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

CERTIFIED MAI L RETURN RECEIPT REQUESTED

SEP 12 2013

David Brownsberger
Project Manager
Deloury Industries
100 Burtt Road
Andover, MA 01810

Re: Authorization to discharge under the Remediation General Permit (RGP) – 910000. CSO Improvements Project site located at 40 Crown Street in Nashua, NH 03060, Authorization # NHG910063

Dear Mr. Brownsberger:

Based on the review of a Notice of Intent (NOI) submitted by Robert J. Leventry, Division Manager for Environmental Services, Inc., on behalf of Deloury Industries contracted by the City Of Nashua to perform CSO Improvements for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the check list 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 the parameters which you have marked "Believed Present". The checklist also includes parameters which your laboratory reports indicated the presence of pollutants detected at levels above the Appendix III limits of the RGP.

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). Due to the

ample dilution at the Merrimack River point of discharge (2,206) the DFR applicable for this pollutant is equal to the ceiling value established in the RGP. (See the RGP Appendix IV for New Hampshire facilities). Therefore, the limit for antimony of 141 ug/L, arsenic of 540 ug/L, trivalent chromium of 1,710 ug/L, copper of 2,070 ug/L, lead of 430 ug/L nickel of 2,380 ug/L, zinc of 1,480 ug/L, and iron of 5,000 ug/L, shall not be exceeded in the discharge.

This general permit and authorization to discharge will expire on September 9, 2015. This project reportedly will terminate on October 25, 2013. 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: Jeff Andrews, NHDES
Robert J. Laventry, Green Environmental

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Permit Number:	**NHG910063**
Authorization Issued:	September, 2013
Facility/Site Name:	CSO Improvements Project
Facility/Site Address:	40 Crown Street, Nashua, NH 03060
	Email address of owner; Not Provide, Phone n: 603 5983330
Legal Name of Operator:	Deloury Industries
Operator contact name, title, and Address:	David Brownsberger, Project Manager, Nashua NH.03060
	Email dbrownsberger@deloury.com
Estimated Date of Completion:	October 25, 2013
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Subcategory A. General Urban Fill Sites
Receiving Water:	Merrimack 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#60.2/5mL
	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/5.0mg/LmL
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
√	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (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)	Monitor Only (ug/L)/ Me#8260C/ ML

	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)
	(TertiaryButanol)	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/ ML5ug/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/ML50 ug/L
	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML50 ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML5ug/L,Me#604 &625/ML10ug/L
√	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
√	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
	a. Benzo(a) Anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	b. Benzo(a) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/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)
		Me#610/ML5ug/L& Me#625/ML5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	e. Chrysene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
	h. Acenaphthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug /L & Me#625/ML5ug/L
	i. Acenaphthylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	m. Fluorene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L / Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	Metal parameter	Total Recoverable NH/Metal Limit H [10] = 25 mg/l CaCO3, Units = ug/l (11/12)		Minimum level=ML	
		Freshwater Limts	2206 dilution		
√	39. Antimony	141		ML	10
√	40. Arsenic **		540	ML	20
	41. Cadmium **	0.8		ML	10
√	42. Chromium III (trivalent) **		1,710	ML	15

	Metal parameter	Total Recoverable NH/Metal Limit H [10] = 25 mg/l CaCO3, Units = ug/l (11/12)		Minimum level=ML	
		Freshwater Limts	2206 dilution		
	43. Chromium VI (hexavalent) **	11.4		ML	10
√	44. Copper **		2,070	ML	15
√	45. Lead **		430	ML	20
	46. Mercury **	0.9		ML	02
√	47. Nickel **		2,380	ML	20
	48. Selenium **	5		ML	20
	49. Silver	0.4		ML	10
√	50. Zinc **		1,480	ML	15
√	51. Iron	5,000		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	6.5-8.3; 1/Month/Grab[13]
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab[13]
√	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab[13]
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab[14]
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab[14]
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab[14]
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab[14]
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab[14]
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab[14]
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab[14]
	64. Maximum Change in Temperature in MA –Any Class SB water body - October to June	4°F; 1/Month/Grab[14]

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "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.
[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

Remediation General Permit
Appendix V

Notice of Intent (NOI)
Suggested Forms & Instructions

I. Notice of Intent (NOI) Suggested Form and Instructions

In order to be covered by the remediation general permit (RGP), applicants must submit a completed Notice of Intent (NOI) to EPA Region I and the appropriate state agency. The owner or operator, as defined by 40 CFR § 122.2, means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

The following are three general "**operator**" scenarios (variations on any of these three are possible, especially as the number of owners and contractors increases):

▸ **"***Owner" as "Operator" - sole permittee.* The property owner designs the structures and control systems for the site, develops and implements the BMPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). Under the definition of operator, in this case, the "Owner" would be considered the "operator" and therefore the only party that needs permit coverage. Everyone else working on the site may be considered subcontractors and do not need to apply for permit coverage.

▸ *"Contractor" as "Operator" - sole permittee.* The property owner hires a company (e.g., a contractor) to design the project and oversee all aspects, including preparation and implementation of the BMPP and compliance with the permit (e.g., a "turnkey" project). Here, the contractor would likely be the only party needing a permit. Similarly, EPA expects that property owners hiring a contractor or consultant to perform groundwater remediation work (e.g., due to a leaking fuel oil tank) would come under this type of scenario. EPA believes that the contractor, being a professional in the industry, should be the responsible entity rather than the individual. The contractor is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing the plans needed to comply with the permit. However, property owners would also meet the definition of "operator" and require permit coverage in instances where they perform any of the required tasks on their personal properties.

▸ *"Owner" and "Contractor" as "Operators" - co-permittees.* The owner retains control over any changes to site plans, BMPPs, or wastewater conveyance or control designs, but the contractor is responsible for conducting and overseeing the actual activities (e.g., excavation, installation and operation of treatment train, etc.) and daily implementation of BMPP and other permit conditions. In this case, both parties need to apply for coverage.

Generally, a person would not be considered an "operator," and subsequently would not need permit coverage, if: 1) that person is a subcontractor hired by, and under the supervision of, the owner or a general contractor (e.g., if the contractor directs the

subcontractor's activities on-site, it is probably not an operator); or 2) the person's activities would otherwise result in the need for coverage under the RGP but another operator has legally assumed responsibility for the impacts of project activities.

A. Instructions for the Suggested Notice of Intent (NOI) - At a minimum, the Notice of Intent must include the following for each individual facility or site. Additional information may be attached as needed.

1. General facility/site information.

a) Provide the facility/site name, mailing address, and telephone and fax numbers. Provide the facility Standard Industrial Classification (SIC) code(s), which can be found online at http://www.osha.gov/pls/imis/sic_manual.html. Provide the site location, including longitude and latitude.

b) Provide the facility/site owner's name, address, email address, telephone and fax numbers, if different from the site information. Indicate whether the owner is a Federal, State/Tribal, private, or other entity.

c) Provide the site operator's (e.g., contractor's) name, mailing address, telephone and fax numbers, and email address if different from the owner's information.

d) For the site for which the application is being submitted, indicate whether:

1) a prior NPDES permit exclusion has been granted for the discharge (if so, provide the tracking number of the exclusion letter);

2) a prior NPDES application (Form 1 & 2C – for reference, please visit http://www.epa.gov/region1/npdes/epa_attach.html) has ever been filed for the discharge (if so, provide the tracking number and date that the application was submitted to EPA);

3) the discharge is a "new discharge" as defined by 40 CFR 122.2; and

4) for sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 and exempt from state permitting.

e) Indicate whether there is any ongoing state permitting, licensing, or other action regarding the facility or site which is generating the discharge. If "yes," provide any site identification number assigned by the state of NH or MA, any permit or license number assigned, and the state agency contact information (e.g. name, location, telephone no.).

f) Indicate whether or not the facility is covered by other EPA permits including:

1) the Multi-Sector General Permit (MSGP) http://cfpub.epa.gov/npdes/stormwater/msgp.cfm;
2) the Final NPDES General Permit for Dewatering Activity Discharges in Massachusetts and New Hampshire http://www.epa.gov/region1/npdes/dewatering.html;
3) the EPA Construction General Permit http://cfpub.epa.gov/npdes/stormwater/cgp.cfm;
4) an individual NPDES permit; or
5) any other water quality-related individual or general permit.

If so, provide permit tracking number(s).

g) Indicate if the site/facility discharge(s) to an Area of Critical Environmental Concern (ACEC), as shown on the tables and maps in Appendix I.

h) Based on the nature of the facility/site and any historical sampling data, the applicant must indicate which of the sub-categories within which the potential discharge falls.

2. Discharge information.

a) Describe the discharge activities to be covered by the permit. Attach additional sheets as needed.

b) Provide the following information about each discharge:

1) the number of discharge points;

2) the maximum and average flow rate of the discharge in cubic feet per second. For the average flow magnitude, include the units and appropriate notation if this value is a calculated design value or estimate if technical/design information is not available;

3) the latitude and longitude of each discharge with an accuracy of 100 feet (see EPA's siting tool at: http://www.epa.gov/tri/report/siting_tool);

4) the total volume of potential discharge (gal), only if hydrostatic testing;

5) whether the discharge(s) is intermittent or seasonal and if ongoing.

c) Provide the expected start and end dates of discharge (month/day/year).

d) 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).

3. Contaminant information.

In order to complete the NOI, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for the parameters applicable to the sub-category into which the discharge falls, as listed in Appendix III of the permit and selected in Part 1 of the NOI form, except as noted below.

Permittees shall provide additional sampling results with the NOI if such sampling already exists, or if the permittee has reason to believe the site contains additional contaminants not listed in Appendix III for that sub-category or contains additional contaminants not included in Appendix III.

The applicant may use historical data as a substitute for the new sample if the data was collected no more than 2 years prior to the "Submittal of the NOI" and if collected pursuant to:

i. for sites in Massachusetts, 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E");

ii. for sites in New Hampshire, New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act;

a) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential discharge.

Based on the required sampling and analysis, the applicant must fill in the table, or provide a narrative description, with the following additional information for each chemical that is believed present (chemical that violate EPA's criteria limitations):

1) the number of samples taken (minimum of one sample for applicable parameters per Appendix III);
2) the type of sample (e.g. grab, composite, etc.);
3) the analytical method used, including the method number;
4) the minimum level (ML) of the method used (based on Appendix VI);
5) the maximum daily amount (concentration (ug/l) and mass (kg)) of each pollutant, based on the sampling data

lb/day (pounds per day) equals flow (in million gallons per day, MGD) times concentration in milligrams per liter (mg/l) times 8.34.
Example: 2.5 MGD x 30 mg/l TSS x 8.34 = 625.5 lb TSS/day
MGD = gallons per minute (gpm) x 0.00144
1 kg = 2.2 lbs

And;
6) the average daily amount (concentration and mass) of each pollutant, based on the sampling data.

If the results of any sampling indicate that pollutants exist in addition to those listed in Appendix III of the RGP of the permit, the applicant must also describe those contaminants on the NOI in boxes in section I.3.c.)on the line marked "Other," or use additional sheets as needed. Subsequently, EPA may require monitoring for such parameters or will decide if an individual permit is necessary.

c) Determination of Reasonable Potential and Allowable Dilution for Discharges of Metals:

If any *metals* are believed present in the potential discharge to freshwater[1], the applicant must follow the procedures below to determine the dilution factor for each metal.

Step 1: Initial Evaluation

1) The applicant must evaluate all metals believed present in the discharge subject to this permit, including "naturally occurring" metals such as dissolved and/or total Iron. Applicants must enter the highest detected concentration of the metal at zero dilution in the "Maximum value" column of the NOI.

2) Based on the maximum concentration of each metal, the applicant must perform an initial evaluation assuming zero dilution in the receiving water. The applicant must compare the metals concentrations in the untreated (intake) waters to the effluent limits contained in Appendix III.

[1]Dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI.

i. If potential discharges (untreated influent) with metals contain concentrations above the concentration limits listed in Appendix III, applicant must proceed to step 2.
ii. If potential discharges (untreated influent) with metals contain concentrations below the concentrations listed in Appendix III, the applicant may skip step 2 and those metals will **not** be subject to permit limitations or monitoring requirements.

Step 2: Calculation of Dilution Factor

1) **For applicants in NH**: If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant shall evaluate the potential concentration considering a dilution factor (DF) using the formula below. **For sites in New Hampshire, the applicant must contact NH DES to determine the 7Q10 and dilution factor.**

$$DF = [(Qd + Qs)/Qd] \times 0.9$$

Where:

DF	**= Dilution Factor**
Qd	**= Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)**
Qs	**= Receiving water 7Q10 flow, in cfs, where 7Q10 is the annual minimum flow for 7 consecutive days with a recurrence interval of 10 years**
0.9	**= Allowance for reserving 10% of the assets in the receiving stream as per Chapter ENV-Wq 1700, Surface Water Quality Regulations**

i. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then compares the maximum concentration of the metal entered on the NOI to the corresponding total recoverable metals limits listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction within the 1-5 dilution factor range times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. All limits above a dilution factor of 5 are maintained.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in the potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

ii. In either case, the applicant must submit the results of this calculation as part of the NOI. EPA and NH DES will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

2) **For applicants in MA**: If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant must evaluate the potential concentration considering a dilution factor (DF) using the formula below.

DF = (Qd + Qs)/Qd

Where:

DF	**= Dilution Factor**
Qd	**= Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 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**

i. The applicant may estimate the 7Q10 for receiving water by using available information such as nearby USGS stream gauging stations directly or by application of certain "flow factors," using historic streamflow publication information, calculations based on drainage area, information from state water quality offices, or other means. In many cases Massachusetts has calculated 7Q10 information using "flow factors" for a number of streams in the state. The source of the low flow value(s) used by the applicant must be included on NOI application form. Flow data can also be obtained from web applications such as the one located at: http://ma.water.usgs.gov/streamstats/.

ii. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then shall compare the maximum concentration of each metal entered on the NOI to the corresponding total recoverable metals limit listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction of the 0-5 of DF times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. Not to exceed DF of 5.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in a potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

iii. The applicant must submit the results of this calculation as part of the NOI. EPA (and MassDEP where the discharge is not covered by 310 CMR 40.0000) will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

4. Treatment system information.

a) Provide a written description of the treatment train and how the system will be set up for each discharge and attach a schematic of the proposed or existing treatment system(s).
b) Identify each major treatment unit (e.g. frac tanks, filters, air stripper, liquid phase/vapor phase activated carbon, oil/water separators, etc.) by checking all that apply and describing any additional equipment not listed. Attach additional sheets as needed.
c) Provide the proposed average and maximum flow rates (in gallons per minute, gpm) for the discharge and the design flow rates (in gpm) of the treatment system. Clearly identify the component of the treatment with the most limited flow, i.e., the part of the treatment train that establishes the design flow.
d) Describe any chemical additives being used, or planned to be used, and attach MSDS sheets for each. EPA may request further information regarding the chemical composition of the additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the RGP will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the RGP has already been granted and the use of a chemical additive becomes necessary, the permittee must submit a Notice of Change (NOC).

5. Receiving surface water(s) information.

a) Identify the discharge pathway by checking whether it is discharged: directly to the receiving water (river, stream, or brook), within the facility (e.g., through a sewer drain), to a storm drain, to a wetland, or other receiving body.
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters into which discharge will occur.
c) Provide a detailed map(s) indicating the location of the site and outfall(s) to the receiving water(s):

1) For multiple discharges, the discharges should be numbered sequentially.
2) In the case of indirect dischargers (to municipal storm sewer, etc) the map(s) must be sufficient to indicate the location of the discharge to the indirect conveyance and the discharge to the state classified 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 and the basin (for Massachusetts, the Surface Water Quality Standards (314 CMR 4.00) are available at http://www.mass.gov/dep/water/laws/regulati.htm#wqual) (for New Hampshire, contact the NH DES at (603) 271-2984).
e) Specify the reported seven day-ten year low flow (7Q10) of the receiving water (see Section I.A.3) c. above). In New Hampshire, the 7Q10 must be provided by to the applicant by the New Hampshire Department of Environmental Services.

f) Indicate whether the receiving water is a listed 303(d) water quality impaired or limited water and if so, for which pollutants (see Section IX of the Fact Sheet for additional information).
For MA, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at http://www.mass.gov/dep/water/resources/tmdls.htm#info.
For NH, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm.
Also, indicate if there is a final TMDL for any of the listed pollutants. For MA, final TMDLs can be found at: http://www.mass.gov/dep/water/resources/tmdls.htm and for NH, final TMDLs can be found at http://des.nh.gov/organization/divisions/water/wmb/tmdl/index.htm. For more information, contact the states at: New Hampshire Department of Environmental Services, Watershed Management Bureau at 603-271-3503 or the Massachusetts Department of Environmental Protection at 508-767-2796 or 508-767-2873.

6. ESA and NHPA Eligibility.
As required in Parts I.A.4 and Appendix VII the operator of a site/facility must ensure that the potential discharge will not adversely affect endangered species, designated critical habitat, or national historic places that are in proximity to the potential discharge. If the potential discharge is to certain water bodies, the applicant must also submit a formal certification with the NOI that indicates the consultation, with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services), resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharge is not likely to adversely affect any endangered species or critical habitat. Facilities should begin the consultation as early in the process as possible.
a) Using the instructions in Appendix VII and information in Appendix II, indicate under which criterion listed you are eligible for coverage under this general permit.
b) If you selected criterion D or F, indicate if consultation with the federal services has been completed or if it is underway.
c) If consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, indicate if a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat was received.
d) Attach documentation of ESA eligibility as described below and required in Appendix VII, Part I.C, Step 4.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B – Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS and/or NOAA Fisheries, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C – Activities are covered by a Section 10 Permit: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I). A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E – Activities are covered by certification of eligibility. A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I. A copy of the USFWS and/or the NOAA Fisheries, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

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

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. Applicants should provide any supplemental information needed to meet the requirements of the permit, including any analytical data used to support the application, and any certification(s) required.

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.*

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**: Improvements at CSO-004		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.4453 latitude: 42.7611	Facility SIC code(s):	Street: L Crown Street (End of Burke Street) Nashua, NH 03060		
b) Name of **facility/site owner:**		Town: Nashua		
Email address of facility/site owner:		State: NH	Zip: 03060	County:
Telephone no. of facility/site **owner**: 603-589-3330				
Fax no. of facility/site **owner**: 603-589-3344		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ○ 4. Other ◉ if so, describe:		
Address of **owner** (if different from site):		Municipality - City of Nashua		
Street: 229 Main Street				
Town: Nashua	State: NH	Zip: 03060	County: Hillsborough	
c) Legal name of **operator**:		**Operator** telephone no: 978-475-8153		
Deloury Industries		**Operator** fax no.: 978-475-7177	**Operator** email: dbrownsberger@deloury.com	
Operator contact name and title: David Brownsberger - project Manager				
Address of **operator** (if different from owner):	Street: 100 Burtt Road,			
Town: Andover	State: MA	Zip: 01810	County: Essex	

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:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

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:
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:

Dewatering of groundwater in excavation to support installation of 30,000 gallon storage tank.

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow .32 Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) .16 c.f.s Is average flow a design value or estimate? est

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	42.7611	long	-71.4453	pt.2: lat.		long.	;
pt.3: lat		long		pt.4: lat.		long.	;
pt.5: lat		long		pt.6: lat.		long.	;
pt.7: lat		long		pt.8: lat.		long.	; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

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

c) Expected dates of discharge (mm/dd/yy): start Aug 16, 2013 end Oct 25, 2013

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). Attached in Dewatering Plan

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)		☐	☒	2*	G	SM2540D	4 mg/l	1500000	1187	1500000	1187
2. Total Residual Chlorine (TRC)		☒	☐	1	G	M4500	.01 mg/l	ND		ND	
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	G	E1664	5 mg/l	ND		Nd	
4. Cyanide (CN)	57125	☒	☐	1	G	SM4500	.01 mg/l	ND		ND	
5. Benzene (B)	71432	☒	☐	1	G	Sw8260B	1 ug/l	ND		ND	
6. Toluene (T)	108883	☐	☒	1	"	"	2 ug/l	3.1	.002	3.1	.002
7. Ethylbenzene (E)	100414	☒	☐	1	G	"	2 ug/l	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	"	"	"	"	"		"	
9. Total BTEX [2]	n/a	☐	☐								
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	"	"	"	"	"		"	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	"	"	"	"	"		"	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	"	"	"	20 ug/l	"		"	

* 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	G	8260B	2 ug/l	ND		ND	
14. Naphthalene	91203	☒	☐	"	"	"	5 ug/l	"		"	
15. Carbon Tetrachloride	56235	☒	☐	"	"	"	2 ug/l	"		"	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	"	"	"	"	"		"	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	"	"	"	"	"		"	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	"	"	"	"	"		"	
18a. Total dichlorobenzene		☒	☐								
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	"	"	"	"	"		"	
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	"	"	"	"	"		"	
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	"	"	"	1 ug/l	"		"	
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	"	"	"	2 ug/l	"		"	
23. Methylene Chloride	75092	☒	☐	"	"	"	5 ug/l	"		"	
24. Tetrachloroethene (PCE)	127184	☒	☐	"	"	"	2 ug/l	"		"	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	"	"	"	"	"		"	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	"	"	"	"	"		"	
27. Trichloroethene (TCE)	79016	☒	☐	"	"	"	"	"		"	

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	G	8260B	2 ug/l	ND		ND	
29. Acetone	67641	☒	☐	"	"	"	10 ug/l	"		"	
30. 1,4 Dioxane	123911	☒	☐								
31. Total Phenols	108952	☒	☐	1	G	8270C	23 ug/l	ND		ND	
32. Pentachlorophenol (PCP)	87865	☒	☐	"	"	"	"	"		"	
33. Total Phthalates (Phthalate esters) [4]		☐	☒	"	"	"	11 ug/l	210	.17	210	.17
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☐	☒	"	"	"	"	120	.09	120	.09
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	"	"	"	"	ND		ND	
a. Benzo(a) Anthracene	56553	☐	☐								
b. Benzo(a) Pyrene	50328	☐	☐								
c. Benzo(b)Fluoranthene	205992	☐	☐								
d. Benzo(k)Fluoranthene	207089	☐	☐								
e. Chrysene	21801	☐	☐								
f. Dibenzo(a,h)anthracene	53703	☐	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☐	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	"	"	"	"	"		"	

[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	☐	☐								
i. Acenaphthylene	208968	☐	☐								
j. Anthracene	120127	☐	☐								
k. Benzo(ghi) Perylene	191242	☐	☐								
l. Fluoranthene	206440	☐	☐								
m. Fluorene	86737	☐	☐								
n. Naphthalene	91203	☐	☐								
o. Phenanthrene	85018	☐	☐								
p. Pyrene	129000	☐	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	G	SW8082	.22 ug/l	ND		ND	
38. Chloride	16887006	☐	☒	2*	G	E300	5 mg/l	51000	40	51000	40
39. Antimony	7440360	☐	☒	1	"	SW7041	5 ug/l	8.5	.007	8.5	.007
40. Arsenic	7440382	☐	☒	2*	G	SW7060	4 ug/l	15	.01	15	.01
41. Cadmium	7440439	☒	☐	1	G	SW6010	"	ND		ND	
42. Chromium III (trivalent)	16065831	☐	☒	2*	G	"	10 ug/l	12.5	.01	12.5	.01
43. Chromium VI (hexavalent)	18540299	☒	☐	1	G	M3500-CR	.01 mg/l	ND		ND	
44. Copper	7440508	☒	☐	2*	"	SW6010	25 ug/l	"		"	
45. Lead	7439921	☒	☐	"	"	"	12.5 ug/l	"		"	
46. Mercury	7439976	☒	☐	"	"	SW7470	.2 ug/l	"		"	
47. Nickel	7440020	☒	☐	"	"	SW6010	40 ug/l	"		"	
48. Selenium	7782492	☒	☐	1	"	SW7740	5 ug/l	"		"	
49. Silver	7440224	☒	☐	"	"	SW6010	7 ug/l	"		"	
50. Zinc	7440666	☐	☒	2*	"	"	20 ug/l	40.8	.04	40.8	.04
51. Iron	7439896	☐	☒	"	"	"	100 ug/l	3100	2.5	3100	2.5
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? Antimony, Arsenic, Zinc, and Iron
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: Antimony DF: 2206 Metal: Arsenic DF: 2206 Metal: Zinc DF: 2206 Metal: Iron DF: 2206 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:

Based on the contaminants identified, the treatment works is comprised of sediment/retention basin with a silt fence/hay bale filtration and overland flow through vegetative matter. Contaminants identified are likely attributable to suspended solids identified in the samples collected. Should additional settling be required after system start up, a frac tank and bag filter system may be employed.

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):	Sedimentation basin and hay bales/silt fence filtration		

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 145 gpm Maximum flow rate of treatment system 145 gpm
Design flow rate of treatment system 145 gpm

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

NONE

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

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

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Sedimentation basin; silt fence filtration; approximately 30 feet of overland flow through vegetative matter; Merrimack River

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 784 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)?

Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)? pH, Aluminum, Creosote, Chlorophyll

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.

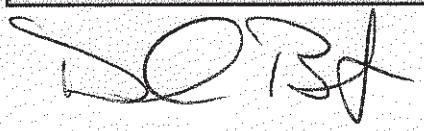
7. Supplemental information.

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

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:	CSO-004 Nashua NH
Operator signature:	
Printed Name &Title:	David Brownsberger - Project Manager
Date:	08-09-2013

B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

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

or electronically mailed to NPDES.Generalpermits@epa.gov

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA=s website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

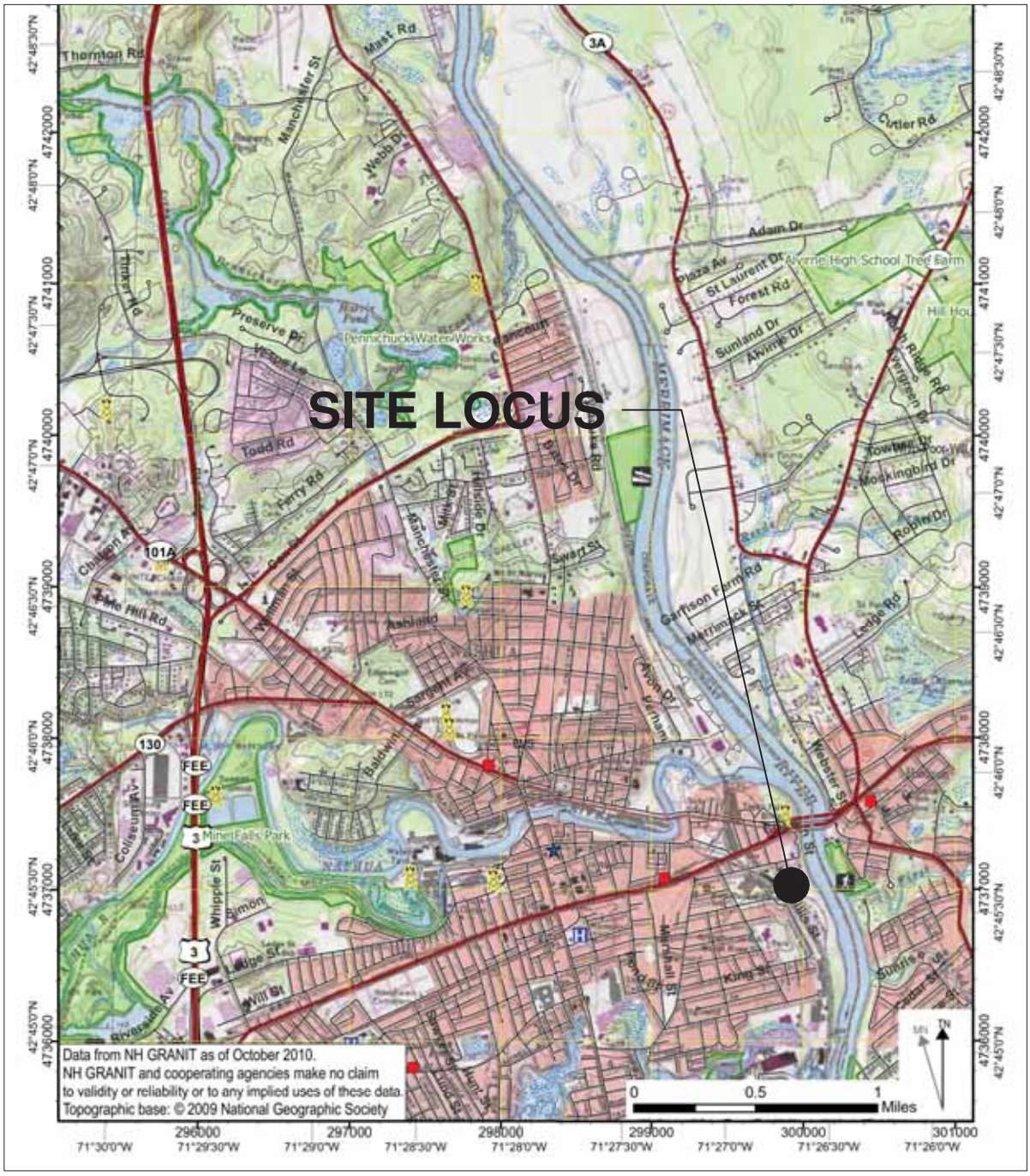
Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.



LOCUS DISPLAYS SITE AT L CROWN STREET NASHUA, NH 03060

GREEN ENVIRONMENTAL

Green Environmental Inc., 120 Longwater Drive, Norwell, MA 02061
Telephone (617) 479-0550 Fax (617) 479-5150
www.GreenEnvironmental.com
Engineering and Environmental Services

SITE LOCUS

FIGURE: N/A
SCALE: N/A
PROJECT NO.: 13025
APPROVED BY: N/A
CHECKED BY: N/A
DRAWN BY: N/A

In NOI section 3 “Contaminant Information,” when the number of samples was noted with an asterisk, only the most recent water sampling date was utilized. Concentrations of Total Metals and Elevated TSS were identified as part of the pre-characterization of groundwater. An additional sample was collected after groundwater was allowed to settle in a container to evaluate the effects this would have on total metals concentrations and TSS. As anticipated, the concentrations decreased. Based on this information, the proposed means to manage groundwater effluent through sedimentation basin and hay bale/silt fence filtration should provide sufficient reduction in concentrations prior to the receiving water body. Effluent sampling will occur in accordance with the NPDES permit requirements to monitor for the compounds identified during pre-characterization.

Laboratory analytical data packages for the sampling are attached to this NOI.

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT: Green Environmental, Inc.
Project: 40 Crown St. Nashua
Lab Order: 1306055
Date Received: 6/26/2013

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1306055-01A	Ground Water	6/26/2013	12:15 PM
1306055-01B	Ground Water	6/26/2013	12:15 PM
1306055-01C	Ground Water	6/26/2013	12:15 PM
1306055-01D	Ground Water	6/26/2013	12:15 PM
1306055-01E	Ground Water	6/26/2013	12:15 PM
1306055-01F	Ground Water	6/26/2013	12:15 PM
1306055-01G	Ground Water	6/26/2013	12:15 PM
1306055-01H	Ground Water	6/26/2013	12:15 PM

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count

Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT: Green Environmental, Inc.
Project: 40 Crown St. Nashua

Lab Order: 1306055

Lab ID: 1306055-01
Collection Date: 6/26/2013 12:15:00 PM
Collection Time:
Client Sample ID: Ground Water
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		**SW6010B**				Analyst: **AL**
Cadmium	ND	4.00		µg/L	1	6/27/2013 5:26:02 PM
Chromium	665	10.0		µg/L	1	6/27/2013 5:26:02 PM
Copper	150	25.0		µg/L	1	6/27/2013 5:26:02 PM
Iron	71,200	100		µg/L	1	6/27/2013 5:26:02 PM
Lead	157	12.5		µg/L	1	6/27/2013 5:26:02 PM
Nickel	82.1	40.0		µg/L	1	6/27/2013 5:26:02 PM
Silver	ND	7.00		µg/L	1	6/27/2013 5:26:02 PM
Zinc	358	20.0		µg/L	1	6/27/2013 5:26:02 PM
ARSENIC, TOTAL		**SW7060A**				Analyst: **REB**
Arsenic	65	8.0		µg/L	2	7/1/2013 11:22:10 AM
MERCURY, TOTAL		**SW7470A**				Analyst: **AL**
Mercury	0.462	0.200		µg/L	1	7/1/2013 6:14:43 PM
ANTIMONY, TOTAL		**SW7041**				Analyst: **REB**
Antimony	8.5	5.0		µg/L	1	6/28/2013 11:00:32 AM
SELENIUM, TOTAL		**SW7740**				Analyst: **REB**
Selenium	ND	5.0	PS	µg/L	1	6/28/2013 12:22:04 PM

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT: Green Environmental, Inc.
Project: 40 Crown St. Nashua

Lab Order: 1306055

Lab ID: 1306055-01
Collection Date: 6/26/2013 12:15:00 PM
Collection Time:
Client Sample ID: Ground Water
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
OIL & GREASE, TPH (NON-POLAR MATERIAL)		**E1664**				Analyst: **AL**
SGT-Hexane Extractable Material	ND	5.0		mg/L	1	6/28/2013
ION CHROMATOGRAPHY		**E300**				Analyst: **REB**
Chloride	62	5.0		mg/L	10	7/1/2013 10:28:07 AM
PHENOL, TOTAL		**E420.1**				Analyst: **AL**
Phenolics, Total Recoverable	ND	0.050		mg/L	1	6/27/2013
TOTAL SUSPENDED SOLIDS		**SM2540 D**				Analyst: **DD**
Suspended Solids (Residue, Non-Filterable)	2,000	4.0		mg/L	1	7/1/2013
HEXAVALENT CHROMIUM		**M3500-CR**				Analyst: **AL**
Chromium, Hexavalent	ND	0.010		mg/L	1	6/27/2013 9:55:00 AM
CHLORINE, TOTAL RESIDUAL (MODIFIED)		**M4500-CL G**				Analyst: **AL**
Chlorine, Total Residual	ND	0.10		mg/L	1	6/26/2013 3:30:00 PM
CYANIDE, TOTAL		**SM4500-CN C,E**				Analyst: **AL**
Cyanide	ND	0.010		mg/L	1	6/27/2013

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	Ground Water
Lab Order:	1306055	**Collection Date:**	6/26/2013 12:15:00 PM
Project:	40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1306055-01H		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8260B VOLATILES BY GC/MS		**SW8260B**				Analyst: **DH**
1,4-Dioxane	ND	50		µg/L	1	7/1/2013 1:48:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
Chloromethane	ND	3.0		µg/L	1	7/1/2013 1:48:00 PM
Vinyl chloride	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Chloroethane	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
Bromomethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Diethyl ether	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
Acetone	ND	10		µg/L	1	7/1/2013 1:48:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/1/2013 1:48:00 PM
Carbon disulfide	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Methylene chloride	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Tertiary Butanol	ND	20		µg/L	1	7/1/2013 1:48:00 PM
2-Butanone	ND	10		µg/L	1	7/1/2013 1:48:00 PM
Diisopropyl ether	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Chloroform	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Tetrahydrofuran	ND	10		µg/L	1	7/1/2013 1:48:00 PM
Bromochloromethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Benzene	ND	1.0		µg/L	1	7/1/2013 1:48:00 PM
Trichloroethene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Dibromomethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/1/2013 1:48:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/1/2013 1:48:00 PM
Toluene	3.1	2.0		µg/L	1	7/1/2013 1:48:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/1/2013 1:48:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	Ground Water
Lab Order:	1306055	**Collection Date:**	6/26/2013 12:15:00 PM
Project:	40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1306055-01H		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,2-Dibromoethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
2-Hexanone	ND	10		µg/L	1	7/1/2013 1:48:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Chlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Ethylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
m,p-Xylene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
o-Xylene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Styrene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Bromoform	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Bromobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Naphthalene	ND	5.0		µg/L	1	7/1/2013 1:48:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
1,3,5-Trichlorobenzene	ND	2.0		µg/L	1	7/1/2013 1:48:00 PM
Surr: Dibromofluoromethane	97.9	68-122		%REC	1	7/1/2013 1:48:00 PM
Surr: 1,2-Dichloroethane-d4	101	74-124		%REC	1	7/1/2013 1:48:00 PM
Surr: Toluene-d8	100	69-121		%REC	1	7/1/2013 1:48:00 PM
Surr: 4-Bromofluorobenzene	101	62-129		%REC	1	7/1/2013 1:48:00 PM

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	Ground Water
Lab Order:	1306055	**Collection Date:**	6/26/2013 12:15:00 PM
Project:	40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1306055-01E		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8270C SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **KAM**
N-Nitrosodimethylamine	ND	23		µg/L	1	6/28/2013 1:00:00 PM
Phenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Bis(2-chloroethyl)ether	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2-Chlorophenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
1,3-Dichlorobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
1,4-Dichlorobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzyl alcohol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
2-Methylphenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
1,2-Dichlorobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Bis(2-chloroisopropyl)ether	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Methylphenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
N-Nitrosodi-n-propylamine	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Hexachloroethane	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Nitrobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Isophorone	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,4-Dimethylphenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzoic acid	ND	23		µg/L	1	6/28/2013 1:00:00 PM
2-Nitrophenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Bis(2-chloroethoxy)methane	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,4-Dichlorophenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
1,2,4-Trichlorobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Naphthalene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Chloroaniline	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Hexachlorobutadiene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Chloro-3-methylphenol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
2-Methylnaphthalene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Hexachlorocyclopentadiene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,4,6-Trichlorophenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,4,5-Trichlorophenol	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2-Chloronaphthalene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2-Nitroaniline	ND	23		µg/L	1	6/28/2013 1:00:00 PM
Dimethyl phthalate	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,6-Dinitrotoluene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Acenaphthylene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
3-Nitroaniline	ND	23		µg/L	1	6/28/2013 1:00:00 PM
4-Nitrophenol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
2,4-Dinitrophenol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
Acenaphthene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
2,4-Dinitrotoluene	ND	11		µg/L	1	6/28/2013 1:00:00 PM

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	Ground Water
Lab Order:	1306055	**Collection Date:**	6/26/2013 12:15:00 PM
Project:	40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1306055-01E		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dibenzofuran	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Diethyl phthalate	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Chlorophenyl phenyl ether	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Fluorene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Nitroaniline	ND	23		µg/L	1	6/28/2013 1:00:00 PM
4,6-Dinitro-2-methylphenol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
N-Nitrosodiphenylamine	ND	11		µg/L	1	6/28/2013 1:00:00 PM
1,2-Diphenylhydrazine (as Azobenzene)	ND	11		µg/L	1	6/28/2013 1:00:00 PM
4-Bromophenyl phenyl ether	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Hexachlorobenzene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Pentachlorophenol	ND	23		µg/L	1	6/28/2013 1:00:00 PM
Phenanthrene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Anthracene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Carbazole	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Di-n-butyl phthalate	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Fluoranthene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzidine	ND	23		µg/L	1	6/28/2013 1:00:00 PM
Pyrene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Butyl benzyl phthalate	120	11		µg/L	1	6/28/2013 1:00:00 PM
Bis(2-ethylhexyl)phthalate	76	11		µg/L	1	6/28/2013 1:00:00 PM
3,3´-Dichlorobenzidine	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benz(a)anthracene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Chrysene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Di-n-octyl phthalate	14	11		µg/L	1	6/28/2013 1:00:00 PM
Benzo(b)fluoranthene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzo(k)fluoranthene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzo(a)pyrene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Dibenz(a,h)anthracene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Indeno(1,2,3-cd)pyrene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Benzo(g,h,i)perylene	ND	11		µg/L	1	6/28/2013 1:00:00 PM
Surr: 2-Fluorophenol	55.7	20-79		%REC	1	6/28/2013 1:00:00 PM
Surr: Phenol-d5	34.7	15-54		%REC	1	6/28/2013 1:00:00 PM
Surr: Nitrobenzene-d5	65.9	42-117		%REC	1	6/28/2013 1:00:00 PM
Surr: 2-Fluorobiphenyl	73.3	43-107		%REC	1	6/28/2013 1:00:00 PM
Surr: 2,4,6-Tribromophenol	77.8	52-129		%REC	1	6/28/2013 1:00:00 PM
Surr: 4-Terphenyl-d14	80.6	37-125		%REC	1	6/28/2013 1:00:00 PM

AMRO Environmental Laboratories Corp.

Date: *03-Jul-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	Ground Water
Lab Order:	1306055	**Collection Date:**	6/26/2013 12:15:00 PM
Project:	40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1306055-01F		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCBS BY EPA8082		**SW8082**				Analyst: **KAM**
Aroclor 1016	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1221	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1232	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1242	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1248	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1254	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Aroclor 1260	ND	0.22		µg/L	1	7/2/2013 7:39:00 PM
Surr: Decachlorobiphenyl	59.8	16-135		%REC	1	7/2/2013 7:39:00 PM
Surr: Tetrachloro-m-xylene	77.7	25-128		%REC	1	7/2/2013 7:39:00 PM

AMRO Environmental Laboratories Corp.

Date: *24-Jul-13*

CLIENT: Green Environmental, Inc.
Project: 13025 40 Crown St. Nashua
Lab Order: 1307034
Date Received: 7/17/2013

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1307034-01A	7-17-13 Water-1	7/17/2013	12:00 AM
1307034-01B	7-17-13 Water-1	7/17/2013	12:00 AM

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count

Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: *24-Jul-13*

CLIENT: Green Environmental, Inc.
Project: 13025 40 Crown St. Nashua

Lab Order: 1307034

Lab ID: 1307034-01
Collection Date: 7/17/2013
Collection Time:
Client Sample ID: 7-17-13 Water-1
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		**SW6010B**				Analyst: **AL**
Chromium	12.5	10.0		µg/L	1	7/22/2013 4:20:32 PM
Copper	ND	25.0		µg/L	1	7/22/2013 4:20:32 PM
Iron	3,100	100		µg/L	1	7/22/2013 4:20:32 PM
Lead	ND	12.5		µg/L	1	7/22/2013 4:20:32 PM
Nickel	ND	40.0		µg/L	1	7/22/2013 4:20:32 PM
Zinc	40.8	20.0		µg/L	1	7/22/2013 4:20:32 PM
ARSENIC, TOTAL		**SW7060A**				Analyst: **REB**
Arsenic	15	4.0		µg/L	1	7/22/2013 11:27:16 AM
ION CHROMATOGRAPHY		**E300**				Analyst: **REB**
Chloride	51	5.0		mg/L	10	7/18/2013
MERCURY, TOTAL		**SW7470A**				Analyst: **AL**
Mercury	ND	0.200		µg/L	1	7/17/2013 4:06:31 PM
TOTAL SUSPENDED SOLIDS		**SM2540 D**				Analyst: **DD**
Suspended Solids (Residue, Non-Filterable)	1,500	4.0		mg/L	1	7/23/2013

AMRO Environmental Laboratories Corp.

Date: *20-Aug-13*

CLIENT: Green Environmental, Inc.
Project: 13025 40 Crown St. Nashua
Lab Order: 1308020
Date Received: 8/13/2013

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1308020-01A	8/13/13 Water-1	8/13/2013	9:00 AM
1308020-02A	08/13/13 Water-2	8/13/2013	9:00 AM

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count

Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: *20-Aug-13*

CLIENT: Green Environmental, Inc.
Project: 13025 40 Crown St. Nashua
Lab Order: 1308020

Lab ID: 1308020-01
Collection Date: 8/13/2013 9:00:00 AM
Collection Time:
Client Sample ID: 8/13/13 Water-1
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ION CHROMATOGRAPHY		**E300**				Analyst: **REB**
Chloride	130	2.5		mg/L	5	8/14/2013 10:36:36 AM
TOTAL SUSPENDED SOLIDS		**SM2540 D**				Analyst: **DD**
Suspended Solids (Residue, Non-Filterable)	24	4.0		mg/L	1	8/14/2013

Lab ID: 1308020-02
Collection Date: 8/13/2013 9:00:00 AM
Collection Time:
Client Sample ID: 08/13/13 Water-2
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		**SW6010B**				Analyst: **AL**
Chromium	ND	10.0		µg/L	1	8/16/2013 12:02:43 AM
Copper	ND	25.0		µg/L	1	8/16/2013 12:02:43 AM
Iron	1,600	100		µg/L	1	8/16/2013 12:02:43 AM
Lead	ND	12.5		µg/L	1	8/16/2013 12:02:43 AM
Nickel	ND	40.0		µg/L	1	8/16/2013 12:02:43 AM
Zinc	51.4	20.0		µg/L	1	8/16/2013 12:02:43 AM
ARSENIC, TOTAL		**SW7060A**				Analyst: **REB**
Arsenic	21	8.0		µg/L	2	8/19/2013 11:31:00 AM
MERCURY, TOTAL		**SW7470A**				Analyst: **AL**
Mercury	ND	0.200		µg/L	1	8/16/2013 3:32:47 PM

AMRO Environmental Laboratories Corp.

Date: *29-Aug-13*

CLIENT: Green Environmental, Inc.
Project: #13025 40 Crown St. Nashua
Lab Order: 1308070
Date Received: 8/27/2013

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date	Collection Time
1308070-01A	8/27/13 GW	8/27/2013	12:00 AM
1308070-01B	8/27/13 GW	8/27/2013	12:00 AM

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Micro Data Qualifiers

TNTC	Too numerous to count

Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

AMRO Environmental Laboratories Corp.

Date: *29-Aug-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	8/27/13 GW
Lab Order:	1308070	**Collection Date:**	8/27/2013
Project:	#13025 40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1308070-01B		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ARSENIC, TOTAL		**SW7060A**				Analyst: **REB**
Arsenic	ND	4.0		µg/L	1	8/28/2013 12:37:17 PM

AMRO Environmental Laboratories Corp.

Date: *29-Aug-13*

CLIENT:	Green Environmental, Inc.	**Client Sample ID:**	8/27/13 GW
Lab Order:	1308070	**Collection Date:**	8/27/2013
Project:	#13025 40 Crown St. Nashua	**Matrix:**	GROUNDWATER
Lab ID:	1308070-01A		

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 8270C SEMIVOLATILE ORGANICS, BASE/NE SW8270C						Analyst: **KAM**
Dimethyl phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Diethyl phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Butyl benzyl phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	8/28/2013 2:37:00 PM
Surr: Nitrobenzene-d5	82.2	42-117		%REC	1	8/28/2013 2:37:00 PM
Surr: 2-Fluorobiphenyl	78.3	43-107		%REC	1	8/28/2013 2:37:00 PM
Surr: 4-Terphenyl-d14	89.5	37-125		%REC	1	8/28/2013 2:37:00 PM

Notes:
1. See the Consolidated Assessment and Listing Methodology (CALM) for definitions and details regarding how this list was developed.
2. This list is sorted by Waterbody Type and then Assessment Unit ID.
3. TMDL stands for Total Maximum Daily Load study. TMDL schedules are subject to change as funding and resources become available.
4. Waters presented on this list may also be threatened or impaired by other pollutants or nonpollutants that do not require a TMDL.

Assessment Unit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threat	TMDL Priority	TMDL Schedule	Source Name
NHRIV700060905-19	Baboosic Brook, CWF	MERRIMACK	10.276	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P	N	LOW	2019	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2017	Source Unknown
NHRIV700060906-01	Beaver Brook	MONT VERNON	13.002	MILES	Aquatic Life	Aluminum	5-M	N	LOW	2023	Source Unknown
						pH	5-M	N	LOW	2021	Source Unknown
NHRIV700060906-04	Hartshorn Brook	MONT VERNON	7.171	MILES	Aquatic Life	pH	5-M	N	LOW	2023	Source Unknown
NHRIV700060906-08	Great Brook	MILFORD	9.623	MILES	Aquatic Life	pH	5-M	N	LOW	2021	Source Unknown
NHRIV700060906-12	Ox Brook	MILFORD	4.717	MILES	Aquatic Life	pH	5-M	N	LOW	2021	Source Unknown
NHRIV700060906-18	Souhegan River, W/CWF	MERRIMACK	12.236	MILES	Aquatic Life	Aluminum	5-M	N	LOW	2023	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2019	Source Unknown
						pH	5-M	N	LOW	2023	Source Unknown
NHRIV700060906-20	UNNAMED BROOK - FROM YORK POND TO SOUHEGAN RIVER	MERRIMACK	2.231	MILES	Aquatic Life	Dissolved oxygen	5-M	N	LOW	2019	Source Unknown
						pH	5-M	N	LOW	2017	Source Unknown
NHRIV700061001-02	Witches Brook, CLS-A,	HOLLIS	11.806	MILES	Aquatic Life	Oxygen, Dissolved	5-P	N	LOW	2019	Source Unknown
						pH	5-P	N	LOW	2017	Source Unknown
NHRIV700061001-05	Pennichuck Brook	HOLLIS	1.511	MILES	Aquatic Life	pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061001-06	Muddy Brook	NASHUA	4.805	MILES	Aquatic Life	Oxygen, Dissolved	5-M	N	LOW	2019	Source Unknown
						pH	5-M	N	LOW	2021	Source Unknown
NHRIV700061001-07	Pennichuck Brook,	MERRIMACK	3.642	MILES	Aquatic Life	Dissolved oxygen	5-M	N	LOW	2019	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2019	Source Unknown
						pH	5-P	N	LOW	2019	Source Unknown
NHRIV700061001-09	Unnamed Brook to Pennichuck Brook (Boire Fields)	NASHUA	0.986	MILES	Aquatic Life	Oxygen, Dissolved	5-P	N	LOW	2021	Source Unknown
						pH	5-M	N	LOW	2021	Source Unknown
NHRIV700061001-12	UNNAMED BROOK	NASHUA	0.286	MILES	Aquatic Life	Iron	5-M	N	LOW	2023	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2023	Source Unknown
NHRIV700061002-04	Nesenkeag Brook	LONDONDERRY	0.482	MILES	Aquatic Life	Oxygen, Dissolved	5-P	N	LOW	2016	Source Unknown
						pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061002-05	Nesenkeag Brook, CWF	LITCHFIELD	4.031	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-M		LOW	2017	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2019	Source Unknown
						pH	5-M	N	LOW	2016	Source Unknown
NHRIV700061002-14	MERRIMACK RIVER	NASHUA	3.714	MILES	Aquatic Life	pH	5-M	N	LOW	2023	Source Unknown

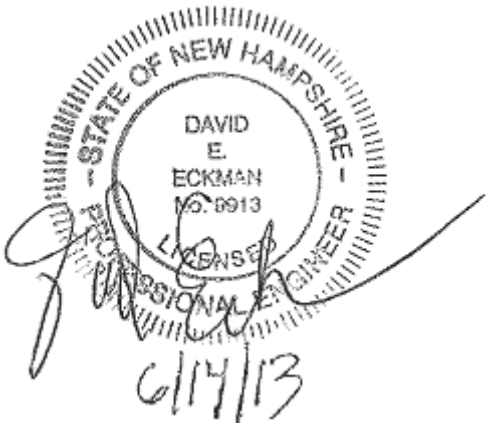
Notes:
1. See the Consolidated Assessment and Listing Methodology (CALM) for definitions and details regarding how this list was developed.
2. This list is sorted by Waterbody Type and then Assessment Unit ID.
3. TMDL stands for Total Maximum Daily Load study. TMDL schedules are subject to change as funding and resources become available.
4. Waters presented on this list may also be threatened or impaired by other pollutants or nonpollutants that do not require a TMDL.

Assessment Unit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threat	TMDL Priority	TMDL Schedule	Source Name
NHRIV700061203-11	Beaver Brook	DERRY	7.534	MILES	Aquatic Life	Chloride	5-P	N	LOW	2021	Impervious Surface/Parking Lot Runoff
NHRIV700061203-16	BEAVER BROOK	LONDONDERRY	5.406	MILES	Aquatic Life	pH	5-M	N	LOW	2017	Landfills
NHRIV700061203-20	Beaver Brook, CWF	LONDONDERRY	12.402	MILES	Aquatic Life	pH	5-M	N	LOW	2016	Source Unknown
NHRIV700061203-21	Beaver Brook, CWF	WINDHAM	9.808	MILES	Aquatic Life	pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061203-22	Beaver Brook, CWF	PELHAM	10.508	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P	N	LOW	2017	Source Unknown
NHRIV700061203-25	HOWARD BROOK	HUDSON	0.645	MILES	Aquatic Life	pH	5-M	N	LOW	2021	Source Unknown
					Primary Contact Recreation	ESCHERICHIA COLI	5-P		LOW	2025	Source Unknown
NHRIV700061203-27	UNNAMED BROOK	CHESTER	2.244	MILES	Aquatic Life	PH	5-M		LOW	2025	Source Unknown
NHRIV700061203-28	UNNAMED BROOK	CHESTER	0.109	MILES	Aquatic Life	PH	5-P		LOW	2025	Source Unknown
NHRIV700061203-35	UNNAMED BROOK	HUDSON	0.167	MILES	Aquatic Life	PH	5-M		LOW	2025	Source Unknown
NHRIV700061203-37	UNNAMED BROOK	HUDSON	0.211	MILES	Aquatic Life	PH	5-M		LOW	2025	Source Unknown
NHRIV700061204-08	UNNAMED BROOK	WINDHAM	0.660	MILES	Aquatic Life	PH	5-M		LOW	2025	Source Unknown
NHRIV700061205-01	Beaver Brook, CWF	PELHAM	1.957	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P	N	LOW	2017	Source Unknown
NHRIV700061205-05	UNNAMED BROOK - TO GUMPAS POND	PELHAM	1.846	MILES	Aquatic Life	pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061206-01	GLOVER BROOK	HUDSON	2.772	MILES	Aquatic Life	pH	5-P	N	LOW	2021	Source Unknown
NHRIV700061206-04	MERRILL BROOK	HUDSON	3.742	MILES	Aquatic Life	pH	5-P	N	LOW	2021	Source Unknown
NHRIV700061206-05	First Brook	HUDSON	0.149	MILES	Aquatic Life	pH	5-M	N	LOW	2021	Source Unknown
NHRIV700061206-10	SECOND BROOK	HUDSON	2.318	MILES	Aquatic Life	pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061206-24	MERRIMACK RIVER	NASHUA	5.151	MILES	Aquatic Life	Aluminum	5-M	N	LOW	2019	Source Unknown
						pH	5-P	N	LOW	2016	Source Unknown
					Primary Contact Recreation	Chlorophyll-a	5-M	N	LOW	2019	Source Unknown
NHRIV700061401-04	Kelly Brook	PLAISTOW	13.482	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-M		LOW	2019	Municipal (Urbanized High Density Area) Source Unknown Unspecified Urban
						Dissolved oxygen	5-M	N	LOW	2019	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2016	Source Unknown
						pH	5-M	N	LOW	2016	Source Unknown
NHRIV700061403-05	Bartlett Brook	DANVILLE	13.025	MILES	Aquatic Life	Dissolved oxygen	5-M	N	LOW	2021	Source Unknown
						Oxygen, Dissolved	5-P	N	LOW	2021	Source Unknown
						pH	5-M	N	LOW	2019	Source Unknown

Notes:
1. See the Consolidated Assessment and Listing Methodology (CALM) for definitions and details regarding how this list was developed.
2. This list is sorted by Waterbody Type and then Assessment Unit ID.
3. TMDL stands for Total Maximum Daily Load study. TMDL schedules are subject to change as funding and resources become available.
4. Waters presented on this list may also be threatened or impaired by other pollutants or nonpollutants that do not require a TMDL.

Assessment Unit ID	Water Name	Primary Town	Water Size	Size Unit	Use Desc	Impairment Name	DES Category	Threat	TMDL Priority	TMDL Schedule	Source Name
NHRIV700061002-14	MERRIMACK RIVER	NASHUA	3.714	MILES	Primary Contact Recreation	Creosote	5-M	N	LOW	2019	Contaminated Groundwater
											Rcra Hazardous Waste Sites
NHRIV700061002-26	NESENKEAG BROOK - UNNAMED BROOK	LONDONDERRY	3.151	MILES	Aquatic Life	Oxygen, Dissolved	5-P	N	LOW	2023	Source Unknown
						pH	5-M	N	LOW	2023	Source Unknown
NHRIV700061101-01	Drew Brook	DERRY	11.270	MILES	Aquatic Life	pH	5-M	N	LOW	2019	Source Unknown
NHRIV700061101-05	Taylor Brook	DERRY	0.330	MILES	Primary Contact Recreation	ESCHERICHIA COLI	5-P	N	LOW	2025	Source Unknown
NHRIV700061102-16	POLICY BROOK - FROM CANOBIE LAKE	SALEM	1.189	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P	N	LOW	2019	Source Unknown
NHRIV700061102-17	POLICY BROOK	SALEM	0.844	MILES	Aquatic Life	Chloride	5-P	N	LOW	2021	Commerical Districts (Shopping/Office
											Highway/Road/Bridge Runoff (Non-construction Related)
											Impervious Surface/Parking Lot Runoff
NHRIV700061102-18	Policy Brook	SALEM	15.592	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P	N	LOW	2019	Municipal (Urbanized High Density Area)
											Source Unknown
											Unspecified Urban
						pH	5-M	N	LOW	2017	Source Unknown
NHRIV700061102-21	Unnamed Trib to Harris	SALEM	2.165	MILES	Aquatic Life	Chloride	5-M	N	LOW	2023	Source Unknown
NHRIV700061203-01	Unnamed Tribs to Hurantis Lake	CHESTER	1.276	MILES	Aquatic Life	pH	5-M	N	LOW	2016	Source Unknown
NHRIV700061203-02	Unnamed Brook from Hurantis Lake to Adams	DERRY	4.062	MILES	Aquatic Life	pH	5-M	N	LOW	2016	Source Unknown
NHRIV700061203-09	BEAVER BROOK	DERRY	15.453	MILES	Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5-P		LOW	2021	Municipal (Urbanized High Density Area)
											Source Unknown
						Chloride	5-M	N	LOW	2021	Commerical Districts (Shopping/Office
											Highway/Road/Bridge Runoff (Non-construction Related)
											Impervious Surface/Parking Lot Runoff
											Municipal (Urbanized High Density Area)
						pH	5-P	N	LOW	2017	Source Unknown
NHRIV700061203-11	Beaver Brook	DERRY	7.534	MILES	Aquatic Life	Chloride	5-P	N	LOW	2021	Commerical Districts (Shopping/Office
											Highway/Road/Bridge Runoff (Non-construction Related)

ECKMAN Engineering, LLC



May 15, 2013

Matt Sweeney
Deloury Construction
46 Lowell Jct. Road
Andover, MA 01810

Re: Dewatering Program
Infrastructure Improvements
At CSO 004 – Storage Tank
Nashua, New Hampshire

Mr. Sweeney:

Attached please find a dewatering plan for construction of CSO-004 Storage Tank for the above referenced project. The dewatering plan was developed using best available information at this time including plan sheet C-03 from the bid and Addendum 1 (record drawing dated 4-75) with borings shown.

The project remains subject to and contractor responsible to abide by all Project, Local, State and Federal requirements, conditions, specifications and practices.

If conditions are encountered that are different from the conditions used to establish this dewatering program the contractor shall contact the engineer prior to continuing work.

If you have any questions, suggestions or require additional information please feel free to contact me.

Very truly yours,

David E. Eckman, PE
Principal Engineer

Roger Appleton, PE
Project Engineer

1.0 – DEWATERING PROGRAM SUMMARY

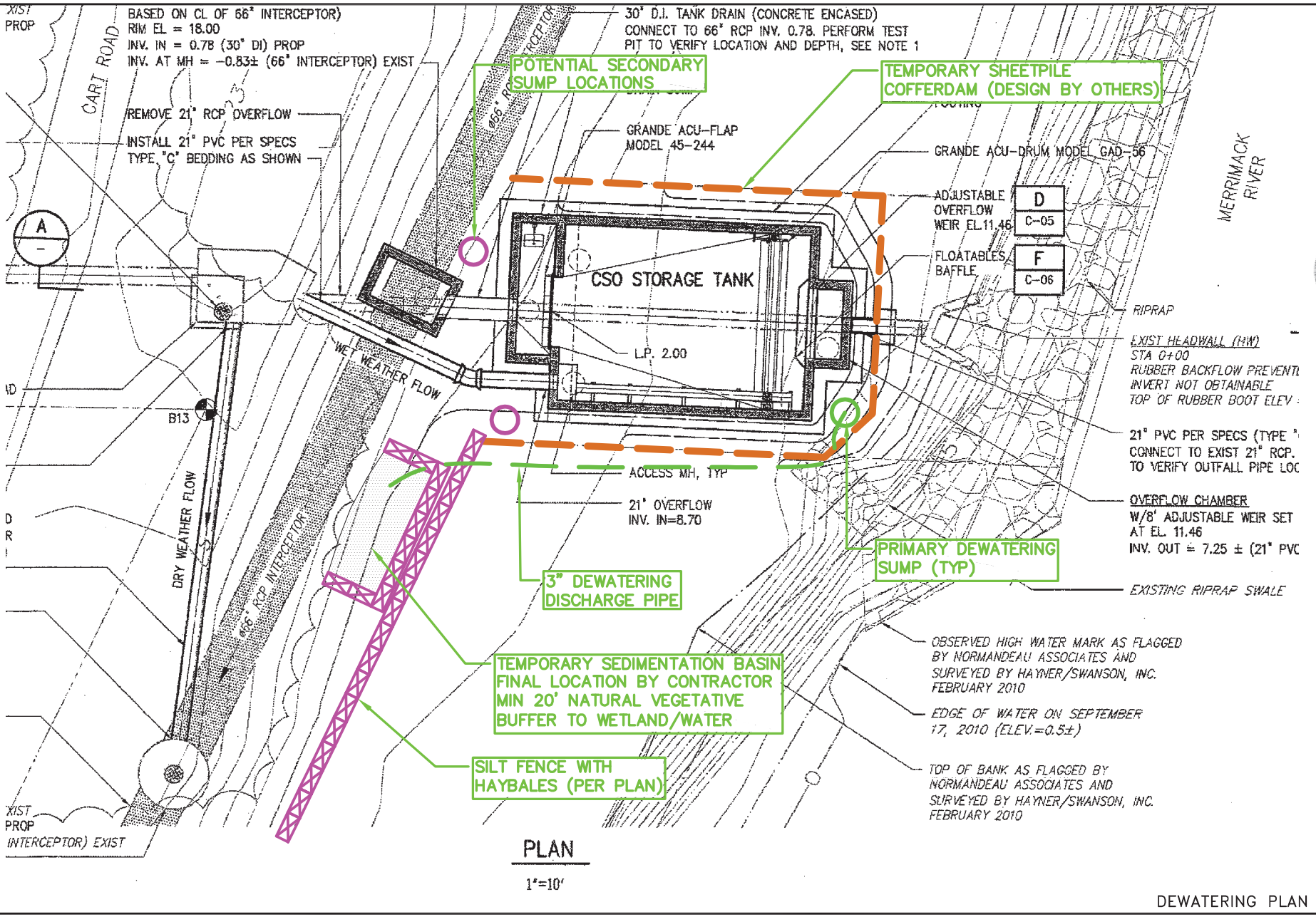
The proposed construction of CSO-004 Storage Tank requires excavation below high water mark of the adjacent Merrimack River. During excavation the contractor will utilize sheetpile cofferdams with dewatering to allow installation of the storage tank in generally dry conditions. Best available information was utilized to develop the dewatering program including subsurface soil information provided on record drawings from 4-75 and included in project information as Addendum 1 (attached). If soil conditions exist that are not consistent with the information provided on Addendum 1, the contractor shall notify this office before commencing construction and placing personnel in the excavation area

The excavation site is located approximately 20' from the observed high water mark for Merrimack River as noted on sheet C-03 of the project plans. Construction of the storage tank will require excavation to an elevation of 0 and –1.5+/- in different areas of the excavation. Information provided on plan sheet C-3 shows an edge of water elevation of 0.5+/- for Merrimack River on September 17, 2010. Soil information obtained from Addendum 1 (attached) shows the soils near bottom of excavation to be firm to hard fine sand with little gravel and some clay or inorganic silt. The boring information suggests soil layers near bottom of excavation that are cemented and have low hydraulic conductivity.

The proposal is to install sheet pile cofferdams at limit of excavation that are driven approximately 8'+/- (sheet pile cofferdam design by others) below bottom of excavation in most areas. The sheet pile cofferdam will help seal the excavation creating a longer flow path through the soil for groundawater to reduce the volume of water necessary to create a safe and dry excavation area. Dewatering will be completed with a 3" submersible electric pump installed in a sump created with 4' section of 18" HDPE pipe with 1' of crushed stone in the bottom. The main dewatering sump will be located at the southeast corner of the excavation. Additional sumps if necessary can be installed at the other corners of the excavation.

Due to the proximity of the excavation immediately adjacent to an existing 66" RCP pipe the potential exists for increased groundwater flowing laterally along the pipe through potentially well draining bedding/backfill around the existing pipe. If additional lateral flows are encountered through the pipe bedding material during excavation the contractor shall contact the engineer before continuing to establish additional dewatering measures including possible additional sumps or temporarily sealing excavation along the pipe.

DEWATERING PLANS & DETAILS



DEWATERING PLAN

No.	Description	Appd	Date
	REVISIONS		

DATE: MAY 15, 2013
SCALE: AS SHOWN
DESIGNED BY: RLA
DRAWN BY: CGC
APPROVED BY: DEE
PROJECT NO: 13-133
FILE NO. 13-133 Dewatering

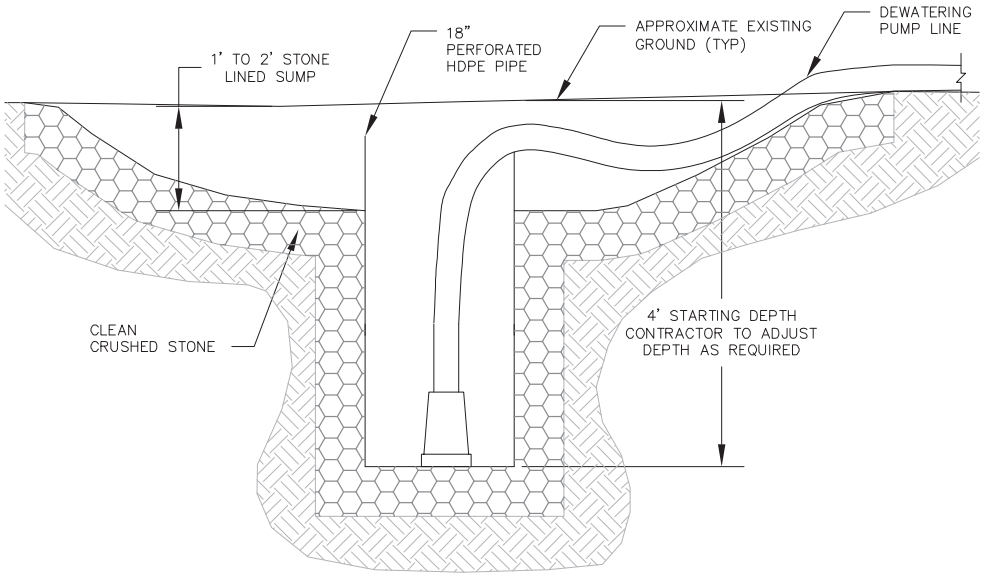
INFRASTRUCTURE IMPROVEMENTS
AT CSO-004 - STORAGE TANK
CITY OF NASHUA
HILLSBOROUGH COUNTY

OWNER:
CITY OF NASHUA

CONTRACTOR:
CORE CONSTRUCTION
46 LOWELL JCT. RD
ANDOVER, MA 01810

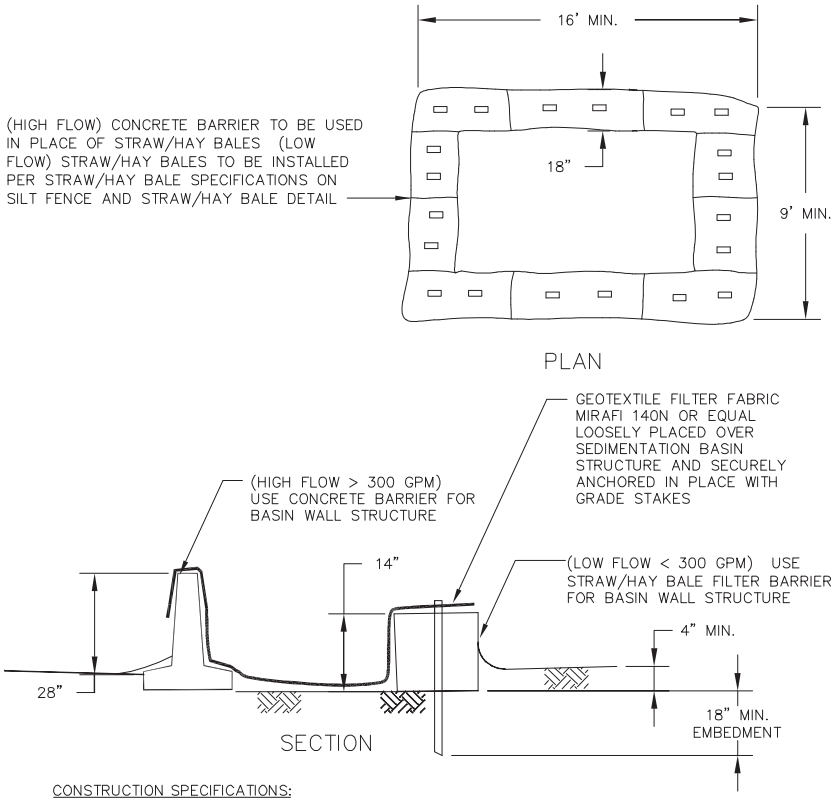
ECKMAN Engineering, LLC
1950 Lafayette Road, PO Box 3035
Portsmouth, New Hampshire 03802
Phone: (603) 433-1364
Fax: (603) 433-2367

D-1



DEWATERING SUMP DETAIL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

1.) SEE STRAW/HAY BALE FILTER SPECIFICATIONS AS PART OF NHDOT EROSION AND SEDIMENT CONTROL BMPS.
2.) ALL TURBID DE-WATERING SHALL BE DIRECTED TO TEMPORARY SEDIMENTATION BASIN.
3.) DE-WATERING SHALL NOT BE DIRECTED TO SURFACE WATERS FROM TEMPORARY DEWATERING BASINS.
4.) ALL DISCHARGE FROM SEDIMENTATION BASIN SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
5.) IF REMOVAL OF SEDIMENT FROM THE BASIN IS REQUIRED AFTER EVERY STORM EVENT, THE SIZE CAN BE INCREASED AT THE DISCRETION OF THE CONTRACTOR (MINIMUM 9' BY 16').
6.) CONSTRUCT ALL COMPONENTS OF SEDIMENTATION BASIN WITHIN THE LIMITS OF WORK SHOWN ON PLAN.
7.) CONTRACTOR SHALL HAVE OPTION TO EXCAVATE AREA TO PROVIDE ADDITIONAL STORAGE FOR TEMPORARY SEDIMENTATION BASIN. AT A MINIMUM BASIN SHALL BE LINED WITH NON-WOVEN, MEDIUM WEIGHT FILTER FABRIC AND HAYBALE BARRIER ALONG DISCHARGE SIDE.

TEMPORARY DE-WATERING BASIN

(NOT TO SCALE)

DEWATERING DETAILS

No.	Description	Appd	Date
	REVISIONS		

DATE: MAY 15, 2013
SCALE: AS SHOWN
DESIGNED BY: RLA
DRAWN BY: CGC
APPROVED BY: DEE
PROJECT NO: 13-133
FILE NO: 13-133 Dewatering

INFRASTRUCTURE IMPROVEMENTS
AT CSO-004 - STORAGE TANK
CITY OF NASHUA
HILLSBOROUGH COUNTY

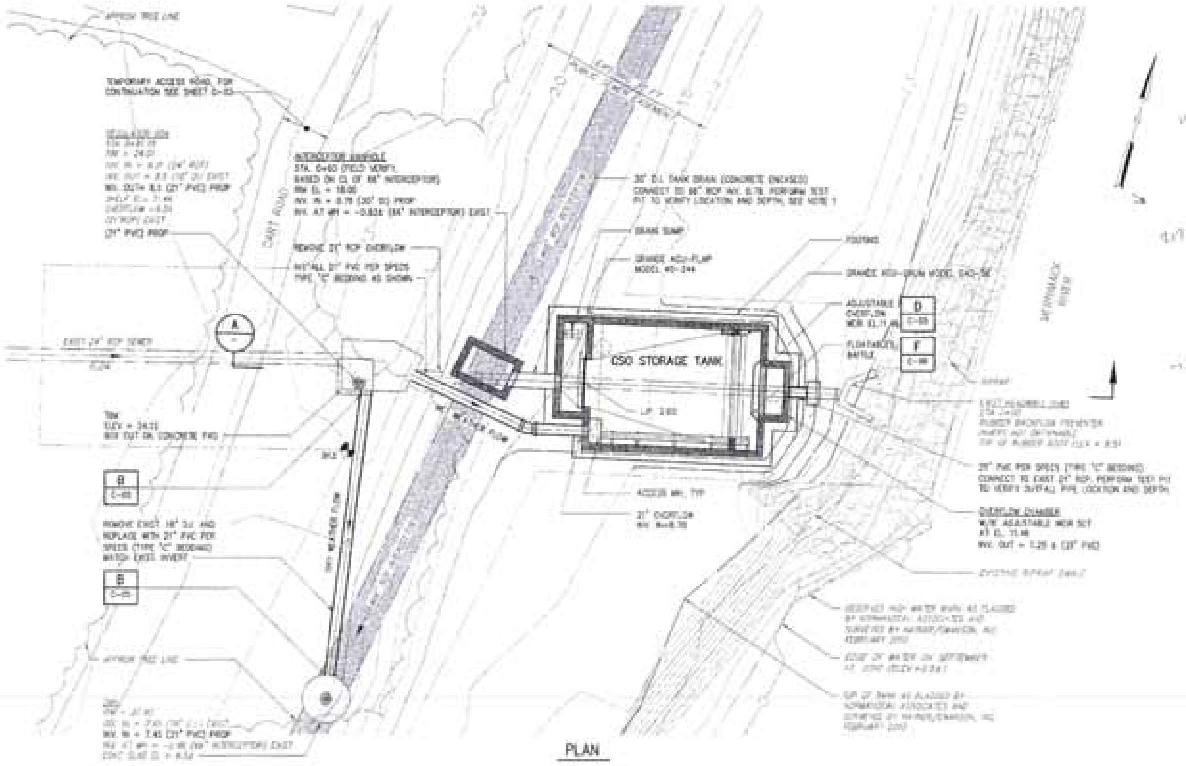
OWNER:
CITY OF NASHUA

CONTRACTOR:
DESIGNATED CONSTRUCTION
46 LOWELL JCT. RD
ANDOVER, MA 01810

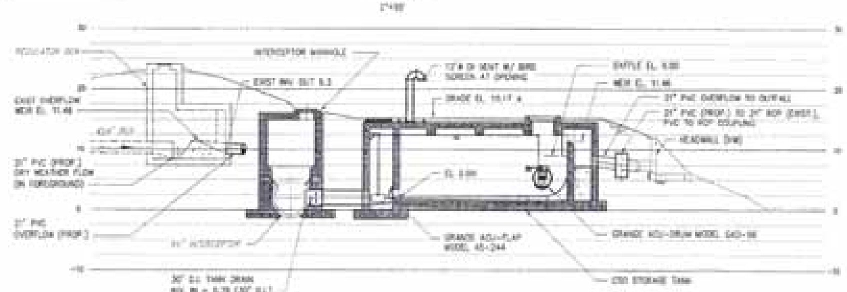
ECKMAN Engineering, LLC
1950 Lafayette Road, PO Box 3035
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

D-2

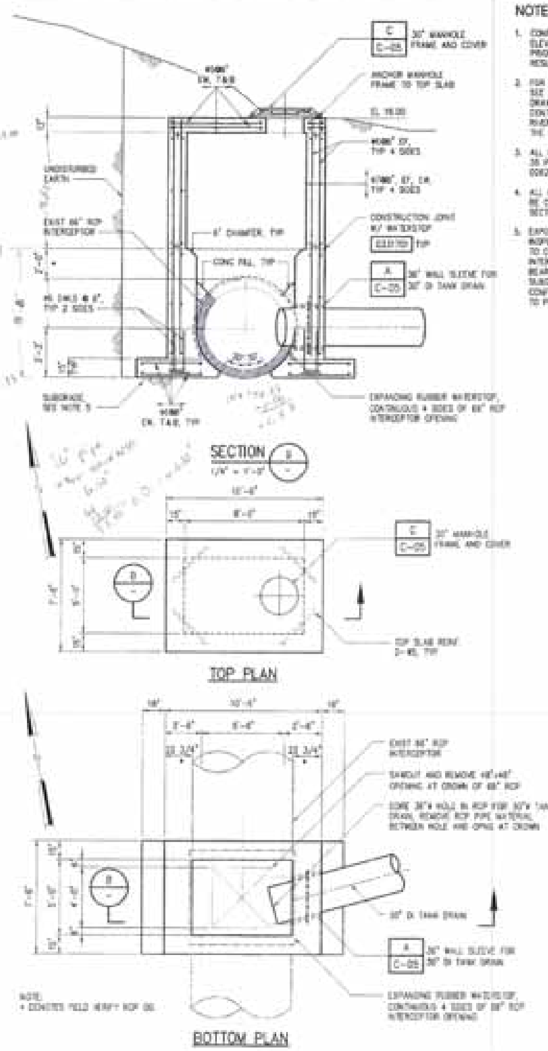
REFERENCE PLANS



PLAN



SECTION A



INTERCEPTOR MANHOLE
CONSTRUCTED OVER EXISTING RCP PIPE

1/4" = 1'-0"

NOTES:

1. CONFIRM INTERCEPTOR LOCATION AND ELEVATION (CROWN) WITH TEST PIT PRIOR TO EXCAVATION AND REPORT RESULTS TO RESIDENT ENGINEER.
2. FOR EXISTING BORING INFORMATION, SEE BORING NO. 13 ON RECORD DRAWING SHEET 3 OF 18 FROM CONTRACT 1 NORTH MERRIMACK RIVER INTERCEPTOR 1 AVAILABLE AT THE NASHUA DPW.
3. ALL PVC PIPE SHALL BE CLASS SDR 35 PER SPECIFICATION SECTION 02622.
4. ALL DUCTILE IRON (DI) PIPE SHALL BE CLASS 52 PER SPECIFICATION SECTION 02616.
5. EXPOSED SUBGRADE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE PROPOSED INTERCEPTOR MANHOLE. DESIGN BEARING CAPACITY OF THE EXISTING SUBGRADE IS 3.0 KSF AND SHALL BE CONFIRMED BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

REV.	DATE	ISSUED FOR	BY
1	12-05-2012	BID SET	FJA

DESIGNED C.M.B.
DRAWN C.C.P.
CHECKED D.S.H.
PROJ.ENGR. F.J.A.

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

BRUCE W. PIERSTORFF, PE NO. 03204

HAZEN AND SAWYER
Environmental Engineers & Scientists
24 Federal Street, 5th Floor
Boston, Massachusetts 02110

CITY OF NASHUA
NEW HAMPSHIRE

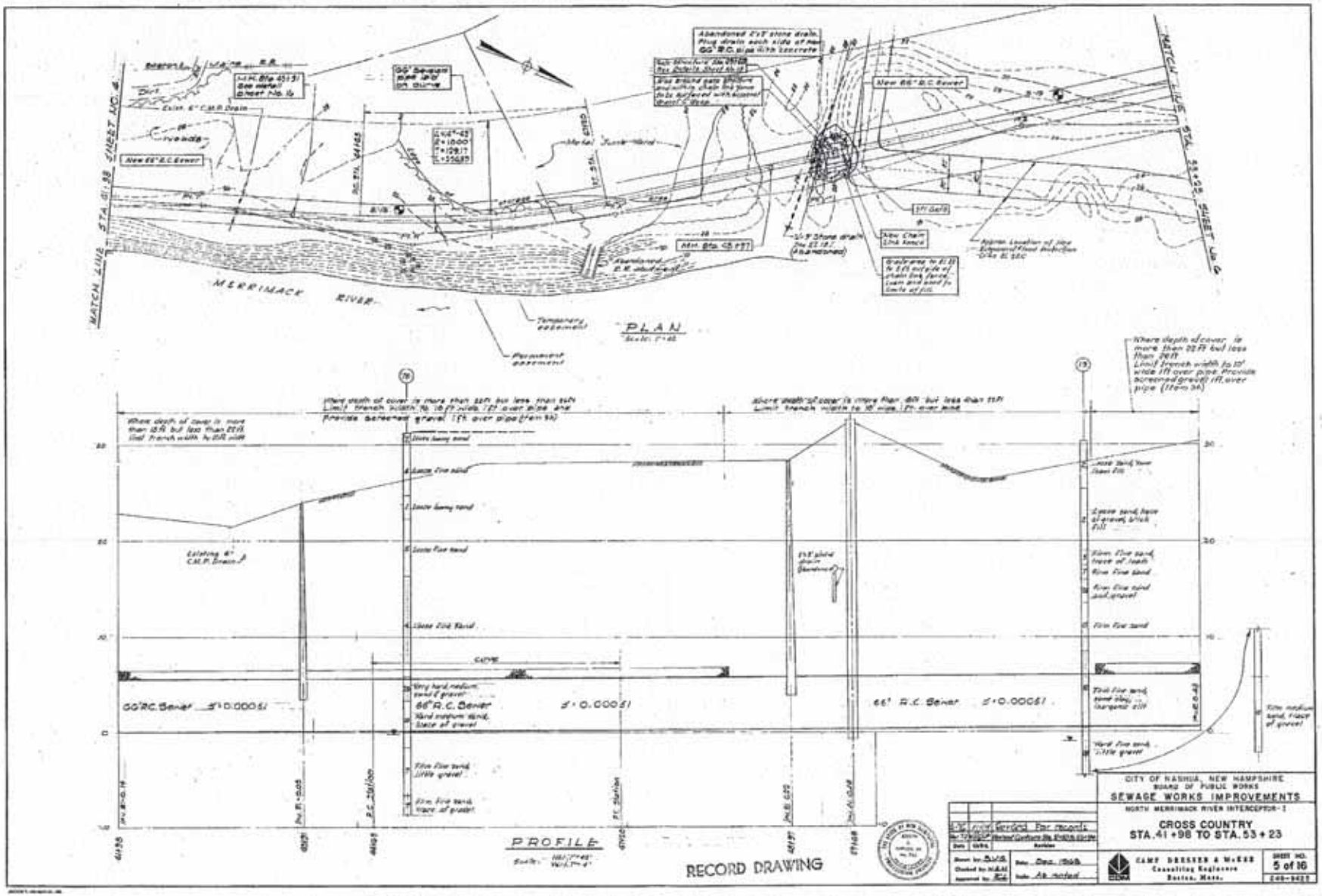
INFRASTRUCTURE IMPROVEMENTS
AT CSO 004 - STORAGE TANK

CIVIL

SEWER IMPROVEMENTS
PLAN AND PROFILE

DATE: DECEMBER 2012
PROJECT NUMBER: 90006-009
DRAWING NUMBER: C-03

BID SET



S-03

Addendum 1

Matthew Head

From: Andrews, Jeff <Jeffrey.Andrews@des.nh.gov>
Sent: Friday, August 09, 2013 11:24 AM
To: Matthew Head
Subject: RE: Project in Nashua NH

Hi Matthew, the 7Q10 for the Nashua River in Nashua is 784 cfs. The dilution factor equation is on page 5 of 22 of Appendix V of the RGP:

DF = [(Qd + Qs)/Qd] x 0.9 = [(0.32 + 784)/0.32] x 0.9 = 2206

Please call me if you have any questions.

Thanks, Jeff

Jeffrey G. Andrews, P.E.
Sanitary Engineer
Wastewater Engineering Bureau
NH Department of Environmental Services
Tel: (603) 271-2984
Fax: (603) 271-4128
E-mail: Jeff.Andrews@des.nh.gov

-----Original Message-----
From: Matthew Head [mailto:mhead@greenenvironmental.com]
Sent: Friday, August 09, 2013 8:11 AM
To: Andrews, Jeff
Cc: Rob Leventry
Subject: Project in Nashua NH

Hello,

This is Mathew Head from Green Environmental. I am currently working on a NPDES RGP for a project in Nashua, NH at long: -71.4453 lat: 42.7611. Discharge from the project will ultimately be to the Merrimack River. The NOI for the RGP refers us to contact NHDES for the 7Q10 and Dilution Factor and I was wondering if you could be of help. Our estimated discharge is 210,000 GPD or approximately .32 cfs.

Thank You,

Mathew Head

In NOI section 3 “Contaminant Information,” when the number of samples was noted with an asterisk, only the most recent water sampling date was utilized. Concentrations of Total Metals and Elevated TSS were identified as part of the pre-characterization of groundwater. An additional sample was collected after groundwater was allowed to settle in a container to evaluate the effects this would have on total metals concentrations and TSS. As anticipated, the concentrations decreased. Based on this information, the proposed means to manage groundwater effluent through sedimentation basin and hay bale/silt fence filtration should provide sufficient reduction in concentrations prior to the receiving water body. Effluent sampling will occur in accordance with the NPDES permit requirements to monitor for the compounds identified during pre-characterization.

Laboratory analytical data packages for the sampling are attached to this NOI.