

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

MA 6910313

**I. General site information.** Please provide the following information about the site:

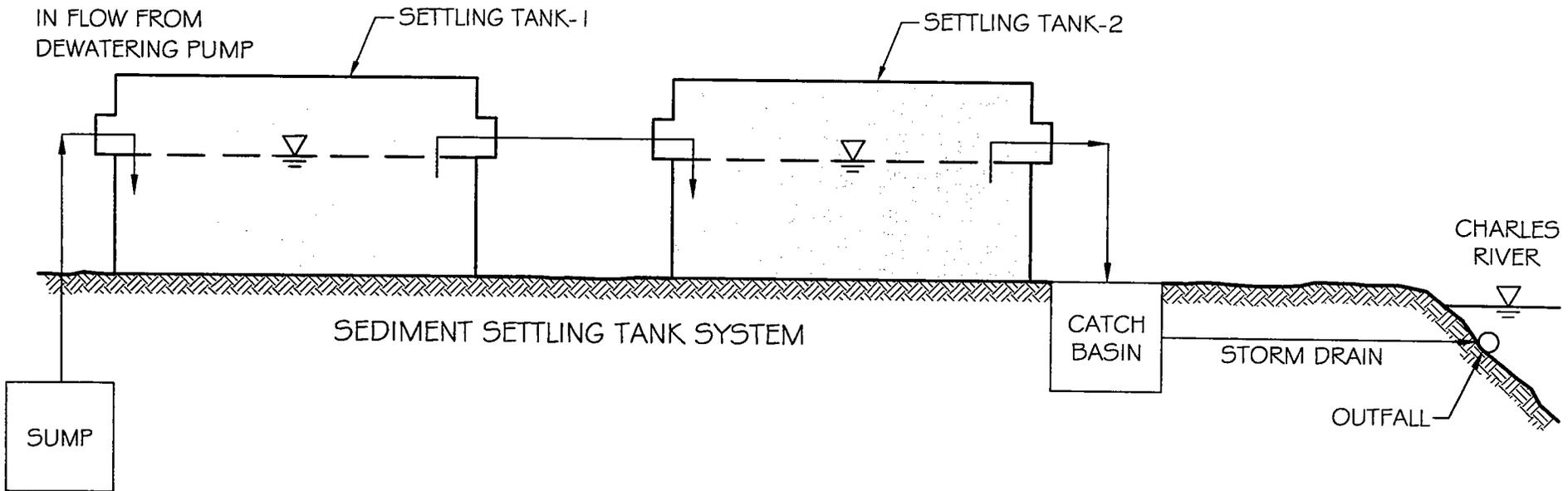
a) Name of facility/site: Newton North High School		Facility/site address: 360 Lowell Avenue Newtonville, Ma 02460	
Location of facility/site: longitude: 71.12    latitude: 42.20	Facility SIC code(s):	Street: 360 Lowell Avenue	
b) Name of facility/site owner: City Of Newton-Public Building Dept.		Town: Newtonville	
Email address of owner: nparnell@newtonma.gov		State: MA	Zip: 02460
Telephone no. of facility/site owner: (617) 796-1600		County: Norfolk	
Fax no. of facility/site owner: (617) 796-1601		Owner is (check one): 1. Federal _____ 2. State/Tribal _____	
Address of owner (if different from site):		3. Private _____ 4. other, if so, describe: City of Newton	
Street: 52 Elliot Street			
Town: Newton	State: MA	Zip: 02459	County: Norfolk
c) Legal name of operator: City of Newton - Public Buildings Department		Operator telephone no: (617) 796-1600	
		Operator fax no.: (617) 796-1601	Operator email: nparnell@newtonma.gov
Operator contact name and title: A. Nicholas Parnell, AIA, Commissioner			

Address of <b>operator</b> (if different from owner):		Street:	
Town:	State:	Zip:	County:
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <input checked="" type="checkbox"/> No ___ 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <input checked="" type="checkbox"/> No ___			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ___ No <input checked="" type="checkbox"/> If "yes," 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 storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 2. phase I or II construction storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 3. individual NPDES permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 4. any other water quality related permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number:	

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage: Construction dewatering to be performed concurrently with site excavation for construction of a building with one level of below-grade. Excavation and construction will be performed within a open excavaton. See attached report for further detail.		
b) Provide the following information about each discharge:	1) Number of discharge points:  2	2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow <u>.223</u> Average flow <u>.156</u> Is maximum flow a <b>design value</b> ? Y ___ N <input checked="" type="checkbox"/> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Average Flow = .078 cfs (35 gpm) (estimated value based on maximum excavation)
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>71.12</u> lat. <u>42.20</u> ; pt.2: long. <u>71.12</u> lat. <u>42.20</u> ; pt.3: long. _____ lat. _____ ; pt.4: long. _____ lat. _____ ; pt.5: long. _____ lat. _____ ; pt.6: long. _____ lat. _____ ; pt.7: long. _____ lat. _____ ; pt.8: long. _____ lat. _____ ; etc.		

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent <input checked="" type="checkbox"/> or seasonal _____? Is discharge ongoing      Yes <input checked="" type="checkbox"/> No _____?
c) Expected dates of discharge (mm/dd/yy): start <u>07/01/07</u> end <u>07/01/08</u>	
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).	



 <b>McPHAIL</b> ASSOCIATES, INC. Geotechnical Engineers 30 Norfolk Street Cambridge, MA 02139 617/868-1420 617/868-1423 (Fax)	NEWTON NORTH HIGH SCHOOL NEWTONVILLE MASSACHUSETTS	
	SCHEMATIC OF WATER FLOW	
	FOR CITY OF NEWTON AND GUND PARTNERSHIP, INC.	
	BY McPHAIL ASSOCIATES, INC. CONSULTING GEOTECHNICAL ENGINEERS	
	Date: MAY 2007	Dwn: F.G.P.
Project No: 4514	Scale: N.T.S.	

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) 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. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✓	2		160.2		81	.018		
2. Total Residual Chlorine	✓				330.1	50	ND			
3. Total Petroleum Hydrocarbons	✓				1664	4	ND			
4. Cyanide	✓				335.4	5	ND			
5. Benzene	✓				624	1	ND			
6. Toluene	✓				624	1	ND			
7. Ethylbenzene	✓				624	1	ND			
8. (m,p,o) Xylenes	✓				624	2	ND			
9. Total BTEX <sup>4</sup>	✓				624		ND			

<sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓				504.1	.019	ND			
11. Methyl-tert-Butyl Ether (MtBE)	✓				624	20	ND			
12. tert-Butyl Alcohol (TBA)	✓				624	100	ND			
13. tert-Amyl Methyl Ether (TAME)	✓				624	20	ND			
14. Naphthalene	✓				624	4.9	ND			
15. Carbon Tetra-chloride	✓				624	1	ND			
16. 1,4 Dichlorobenzene	✓				624	5	ND			
17. 1,2 Dichlorobenzene	✓				624	5	ND			
18. 1,3 Dichlorobenzene	✓				624	5	ND			
19. 1,1 Dichloroethane	✓				624	1.5	ND			
20. 1,2 Dichloroethane	✓				624	1.5	ND			
21. 1,1 Dichloroethylene	✓				624	1	ND			
22. cis-1,2 Dichloro-ethylene	✓				624	1	ND			
23. Dichloromethane (Methylene Chloride)	✓				624	5	ND			
24. Tetrachloroethylene	✓				624	1.5	ND			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓				624	2	ND			
26. 1,1,2 Trichloroethane	✓				624	1.5	ND			
27. Trichloroethylene	✓				624	1	ND			
28. Vinyl Chloride	✓				624	2	ND			
29. Acetone	✓				624	10	ND			
30. 1,4 Dioxane	✓				624	2,000	ND			
31. Total Phenols	✓				420.1		ND			
32. Pentachlorophenol	✓				8270	.78	ND			
33. Total Phthalates <sup>5</sup> (Phthalate esthers)	✓				8270		ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓				8270	9.8	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓				8270		ND			
a. Benzo(a) Anthracene	✓				8270	.2	ND			
b. Benzo(a) Pyrene	✓				8270	.2	ND			
c. Benzo(b)Fluoranthene	✓				8270	.2	ND			
d. Benzo(k) Fluoranthene	✓				8270	.2	ND			
e. Chrysene	✓				8270	.2	ND			

<sup>5</sup>The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (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)
f. Dibenzo(a,h) anthracene	✓				8270	.2	ND			
g. Indeno(1,2,3-cd) Pyrene	✓				8270	.2	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓						ND			
h. Acenaphthene	✓				8270	.2	ND			
i. Acenaphthylene	✓				8270	.2	ND			
j. Anthracene	✓				8270	.2	ND			
k. Benzo(ghi) Perylene	✓				8270	.2	ND			
l. Fluoranthene	✓				8270	.2	ND			
m. Fluorene	✓				8270	.2	ND			
n. Naphthalene-	✓				8270	.2	ND			
o. Phenanthrene	✓				8270	.2	ND			
p. Pyrene	✓				8270	.2	ND			
37. Total Polychlorinated Biphenyls (PCBs)	✓				608	.258	ND			
38. Antimony	✓					.5	ND			
39. Arsenic		✓			200.7		2.1	.00046		
40. Cadmium	✓				GFAA	.2	ND			
41. Chromium III		✓			200.7		8.7	.00190		
42. Chromium VI	✓				200.7	20	ND			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓			200.7	-	18	.00393		
44. Lead		✓			GFAA		4.1	.00090		
45. Mercury	✓				245.2	.2	ND			
46. Nickel		✓			200.7		7.3	.00159		
47. Selenium	✓				200.7	1	ND			
48. Silver	✓				GFAA	.4	ND			
49. Zinc		✓			200.7		29.3	.00640		
50. Iron		✓			200.7		6400	1.39748		
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

<p><i>Step 1:</i> Do any of the metals in the influent have a <b>reasonable potential</b> to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y <input checked="" type="checkbox"/> N <input type="checkbox"/></p>	<p>If yes, which metals? Copper, Lead, Zinc</p>
<p><i>Step 2:</i> For any metals which have <b>reasonable potential</b> to exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor (DF)</b> 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? Metals: Arsenic, chromium III, copper, lead, nickel, zinc and iron _____ DF: <u>&gt;100</u></p>	<p>Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b>. Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If "Yes," list which metals: Iron</p>

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

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:                  Two (2) sedimentation tanks with 10,000-gallons capacity in series. A test of the effluent will be completed prior to discharge into the storm drain system, and additional filtration and/or metal treatment will be added to meet permit limits. See attached figure.</p>						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper	Oil/water separator	Equalization tanks <div style="text-align: center;">✓</div>	Bag filter	GAC filter
	Chlorination	Dechlorination	Other (please describe):			
<p>c) Proposed <b>average</b> and <b>maximum flow rates</b> (gallons per minute) for the discharge and the <b>design flow rate(s)</b> (gallons per minute) of the treatment system:                  Average flow rate of discharge <u>70</u> Maximum flow rate of treatment system <u>100</u> Design flow rate of treatment system <u>NA</u></p>						
<p>d) A description of chemical additives being used or planned to be used (attach MSDS sheets):                  None</p>						

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

a) Identify the discharge pathway:	Direct _____	Within facility__	Storm drain <input checked="" type="checkbox"/>	River/brook_____	Wetlands_____	Other (describe):
<p>b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:                  See Figures 3 &amp; 4 in attached report. The construction dewatering discharge will be pumped to the Charles River from storm drains along Walnut Street or Elm Street, to the Cheesecake Brook and an un-numbered outfall for the Laundry Brook.</p>						

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 21.9 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? Yes  No  If yes, for which pollutant(s)?

Is there a TMDL? Yes  No  If yes, for which pollutant(s)?

**6. Results of Consultation with Federal Services:** Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes  No

Has any consultation with the federal services been completed? No  or is consultation underway? No

What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):

a "no jeopardy" opinion?  or written concurrence  on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?

Yes  No  Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes  No

**7. Supplemental information. :**

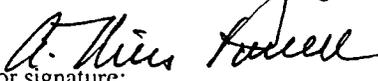
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

**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: Newton North High School

Operator signature:



Title:

Commissioner of Public Buildings

Date:

MAY 22, 2007