on Appendix III of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 66 for this site is within a dilution range greater than fifty to one hundred (>50 to 100), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for antimony of

141 ug/L, arsenic of 500 ug/L, cadmium of 10 ug/L, trivalent chromium of 1710 ug/L, copper of 260 ug/L, lead of 66 ug/L, mercury of 2.3 ug/L, nickel of 1451 ug/L, zinc of 1,480 ug/L and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

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 operation 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 June 5, 2015. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Hulma Murphy

Thelma Murphy, Chief Storm Water and Construction Permits Section

Enclosure

cc: Robert Kubit, MassDEP Paul Canavan, BWSC

2010 Remediation General Permit Summary of Monitoring Parameters^[1]

NPDES Authorization Number:		MAG910598				
Authorization Issued:	Septe	mber, 2013				
Facility/Site Name:		ng Redevelopment				
		and 180 Guest Street in Brighton, MA 02135				
	Email	address of owner: bhowe@nddevelopment.com				
Legal Name of Operat		John Moriarty and Associates, inc.				
Operator contact name, title, and Address:		Jamie Noon, Project Manager, 3 church Street, Winchester, MA 01890, Middlesex County				
and the second	1 - A - A - A - A - A - A - A - A - A -	Email: jnoon@jm-a.com				
Estimated date of Com	pletion					
Category and Sub-Category:		Category III. Contaminated Construction Dewatering. Sub- category A. General Urban Fill Sites.				
RGP Termination Date:		September 10, 2015				
	- 4	Charles 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)
\checkmark	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
1.18	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
1	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
i.	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
1.011	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
02.1	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
<u> </u>	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
1.0	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
V .	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
a.	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
V.	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
380	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
N. B.O	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
1	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
\checkmark	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
V	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
V	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
399	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
13	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
1.4	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
\checkmark	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
100	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
\checkmark	I. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
1	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
\checkmark	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
\checkmark	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
\checkmark	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

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	Anno and a second s Anno and an	<u>Total Recoverable</u> <u>MA/Metal Limit</u> <u>H ¹⁰ = 50 mg/l</u> <u>CaCO3, Units =</u> <u>ug/l ^(11/12)</u>	et alle the transmission of the	<u>Minimum</u> level=ML		
	Metal parameter	Freshwater Limts	Leonari (Cabi) Canter di Cabi			
\checkmark	39. Antimony	141	ML	10		
	40. Arsenic **	500	ML	20		
\checkmark	41. Cadmium **	10	ML	10		
√	42. Chromium III (trivalent) **	1,710	ML	15		
1	43. Chromium VI (hexavalent) **	11.4	ML	10		
\checkmark	44. Copper **	260	ML	15		
\checkmark	45. Lead **	66	ML	20		
\checkmark	46. Mercury **	2.3	ML	02		
	47. Nickel **	2,380	ML	20		
	48. Selenium **	5	ML	20		
	49. Silver	1.2	ML	10		
\checkmark	50. Zinc **	1,480	ML	15		
\checkmark	51. Iron ·	5,000	ML	20		

	Other Parameters	Limit
V	52. Instantaneous Flow	Site specific in CFS
\checkmark	53. Total Flow	Site specific in CFS
\checkmark	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab13
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab13
	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
10		

Footnotes:

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

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

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

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

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

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

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

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

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

⁹Although 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.

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).

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

Temperature sampling per Method 170.1

John Moriarty & Associates, Inc.

MORIARTY

Three Church Street Winchester, MA 01890 Phone: 781-729-3900 FAX: 781-729-8456

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 September 9, 2013 File No. 3410.01

Re: Notice of Intent for the Remediation General Permit Temporary Construction Dewatering for Site Redevelopment 180 Guest Street, Brighton, Massachusetts

Dear Sir/Madam:

On behalf of Boston Landing, LLC, John Moriarty and Associates, (JMA) 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. JMA is the general contractor for the project and will have direct responsibility of the subcontractors performing the dewatering activities at the Site. Subcontractors working for JMA on the project will be required to meet the requirements of this NOI and the RGP. The location of discharge via a storm drain outfall is shown on Figure 1 and the extent of the Site is shown on Figure 2.

The Site is located at 38-40 Guest Street and 180 Guest Street in Brighton, Massachusetts (Figure 1). Redevelopment activities include mass excavation of urban fill and natural soils, installation of new utility systems and the earthwork required to prepare the Site for the construction of a new building. It is anticipated that urban fill will be encountered during earthwork activities. The Massachusetts Department of Environmental Protection (DEP) has assigned Release Tracking Numbers (RTNs) 3-31356 and 3-31358 to this Site under the Massachusetts Contingency Plan (310 CMR 40.0000) due to the presence of lead, arsenic, and total petroleum hydrocarbons (TPH) in soil. The Site redevelopment activities will also be performed within an existing Activity and Use Limitation (AUL) area for RTN 3-24285, which was closed with a partial Class A-3 Response Action Outcome (RAO) in March 2009.

The earthwork to prepare the Site for redevelopment will require excavation of soil to a depth of approximately 15 below ground surface (bgs), depending on the location. Groundwater is anticipated to be encountered between 8 to 10 feet bgs. The excavation will be supported by sheet piles which will remain as a permanent groundwater cutoff. Groundwater that flows into the excavations during remediation activities will either be recharged in close proximity to active excavation or be treated prior to discharge to a

storm drain such that the discharged effluent meets the effluent limitations established by Appendix III and Appendix IV of the RGP Application. Figure 3 includes a schematic of the proposed dewatering treatment system. The completed Notice of Intent for the Remediation General Permit form is included as Appendix A. Analytical laboratory data is included in Appendix B. The discharge point for the treatment system will be the Charles River.

According to the Massachusetts Geographical Information System (MassGIS), the excavation activities will not impact Areas of Critical Environmental Concern (ACEC) or Habitats of Rare Wetland Wildlife. A review of the information on the U.S. Fish and Wildlife Service website led to the conclusion that the project will not impact federally-listed threatened or endangered species. A letter from that agency is included in Appendix D. A letter requesting information regarding Oceanic Fisheries was sent to the National Oceanic and Atmospheric Administration (NOAA), and their response (Appendix D) states that no listed species are known to occur in the Charles River in the area of discharge.

Discharge of treated water is scheduled to begin as early as September 13, 2013, pending authorization from the EPA and other agencies.

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

Very truly yours,

John Moriarty & Associates, Inc.

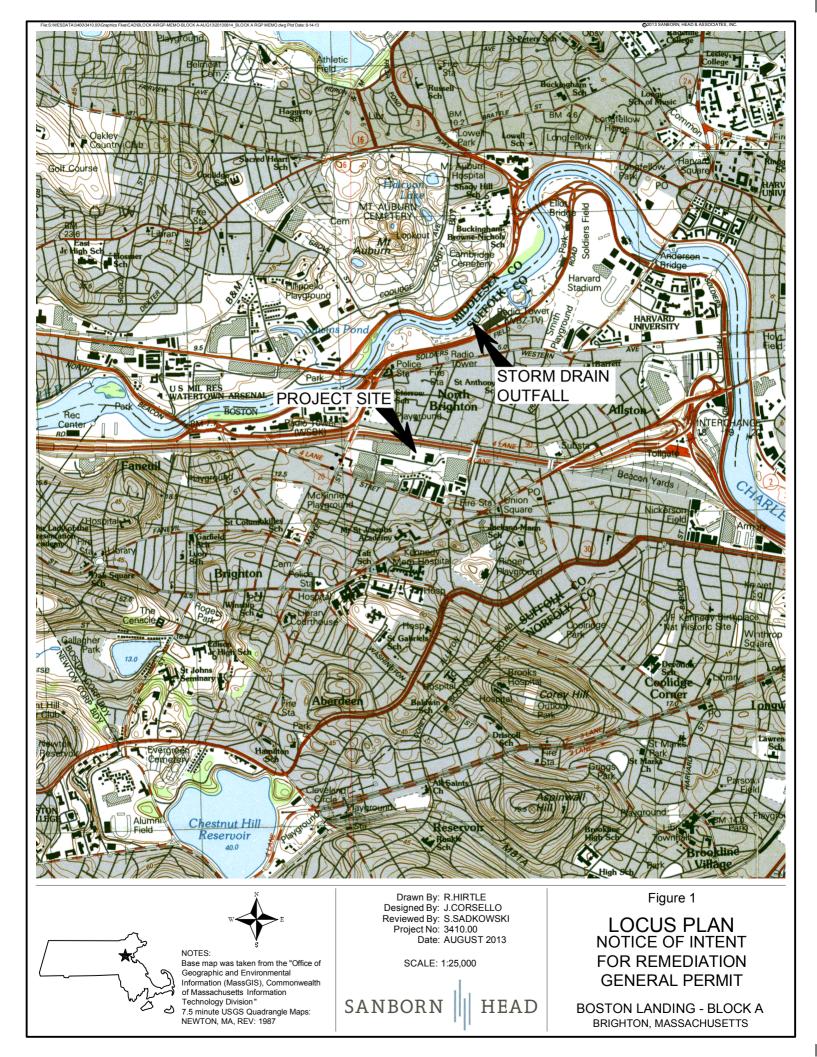
Jamie Noon Senior Project Manager

encl. Figure 1 – Locus Plan

- Figure 2 Location of Proposed Excavation
- Figure 3 Proposed Groundwater Treatment Schematic
- Appendix A Notice of Intent Form
- Appendix B Analytical Data
- Appendix C Charles River Dilution Calculations
- Appendix D Federal Correspondence
- Appendix E National Register of Historic Places, Brighton, Massachusetts
- Appendix F Best Management Practices Plan
- cc: Boston Public Health Commission

FIGURES





NOTES:	LEGEND:							
1. THE EXISTING BASE MAP WAS DRAWN FROM AN ELECTRONIC PLAN RECEIVED ON JULY 31, 2013	B-101	TEST BORING BY TTR	CB-1 -	GEOPROBE BY W&C	GP-1 -	GEOPROBE BY HYDROENVIRO TECH	SH-305 🔘	APPROXIMATE DESIGNATION (PENETRATION (
DRAWING NAME "ACAD-20-609 EC.DWG" PREPARED BY BEALS ASSOCIATES OF CAMBRIDGE, MA	B-115 -	GEOPROBE BY TTR	MW-1 -	BORING COMPLETED AS WELL BY CARR-DEE	NC-3	TEST BORING BY GUILD DRILLING CO.		OBSERVED BY
2. THE PROPOSED BUILDINGS FOOTPRINT RECEIVED ELECTRONICALLY FROM ELKUS/MANFREDI	TP-122	TEST PIT BY RWG		CORP.		LOCATION AND DESIGNATION OF SOIL PRE-CHARACTERIZATION	SH-307	
ARCHITECTS OF BOSTON, MA, DATED MAY 15, 2012.			GT-202A	ROTARY BORING BY GROUNDWATER TECH	V-11	BORING PHASE 1 OBSERVED BY SANBORN HEAD	3 H-307 T	OBSERVED BY
3. THE NPDES RGP SAMPLE WAS COLLECTED AS A COMPOSITE SAMPLE FROM MONITORING WELLS	G-2 -	GEOPROBE BY RWG				LOCATION AND DESIGNATION OF	TP-13	APPROXIMATE
SH-1W, SH-4W, SH-5W, AND B-125P (COLORED ORANGE) ON SEPTEMBER 25, 2012.	G-1	BORING BY RWG	в-1 🕂	TEST BORING BY GZA	SH-18 🔊	GEOTECHNICAL BORING OBSERVED BY SANBORN HEAD		SANBORN HEAD



				-					DRAWN BY: R.HIRTLE DESIGNED BY: J.CORSELLO
ard.ctb 3	SANBORN	HEAD	GRAPHICAL SCALE	-					REVIEWED BY: S.SADKOWSKI PROJECT MGR: S.SADKOWSKI
8-14-1	1.1.			-					PIC: M.DIPILATO
DATE SP					NO.	DATE	DESCRIPTION	BY	DATE: AUGUST 2013

MACCS: S. \WESDATA\2010\3208.00\Source Flee\2012 5. \Can Unerry\USDS-Avers\Avers\ComPerview\220902 5. \Can Unerry\USDS-Avers\Avers\ComPerve\220902 5. \Can Unerry\USDS-Avers\Avers\ComPerve\220902 5. \Can Unerry\USDS-Avers\Avers\ComPerve\220902 5. \Can Unerry\USDS-Avers\Avers\ComPerve\200902

ETS: S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris_\Z=B_FLOB.4vg \KEGDATA_SHO(SH0.00)Graphics Flex\CAD\Xvris2_Z=B_B1.6vg S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris2_Z=P2_B1.6vg S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris2_Z=B_ED_60 S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris2_Z=B_ED_60 S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris2_Z=B_E0 S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xvris2_Z=B_E0 S: \REGIATA_SHOR\SH0.00\Graphics Flex\CAD\Xris2_Z=B_E0 S: \REGIATA_SH0.00\Graphics Flex\Xris2_Z=B_E0 S: \REGIATA_SH0.00\Graphics Flex\Xr ATE LOCATION AND ON OF CONE ON (CPT) TEST BY SANBORN HEAD

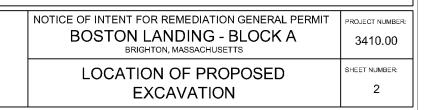
ATE LOCATION AND ON OF CPT AND FLAT FOMETER (DMT) TEST DY SANBORN HEAD

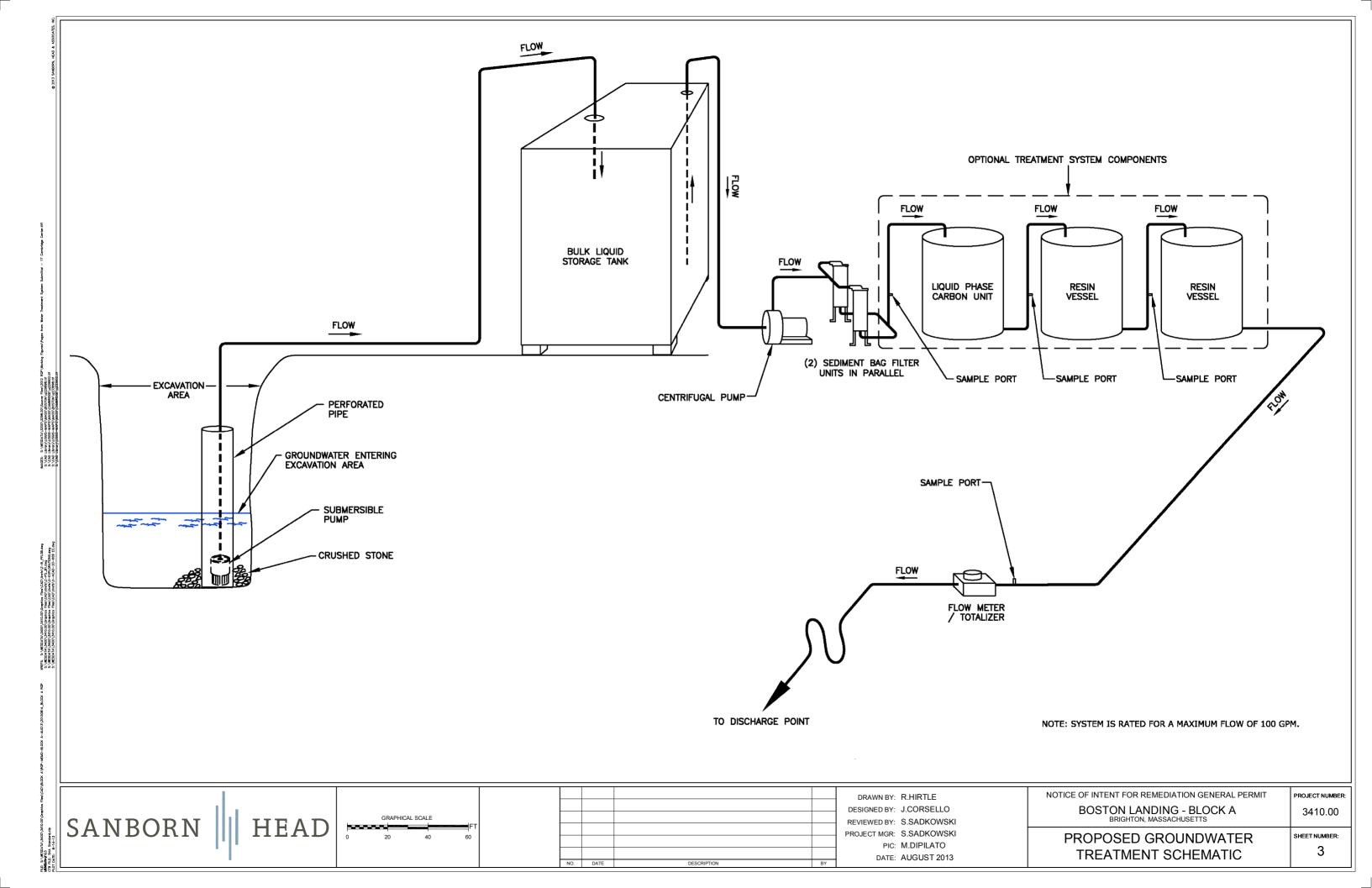
ATE LOCATION AND ON OF TEST PIT BY HEAD



LOCATION AND DESIGNATION OF GEOTECHNICAL BORING COMPLETED AS A MONITORING WELL OBSERVED BY SANBORN HEAD

BLOCK A - BOUNDARY AND AREA OF EXCAVATION





APPENDIX A

NOTICE OF INTENT FORM

SANBORN 🛛 HEAD

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 : 180 Guest Street	Facility/site mailing address:						
Location of facility/site : longitude: -71.142608 latitude: 42.357088	Facility SIC code(s): NA	Street: 20 Guest Street					
b) Name of facility/site owner: Mr. Brian	Howe	Town:	Brighton				
Email address of facility/site owner: bhowe@nbdevelopment.com Telephone no. of facility/site owner :617-987-2526			State: Zip: County: MA 01235 Suffolk				
Fax no. of facility/site owner: Address of owner (if different from site):			Owner is (check one): 1. Federal O 2. State/Tribal O 3. Private O 4. Other O if so, describe: Boston Landing LLC C				
Street: 20 Guest Street							
Town: Brighton	State: MA	Zip: 01	Zip: 01235 County: Suffolk				
c) Legal name of operator :	Operator tel	ephone no: (781) 729-3900					
John Moriarty & Associates Operator fax			no.: (781(729-8456 Operator email: jnoon@jm-a.con			noon@jm-a.com	
Operator contact name and title: Jamie Noon, Project Manager							
Address of operator (if different from owner):	ch Street	h Street					
Town: Winchester	State: MA	Zip: 01	390	County:	Middlesex		

 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 O N O, if Y, number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y O N O, if Y, date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y O N O 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y O N O 						
 e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y O N O. If Y, please list: site identification # assigned by the state of NH or MA: permit or license # assigned: state agency contact information: name, location, and telephone number: f) Is the site/facility covered by any other EPA permit, including: Multi-Sector General Permit? Y O N O. Multi-Sector General Permit? Y O N O. Final Dewatering General Permit? Y O N O. EPA Construction General Permit? Y O N O. Individual NPDES permit? Y O N O. Individual NPDES permit? Y O N O. Individual or general permit? Y O N O. 						
g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y_O_N_O_						
h) Based on the facility/site information and any historica discharge falls.	al sampling data, identify the sub-category into which the potential					
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) 					
II - Non Petroleum Site Remediation	C. Petroleum Sites with Additional Contamination 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 <u>■</u> B. Known Contaminated Sites <u>■</u> 					

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

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:						
Temporary construction dewatering						
b) Provide the following info	rmation about each discharge:					
1) Number of discharge 2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? points: 1 1 Max. flow 0.22 Is maximum flow a design value? Y O N O Average flow (include units) 0.06 Is average flow a design value or estimate?						
	pt.6: lat. long. ;					
4) If hydrostatic testing, 5) Is the discharge intermittent or seasonal? total volume of the Is discharge ongoing? Y N discharge (gals):						
c) Expected dates of discharge (mm/dd/yy): start Sep 3, 2013 end Jun 5, 2015						
 d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving 						
waters(s) See attached figures						

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.

					Sample	Analytical	<u>Minimum</u>	Maximum dai	<u>ly value</u>	Average daily	value
<u>Parameter *</u>	<u>CAS</u> <u>Number</u>	<u>Believed</u> <u>Absent</u>	<u>Believed</u> <u>Present</u>	<u># of</u> <u>Samples</u>	<u>Tvpe</u> (e.g., grab)	<u>Method</u> <u>Used</u> (method #)	<u>Level</u> (ML) of <u>Test</u> <u>Method</u>	<u>concentration</u> (ug/l)	<u>mass</u> (kg)	<u>concentration</u> (ug/l)	<u>mass</u> (kg)
1. Total Suspended Solids (TSS)			×	1	Composite	2540D	160,000	10,000,000			
2. Total Residual Chlorine (TRC)		×		1	Composite	4500CL	20	ND			
3. Total Petroleum Hydrocarbons (TPH)		×		1	Composite	1664A	4,800	ND			
4. Cyanide (CN)	57125	×		1	Composite	4500CN	5.0	ND			
5. Benzene (B)	71432	×		1	Composite	8260C	0.5	ND			
6. Toluene (T)	108883	×		1	Composite	8260C	0.75	ND			
7. Ethylbenzene (E)	100414	×		1	Composite	8260C	0.5	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	×		1	Composite	8260C	1.0	ND			
9. Total BTEX ²	n/a	×		1	Composite	8260C	2.75	ND			
10. Ethylene Dibromide (EDB) (1,2- Dibromoethane) ³	106934	×		1	Composite	504.1	0.01	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	×		1	Composite	8260C	1.0	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	×		1	Composite	8260C	10	ND			

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

 ² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.
 ³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

<u>Parameter *</u>	<u>CAS</u> <u>Number</u>	Believed <u>Absent</u>	Believed <u>Present</u>	<u># of</u> <u>Samples</u>	<u>Sample</u> <u>Type</u> <u>(e.g.,</u> <u>grab)</u>	<u>Analytical</u> <u>Method</u> <u>Used</u> (method #)	<u>Minimum</u> <u>Level</u> (<u>ML) of</u> <u>Test</u> <u>Method</u>	<u>Maximum dai</u> concentration (ug/l)	<u>ly value</u> <u>mass</u> <u>(kg)</u>	<u>Average daily</u> concentration (ug/l)	<u>value</u> <u>mass</u> (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	×		1	Composite	8260C	2.0	ND			
14. Naphthalene	91203	×		1	Composite	8260C	2.5	ND			
15. Carbon Tetrachloride	56235	×		1	Composite	8260C	0.5	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	×		1	Composite	8260C	2.5	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	×		1	Composite	8260C	2.5	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	×		1	Composite	8260C	2.5	ND			
18a. Total dichlorobenzene		×		1	Composite	8260C	7.5	ND			
19. 1,1 Dichloroethane (DCA)	75343		×	1	Composite	8260C	0.75	11			
20. 1,2 Dichloroethane (DCA)	107062	×		1	Composite	8260C	0.5	ND			
21. 1,1 Dichloroethene (DCE)	75354		×	1	Composite	8260C	0.5	0.64			
22. cis-1,2 Dichloroethene (DCE)	156592	×		1	Composite	8260C	0.5	ND			
23. Methylene Chloride	75092	×		1	Composite	8260C	3.0	ND			
24. Tetrachloroethene (PCE)	127184	×		1	Composite	8260C	0.5	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	×		1	Composite	8260C	0.5	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	×		1	Composite	8260C	0.75	ND			
27. Trichloroethene (TCE)	79016	×		1	Composite	8260C	0.5	ND			

					Sample	Analytical	<u>Minimum</u>	<u>Maximum dai</u>	l <u>y value</u>	Average daily	value
<u>Parameter *</u>	<u>CAS</u> <u>Number</u>	Believed Absent	<u>Believed</u> <u>Present</u>	<u># of</u> <u>Samples</u>	<u>Type</u> (e.g., grab)	<u>Method</u> <u>Used</u> (method #)	Level (ML) of <u>Test</u> <u>Method</u>	concentration (ug/l)	<u>mass</u> (kg)	<u>concentration</u> (ug/l)	<u>mass</u> (kg)
28. Vinyl Chloride (Chloroethene)	75014	×		1	Composite	8260C	1.0	ND			
29. Acetone	67641		×	1	Composite	8260C	5.0	5.0			
30. 1,4 Dioxane	123911		×	1	Composite	8260C SIM	3.0	4.3			
31. Total Phenols	108952		×	1	Composite	420.1	30	140			
32. Pentachlorophenol (PCP)	87865	×		1	Composite	8270D SIM	4.0	ND			
33. Total Phthalates (Phthalate esters) ⁴		×		1	Composite	8270D	28	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	×		1	Composite	8270D SIM	3.0	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)			×	1	Composite	8270D SIM	7.0	1.0			
a. Benzo(a) Anthracene	56553	×		1	Composite	8270D SIM	1.0	ND			
b. Benzo(a) Pyrene	50328	×		1	Composite	8270D SIM	1.0	ND			
c. Benzo(b)Fluoranthene	205992	×		1	Composite	8270D SIM	1.0	ND			
d. Benzo(k)Fluoranthene	207089	×		1	Composite	8270D SIM	1.0	ND			
e. Chrysene	21801		×	1	Composite	8270D SIM	1.0	1.0			
f. Dibenzo(a,h)anthracene	53703	×		1	Composite	8270D SIM	1.0	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	×		1	Composite	8270D SIM	1.0	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)			×	1	Composite	8270D SIM	9.0	7.7			

⁴ The sum of individual phthalate compounds.

					Sample	Analytical	Minimum	Maximum dai	ily value	Average daily	value
<u>Parameter *</u>	<u>CAS</u> <u>Number</u>	<u>Believed</u> <u>Absent</u>	<u>Believed</u> <u>Present</u>	<u># of</u> <u>Samples</u>	<u>Type</u> (e.g., grab)	<u>Method</u> <u>Used</u> (method #)	<u>Level</u> (ML) of <u>Test</u> <u>Method</u>	<u>concentration</u> (ug/l)	<u>mass</u> (kg)	<u>concentration</u> (ug/l)	<u>mass</u> (kg)
h. Acenaphthene	83329	×		1	Composite	8270D SIM	1.0	ND			
i. Acenaphthylene	208968	×		1	Composite	8270D SIM	1.0	ND			
j. Anthracene	120127	×		1	Composite	8270D SIM	1.0	ND			
k. Benzo(ghi) Perylene	191242	×		1	Composite	8270D SIM	1.0	ND			
1. Fluoranthene	206440		×	1	Composite	8270D SIM	1.0	3.1			
m. Fluorene	86737	×		1	Composite	8270D SIM	1.0	ND			
n. Naphthalene	91203	×		1	Composite	8270D SIM	1.0	ND			
o. Phenanthrene	85018		×	1	Composite	8270D SIM	1.0	2.4			
p. Pyrene	129000		×	1	Composite	8270D SIM	1.0	2.2			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	×		1	Composite	608	1.75	ND			
38. Chloride	16887006		×	1	Composite	300.0	50,000	770,000			
39. Antimony	7440360		×	1	Composite	6020A	0.5	0.8			
40. Arsenic	7440382		×	1	Composite	6020A	0.5	21			
41. Cadmium	7440439		×	1	Composite	6020A	0.2	1.6			
42. Chromium III (trivalent)	16065831		×	1	Composite	6020A	1.0	81.1			
43. Chromium VI (hexavalent)	18540299	×		1	Composite	3500CR	10	ND			
44. Copper	7440508		×	1	Composite	6020A	1.0	41.5			
45. Lead	7439921		×	1	Composite	6020A	0.5	98.7			
46. Mercury	7439976		×	1	Composite	245.1	0.2	0.2			
47. Nickel	7440020		×	1	Composite	6020A	0.5	51			
48. Selenium	7782492	×		1	Composite	6020A	5.0	ND			
49. Silver	7440224	×		1	Composite	6020A	0.4	ND			
50. Zinc	7440666		×	1	Composite	6020A	10	276.2			
51. Iron	7439896		×	1	Composite	200.7	50	41,000			
Other (describe):											

					<u>Sample</u>	Analytical	Minimum	<u>Maximum dai</u>	l <u>y value</u>	Average daily	value
<u>Parameter *</u>	<u>CAS</u> <u>Number</u>	Believed Absent	Believed Present	<u># of</u> <u>Samples</u>	<u>Type</u> (e.g., grab)	<u>Method</u> <u>Used</u> (method #)	<u>Level</u> (ML) of <u>Test</u> <u>Method</u>	<u>concentration</u> (ug/l)	<u>mass</u> (kg)	<u>concentration</u> (ug/l)	<u>mass</u> (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 \bigcirc N \bigcirc	If yes, which metals? Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Nickel, Zinc				
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: Arsenic DF 65 Metal: Chromium DF 65 Metal: Copper, Iron, Lead, Nickel, Zinc DF 65 Etc. 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 \bigcirc N \bigcirc If Y, list which metals: Iron, Lead				

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 into 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 pass through the following as necessary: a bag filter, a granular activated carbon vessel, and a cation resin vessel. The effluent will be discharged through the existing storm drain system.

b) Identify each	Frac. tank 🗵	Air stripper 🗖	Oil/water separator 🗖		Equalization tanks \Box	Bag filter 🗵	GAC filter 🗵
applicable treatment unit (check all that apply):	Chlorination	De- chlorination	Other (please describe):	catio	on resin vessels (if needed fo	or metals)	

c) Proposed average and maximum the treatment system: Average flow rate of discharge ²⁵ Design flow rate of treatment system	gpm N		for the discharge and e of treatment systemeters	_	y rate (s) (gallons per gpm	minute) of
d) A description of chemical additiv	es being used or	planned to be use	ed (attach MSDS s	heets):		
None anticipated.						
5. Receiving surface water(s). Plea	se provide infor	mation about the r	receiving water(s),	using separate sh	eets 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 Effluent will enter an existing storm water of						
 c) Attach a detailed map(s) indicatin 1. For multiple discharges, number to 2. For indirect dischargers, indicate The map should also include the loc on USGS topographical mapping), so 	he discharges see the location of the ation and distance	equentially. ne discharge to the ce to the nearest sa	e indirect conveya anitary sewer as w	nce and the discha rell as the locus of		ptors (based
d) Provide the state water quality cla	assification of th	e receiving water	Class B			
e) Provide the reported or calculated Please attach any calculation sheets						cfs
f) Is the receiving water a listed 303	(d) water quality	impaired or limit	ted water? Y	N_O_If yes, for	chloroph which pollutant(s)?	nyll-a,DDT,pH,

E. coli, fishes bioassessments, nutrients, oil&grease, PCB in fish tissue, phosphorus, turbidity, sediment bioassays Is there a final TMDL? Y O NO If yes, for which pollutant(s)? Chlorophyll-a, E. coli, nutrients, phosphorus, turbidity

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?

 $A \underbrace{O} B \underbrace{O} C \underbrace{O} D \underbrace{O} E \underbrace{O} F \underbrace{O}$

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

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 \bigcirc N \bigcirc

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 \bigcirc 2 \bigcirc 3 \bigcirc

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.

Appendix B includes the analytical data collected by Sanborn, Head & Associates, Inc. on September 25, 2012

Appendix C includes calculations for the dilution factor for metals.

Appendix D includes correspondence from the National Oceanic and Atmospheric Administration and the US Fish and Wildlife Service.

Appendix E includes a list of Historic Places in Brighton, Massachusetts.

Appendix F includes the Best Management Practices Plan.

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: 180 Guest Street, Brighton, Massachusetts Operator signature: Printed Name & Title: NOON Senion Project manage James 9-10-13 Date:

APPENDIX B

ANALYTICAL DATA

SANBORN 🛛 HEAD

TABLE 1Summary of Groundwater Quality DataNPDES Remediation General PermitBoston Landing - Block ABrighton, MA

General Parameter	Analytical Method	Units	Block A 9/25/2012	NPDES RGP Effluent Limit (2010)
Solids, Total Suspended	TSS-2540	mg/l	10,000	30
Chloride	CL-300	mg/l	770	Monitor Only
Cyanide, Total	TCN-4500	ug/l	<5	5.2
Chlorine, Total Residual ²	TRC-4500		<20	11
TPH	TPH-1664	ug/l		5
Phenolics, Total	TPHENOL-420	mg/l	<4.8	300
	IPHENOL-420	ug/l	140	300
Total Metals		. /]	10	11.4
Chromium, Hexavalent	HEXCR-3500	ug/l	<10	11.4
Antimony, Total	SB-6020T	ug/l	0.8	141*
Arsenic, Total	AS-6020T	ug/l	21	500*
Cadmium, Total	CD-6020T	ug/l	1.6	10*
Chromium, Total	CR-6020T	ug/l	81.1	1710*
Copper, Total	CU-6020T	ug/l	41.5	260*
Iron, Total	FE-UI	ug/l	41,000	5000*
Lead, Total	PB-6020T	ug/l	98.7	66*
Mercury, Total	HG-U	ug/l	0.2	2.3*
Nickel, Total	NI-6020T	ug/l	51	1451*
Selenium, Total	SE-6020T	ug/l	<5	250*
Silver, Total	AG-6020T	ug/l	< 0.4	57*
Zinc, Total	ZN-6020T	ug/l	276.2	1480*
Pesticides			TT	
1,2-Dibromoethane	504	ug/l	< 0.010	0.05
Volatile Organic Compounds (VOCs)				
Methylene chloride	8260	ug/l	<3	4.6
1,1-Dichloroethane	8260	ug/l	11	70
Carbon tetrachloride	8260	ug/l	< 0.5	4.4
1,1,2-Trichloroethane	8260	ug/l	<0.75	5
Tetrachloroethene	8260	ug/l	< 0.5	5
1,2-Dichloroethane	8260	ug/l	< 0.5	5
1,1,1-Trichloroethane	8260	ug/l	< 0.5	200
Benzene	8260	ug/l	< 0.5	5
Toluene	8260	ug/l	<0.75	see Total BTEX
Ethylbenzene	8260	ug/l	< 0.5	see Total BTEX
Vinyl chloride	8260	ug/l	<1	2
1,1-Dichloroethene	8260	ug/l	0.64	3.2
Trichloroethene	8260	ug/l	< 0.5	5
1,2-Dichlorobenzene	8260	ug/l	<2.5	600
1,3-Dichlorobenzene	8260	ug/l	<2.5	320
1,4-Dichlorobenzene	8260	ug/l	<2.5	5
Methyl tert butyl ether	8260	ug/l	<1	70
p/m-Xylene	8260	ug/l	<1	see Total BTEX
o-Xylene	8260	ug/l	<1	see Total BTEX
Xylenes, Total	8260	ug/l	<1	see Total BTEX
cis-1,2-Dichloroethene	8260	ug/l	< 0.5	70
Acetone	8260	ug/l	5	Monitor Only
1,2-Dibromoethane ³	8260	ug/l	<2	0.05
Naphthalene	8260	ug/l	<2.5	20
Tert-Butyl Alcohol	8260	ug/l	<10	Monitor Only
Tertiary-Amyl Methyl Ether	8260	ug/l	<2	Monitor Only
1,4-Dioxane	8260-SIM	ug/l	4.3	Monitor Only
Total BTEX ⁴	8260	ug/l	<1	100

TABLE 1Summary of Groundwater Quality DataNPDES Remediation General PermitBoston Landing - Block ABrighton, MA

	Analytical Method	Units	Block A 9/25/2012	NPDES RGP Effluent Limit (2010)
General Parameter			5/20/2012	
Semivolatile Organic Compounds (SVOCs)				
Bis(2-ethylhexyl)phthalate ⁵	8270TCL	ug/l	<3	6
Butyl benzyl phthalate ⁵	8270TCL	ug/l	<5	see Total Phthalates
Di-n-butylphthalate ⁵	8270TCL	ug/l	<5	see Total Phthalates
Di-n-octylphthalate ⁵	8270TCL	ug/l	<5	see Total Phthalates
Diethyl phthalate ⁵	8270TCL	ug/l	<5	see Total Phthalates
Dimethyl phthalate ⁵	8270TCL	ug/l	<5	see Total Phthalates
Total Phthalates ⁶	8270TCL	ug/l	<5	3
Acenaphthene ⁷	8270TCL-SIM	ug/l	0.42 J	see Total Group II PAHs
Fluoranthene ⁷	8270TCL-SIM	ug/l	3.1	see Total Group II PAHs
Naphthalene ⁷	8270TCL-SIM	ug/l	<1	20
Benzo(a)anthracene ⁸	8270TCL-SIM	ug/l	0.94 J	0.2
Benzo(a)pyrene ⁸	8270TCL-SIM	ug/l	0.81 J	0.2
Benzo(b)fluoranthene ⁸	8270TCL-SIM	ug/l	0.85 J	0.2
Benzo(k)fluoranthene ⁸	8270TCL-SIM	ug/l	0.81 J	0.2
Chrysene ⁸	8270TCL-SIM	ug/l	1.0	0.2
Acenaphthylene ⁷	8270TCL-SIM	ug/l	<1	see Total Group II PAHs
Anthracene ⁷	8270TCL-SIM	ug/l	0.51 J	see Total Group II PAHs
Benzo(ghi)perylene ⁷	8270TCL-SIM	ug/l	0.65 J	see Total Group II PAHs
Fluorene ⁷	8270TCL-SIM	ug/l	0.52 J	see Total Group II PAHs
Phenanthrene ⁷	8270TCL-SIM	ug/l	2.4	see Total Group II PAHs
Dibenzo(a,h)anthracene ⁸	8270TCL-SIM	ug/l	<1	0.2
Indeno(1,2,3-cd)Pyrene ⁸	8270TCL-SIM	ug/l	0.66 J	0.2
Pyrene ⁷	8270TCL-SIM	ug/l	2.2	see Total Group II PAHs
Pentachlorophenol ²	8270TCL-SIM	ug/l	<4	1
Total Group I PAHs	8270TCL-SIM	ug/l	5.1	10
Total Group II PAHs	8270TCL-SIM	ug/l	9.8	100
Polychlorinated Biphenyls (PCBs)				
Aroclor 1016 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1221 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1232 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1242 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1248 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1254 ¹¹	PCB-608	ug/l	<0.25	0.5
Aroclor 1260 ¹¹	PCB-608	ug/l	<0.25	0.5
Total PCBs	PCB-608	ug/l	<0.25	0.5

Notes:

 The sample was collected by Sanborn, Head & Associates, Inc. personnel on the date indicated and was submitted to Alpha Analytical, Inc. of Westborough, MA (Alpha) for analysis. The sample is a composite of wells SH-1W, SH-4W, SH-5W, and B-125B.
 The Laboratory Reporting Limit (RL) meets the requirements of Appendix VI of the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) even though RL exceeds RGP Effluent Limit.

3. RL achieved by laboratory was above the Effluent Limit.; however, 1,2-dibromoethane was also analytzed by Method 504, as shown, with an RL below the Effluent Limit.

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 II PAHs.

8. 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. According to Alpha the method detection limit for 8270 SIM is 0.20 ug/l. RLs achieved by the laboratory were above the Effluent Limits and the minimum level of the test method due to matrix interference.

9. Sum of Group I 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 of the RGP.

'Italicized' values indicate exceedances of GW-2 standards.

'<' = analytes not detected above laboratory reporting limits

'J qualifier' = estimated value below reporting limit. Alpha re-issued the lab report to show PAH concentrations below RLs because

the RLs are greater than the discharge limit due to matrix interference.

'NS' = Not Specified

'*' = indicates Effluent Limit reflects a dilution factor of 65.

14. Monitor Only means that the subject compound is not subject to a (criteria) limit, however, the the Permitee is still required to

APPENDIX C

CHARLES RIVER DILUTION CALCULATION





File No. <u>3410.00</u>		Page 1 of 1
Project <u>Boston Landing – Block A</u>		_
Location Brighton, Massachusetts		
Subject Dilution Factor		
Calculated By <u>I. Corsello</u>	Date _	8/6/2013
Checked By L. Garvey	Date _	8/12/2013

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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 = 0.223 cfs Qs = 14.3 cfs of flow in the Charles River [Reference 1]

CALCULATION:

DF = (0.223 cfs + 14.3 cfs) / 0.223 cfs DF = 65

RESULTS:

The resulting dilution factor to be used when discharging to the Charles River is 65.

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. 39. (Refer to Attachment A)

Attachment A

Flow		Station na	me and site num	ber	
	Charles River near Millis, Mass. (106)	Charles River at Dover, Mass. (130)	Mother Brook at Dedham, Mass. (135)	Charles River at Wellesley, Mass. (139)	Charles River at Waltham, Mass. (147)
MONTHLY (Co	ntinued)		and the first sector		
Q4	352 246 150	1137 571 169	381 159 26.5	877 532 161	1177 595 195
SDQ4	69.2	231	87.7	189	243
Q5	230 165 97.0	746 359 158	253 90.6 .00	575 332 176	798 355 135
SDQ5	54.4	141	56.4	114	137
Q6	103 71.2 40.6	725 205 67.2	238 49.4 .00	572 186 67.3	694 199 56.5
SDQ6	23.9	125	49.7	118	115
Q7	54.3 39.9 22.5	1060 125 19.5	339 23.3 .06	280 101 29.2	915 122 26.7
SDQ7	11.8	163	49.4	70.3	137
Q8	151 73.8 25.0	956 109 9.01	306 21.8 .00	211 79.5 13	873 105 14.6
SDQ8	49.1	162	53.6	58.5	145
Q9	67.6 49.9 17.7	640 103 7.78	189 21.8 .10	253 89.4 14.9	616 114 19.6
SDQ9	16.9	120	37.7	61.1	114
LOW FLOW					
7Q2	-	32.5	-	26.8	34.0
<mark>7Q10</mark>	—	12.9	_	10.3	14.3

Table 4.--Streamflow characteristics, in cubic feet per second, at selected stream-gaging stations (Continued)

APPENDIX D

FEDERAL CORRESPONDENCE

SANBORN 🛛 HEAD



National Oceanic and Atmospheric Administration National Marine Fisheries Service Northeast Region 55 Great Republic Drive, Gloucester, MA 01930-2276 August 7, 2013 File No. 3410.01

Re: Application for NPDES RGP 180 Guest Street Brighton, Massachusetts

Dear Sir/Madam:

Sanborn, Head & Associates, Inc. (Sanborn Head) is submitting this request for information to be included in a Notice of Intent (NOI) for a Remediation General Permit (RGP). The NOI is for construction dewatering during construction at the 180 Guest Street Redevelopment project. Effluent will be discharged to the Charles River in Brighton, Massachusetts, via a drain and outfall. The outfall is located on the southern bank of the Charles River between the Arsenal Street Bridge and the Elliot Bridge at approximately 42° 21' 53" N and 71° 8' 17" W.

As part of the application to the USEPA for the RGP, we need to investigate whether this proposed temporary discharge has the potential to adversely affect any federally listed species in the reach of the Charles River located downstream of the discharge point. Thank you in advance for your assistance.

Very truly yours, Sanborn, Head & Associates, Inc.

Quincy Pratt Engineer

QP/LMG: qp

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Quincy Pratt

From: Sent: To: Subject: Christine Vaccaro - NOAA Federal [christine.vaccaro@noaa.gov] Thursday, August 08, 2013 9:27 AM Quincy Pratt Re: Plainville MA RGP

Hi Quincy,

I received another fax request from you. Please send these requests via email.

There are no species in that section of the Charles River that would be potentially affected by your activities.

-Chris

Chris Vaccaro Fisheries Biologist Protected Resources Division NOAA Fisheries/NERO Gloucester, MA Phone: 978-281-9167 Email: <u>christine.vaccaro@noaa.gov</u>

On Tue, Aug 6, 2013 at 9:54 AM, Christine Vaccaro - NOAA Federal <<u>christine.vaccaro@noaa.gov</u>> wrote: Dear Mr. Pratt,

There are no known species listed by the National Marine Fisheries Service in the area of the construction dewatering at 2 East Bacon Street in Plainville, MA in the stretch of the Ten Mile River you have indicated in your letter.

Feel free to email any further requests to us for RGP coverage.

Cheers, Chris

Chris Vaccaro Fisheries Biologist Protected Resources Division NOAA Fisheries/NERO Gloucester, MA Phone: <u>978-281-9167</u> Email: christine.vaccaro@noaa.gov



United States Department of the Interior

FISH & WILDLIFE SERVICE

FISH AND WILDLIFE SERVICE

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

January 7, 2013

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 Mr. Brett Hillman of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours, Thomas R. Chapman

Supervisor New England Field Office

APPENDIX E

NATIONAL REGISTER OF HISTORICAL PLACES, BRIGHTON, MASSACHUSETTS

SANBORN || HEAD

Appendix E National Register of Historic Places Research Documentation Brighton, Massachusetts

Site Name	Address	Date Listed
Brighton Center Historic	Academy Hill Rd., Chestnut Hill Ave.,	2/20/2001
District	Dighton, Elko, Henshaw, Leicester, Market,	
	Washington, and Winship Sts.	
Brighton Evangelical	404-410 Washington St.	8/21/1997
Congregational Church		
Chestnut Hill Reservoir	Beacon St. and Commonwealth Ave.	1/18/1990
Historic District		
Evergreen Cemetery	2060 Commonwealth Ave.	8/14/2009
Oak Square School	35 Nonantum St.	11/10/1980
Charles River Reservation	1420-1440 Soldiers Field Rd.	7/19/2010
(Speedway)-Upper Basin		
Headquarters		
Engine House No. 34	444 Western Ave.	10/24/1985

Notes:

Sanborn, Head & Associates, Inc. (Sanborn Head) conducted a review of the National Register of Historic Places within Brighton, Massachusetts. The search returned 7 results, none of which are located at or abutting the site.

APPENDIX F

BEST MANAGEMENT PRACTICES PLAN

SANBORN 🛛 HEAD

APPENDIX F: BEST MANAGEMENT PRACTICES PLAN

Notice of Intent for the Remediation General Permit Temporary Construction Dewatering for Site Redevelopment 38-40 and 180 Guest Street Brighton, 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 of 38-40 and 180 Guest Street in Brighton, Massachusetts. The dewatering discharge will be conveyed through the existing storm drains and discharged to the Charles River in Brighton, MA.

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

Site Security

During construction activities, the dewatering system will be secured using standard construction practices. The fractionalization tank and associated filters, pumps, and flow meters 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

The 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 that accumulates in the fractionalization tank, used bag filters, spent activated carbon, spent cation resin, and miscellaneous wastes associated with water quality sampling activities.

The sediment 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 sediment. 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. The spent cation resin will be processed and recycled by the company providing the fresh resin.

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 bag filter vessels (installed in parallel so the system does not need to be shut down for bag filter changeout), one activated carbon vessel, and two cation resin vessels in series. Sample ports will be available after the bag filter, after the carbon vessel, and after each cation resin vessel.

If sampling indicates that there is breakthrough in the carbon vessel, the system shall be shut down while the carbon is changed out; however, baseline groundwater sampling analytical data indicates that breakthrough of the carbon vessel is unlikely to occur during the operation of this system. If the sampling data at that point indicates that "breakthrough" has occurred on a cation resin vessel, the downstream resin vessel will be moved to the upstream position and the resin 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 carbon vessels and resin vessels will be backwashed with a clean water source when the pressure drop across the vessel 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 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

Hay bales and silt fences as well as sloped grades will be used as needed to construct a berm around the perimeter of the site to prevent rainfall from migrating off-site or into the excavation. If stockpiles of soil are generated, the stockpiles of contaminated soils will be placed on plastic sheets and then covered with sheeting and bermed with hay bales until 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 Charles River, it is not anticipated that the dewatering discharge will cause erosion, stream scouring at the discharge point, or additional sedimentation in the Charles River.

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