

9/10/08 -
revised

LETTER OF TRANSMITTAL

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To: Environmental Protection Agency

Date: September 9, 2008

RGP NOI Processing

Project No: 04478-8

Municipal Assistance Unit (CMU)

Re: 620 Washington Street

One Congress Street, Suite 1100

Winchester, Massachusetts

Boston, MA 02114-2023

RTNs 3-24919 & 3-27775

We are sending you the following enclosures:

Quantity	Date	Description
1	08/27/08	Notice of Intent, NPDES Remediation General Permit, Winchester Hospital, 620 Washington Street, Winchester, MA

These are transmitted as checked below:

☐ For Approval ☒ For Your Use ☐ For Review/Comment ☐ As Requested ☐ Other

Message:

Copy to: File

Signed: Anne L. Leifer, P.G., LSP

If enclosures are not as noted, kindly notify us at once.

Geotechnical
Environmental and
Water Resources
Engineering

August 27, 2008
Project 04478-8



Environmental Protection Agency
RGP NOI Processing
Municipal Assistance Unit (CMU)
One Congress Street, Suite 1100
Boston, MA 02114-2023

Dear Sir or Madam:

**Re: Notice of Intent
NPDES Remediation General Permit
Winchester Hospital
620 Washington Street
Winchester, Massachusetts**

On behalf of Winchester Hospital (WH), GEI Consultants, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP), Massachusetts General Permit (MAG910000). This NOI was prepared in accordance with the general requirements of the NPDES RGP under Federal Register, Vol. 70, No. 147, and related guidance documentation provided by the EPA. The completed NOI form is provided in Appendix A.

Site Information

This NOI has been prepared for the management of dewatering operations during construction at 620 Washington Street in Winchester, Massachusetts (the Property; Fig. 1). The Property is bordered by the Aberjona River to the south, Washington Street to the east and by undeveloped land and the Cavalry Cemetery to the north and west (Figs. 1 and 2). WH plans to construct two structures on the Property, an additional office building to the northeast of the existing building and a parking structure to the north of the existing building.

The work will occur within the Massachusetts Department of Environmental Protection (DEP) disposal site tracked under Release Tracking Number (RTN) 3-24919 (the Site). Concentrations of trichloroethene (TCE), extractable petroleum hydrocarbon (EPH), polycyclic aromatic hydrocarbons (PAHs), and metals exceeded the applicable Reportable Concentrations for soil category S-1 (RCS-1), as defined by the Massachusetts Contingency Plan (MCP; 310 CMR 40.0315(2)), and required reporting to the DEP on May 31, 2005. Soil and groundwater management activities that are planned at the Site will be conducted as a Release Abatement Measure (RAM) per the MCP.

Discharge and Receiving Surface Water Information

The water collected during construction dewatering activities is expected to contain naturally occurring metals (such as iron and zinc) and may contain low levels of chlorinated solvents (such

as TCE) as well as low levels of petroleum-related compounds (such as PAHs or petroleum hydrocarbon fractions) and other metals (arsenic and lead.). On May 14, 2008 a GEI representative collected ground water samples from two monitoring wells on the Property (RWG-102 and RWG-104) to assess the proposed influent. Both water samples were analyzed for the parameters required under the NPDES RGP. In addition, the pH of the proposed influent was measured to evaluate existing conditions. The laboratory data reports for these samples are provided in Appendix B. The analytical results indicated the presence of cyanide, metals (iron and zinc) and two chlorinated organic solvents (TCE and cis-1,2-dichloroethene [cis-1,2-DCE]). Although no petroleum hydrocarbons were detected by EPA Method 8100, there is a potential to encounter some petroleum contamination during dewatering based on results from previous soil sampling.

The measured pH of the groundwater at the Property ranged from 6.0 to 7.5 standard units (s.u.). The pH range detected is outside the RGP effluent limit for Massachusetts waters (6.5 to 8.3). Therefore, we request an expanded effluent limit range of 6.0 to 9.0 due to the naturally low pH in groundwater at the Property.

The collected water will be treated to remove suspended solids and, if necessary, volatile organic compounds (VOCs), petroleum-related compounds, and metals prior to discharge via the treatment system shown in the process flow diagram in Fig. 3. The treated water will be discharged to one or more catch basins on the property or via surface piping to the Aberjona River.

Consultation with Federal Services

GEI reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS) and the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). Based on this review, neither the Property nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC), Habitats of Rare Wetland Wildlife, Habitats of Rare Species or Estimated Habitats of Rare Wildlife or listed as a National Historic Place. Based on this information, consultation with federal and/or state officials was deemed not necessary.

Coverage under NPDES RGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES RGP based on the requirements of the NPDES RGP and our evaluation of the available site-specific information. On behalf of WH, we are requesting coverage under the NPDES RGP for the discharge of recovered water during construction activities to the surface waters of the Aberjona River directly via surface piping or the on-site stormwater drainage system.

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

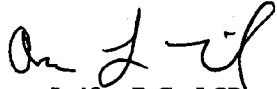
Discharge of treated water is scheduled to begin as early as October 10, 2008, pending authorization from the EPA.

The excavation and dewatering will be conducted as a RAM in accordance with the MCP (310 CMR 40.0000). Therefore, completion and submittal of the DEP Bureau of Resource Protection Water Management (BRP WM) 12 form and fee payment to the Commonwealth of Massachusetts are not required.

Please contact me at 781.721.4066 or aleifer@geiconsultants.com if you have any questions.

Very truly yours,

GEI CONSULTANTS, INC.



Anne Leifer, P.G., LSP
Project Manager

MS/ALL:csb
Enclosures

c: Mr. Melvin Kleckner, Winchester Town Manager
Ms. Jennifer Murphy, Winchester Board of Health
Ms. Elaine Vreeland, Winchester Conservation Commission



This Image provided by MassGIS is taken from
 U.S.G.S. Topographic 7.5 X 15 Minute Series
 Boston North Quadrangle, 1985.
 Datum is National Geodetic Vertical Datum (NGVD).
 Contour Interval is 3 Meters.



MASSACHUSETTS
 QUADRANGLE LOCATION

RGP Notice of Intent
 620 Washington Street
 Winchester, Massachusetts

Winchester Hospital
 Winchester, Massachusetts

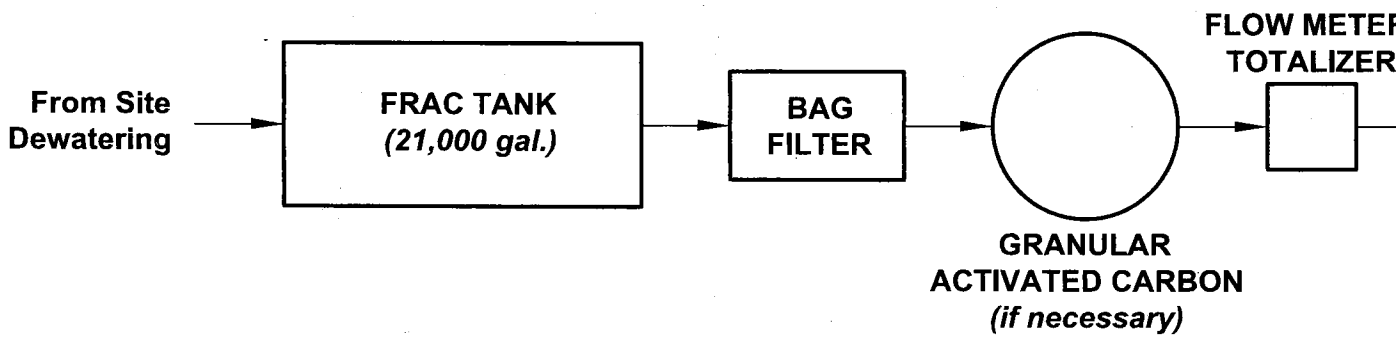


Project 04478-8

SITE LOCATION MAP

August 2008

Fig. 1



PROCESS FLOW DIAGRAM
Not to Scale

RGP Notice of Intent
 Winchester Hospital Redevelopment
 620 Washington Street

Winchester Hospital
 Winchester, Massachusetts



Project 04478-8

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Appendix A

**Remediation General Permit
Notice of Intent**

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

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

a) Name of facility/site: Winchester Hospital		Facility/site address:	
Location of facility/site: longitude: <u>-70.874</u> latitude: <u>42.472</u>	Facility SIC code(s): 8062	Street: 620 Washington Street	
b) Name of facility/site owner: Winchester Hospital		Town: Winchester	
Email address of owner: rrobertson@winhosp.org		State: MA	Zip: 01890
Telephone no. of facility/site owner: 781-756-2511		County: Middlesex	
Fax no. of facility/site owner: 781-756-2997	Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐		
Address of owner (if different from site):	3. Private ☒ 4. other, if so, describe:		
Street: 41 Highland Avenue			
Town: Winchester	State: MA	Zip: 01890	County: Middlesex
c) Legal name of operator:	Operator telephone no: 781-953-8747		
A.J. Martini	Operator fax no.: 781-838-6874		
Operator contact name and title: Ed Whalen			
Operator email: ewhalen@ajmartini.com			
Address of operator (if different from owner):			
Street: 5 Lowell Avenue			
Town: Winchester	State: MA	Zip: 01890	County: Middlesex
d) Check "yes" or "no" for the following:			
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ☐ No ☒ if "yes," number:			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ☐ No ☒ if "yes," date and tracking #:			
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ☒ No ☐			
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ☒ No ☐			

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ☒ No ☐ If "yes," please list: 1. site identification # assigned by the state of NH or MA: MA 2. permit or license # assigned: RTN: 3-24919 3. state agency contact information: name, location, and telephone number: MADEP, NERO, Wilmington, MA 978-694-3200	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y ☐ N ☒, if Y, number: 2. phase I or II construction storm water general permit? Y ☐ N ☒, if Y, number: 3. individual NPDES permit? Y ☐ N ☒, if Y, number: 4. any other water quality related permit? Y ☐ N ☒, if Y, number:
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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:

Discharge of water recovered during construction related dewatering and stormwater management.

b) Provide the following information about each discharge:	1) Number of discharge points: 4	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft³/s)? Max. flow 0.167 Average flow 0.112 Is maximum flow a design value? Y ☐ N ☒ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. 71.1268 lat. 42.4693; pt.2: long. 71.1265 lat. 42.4694; pt.3: long. 71.1261 lat. 42.4694; pt.4: long. 71.1257 lat. 42.4694; 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): NA		5) Is the discharge intermittent ☒ or seasonal ☐ ? Is discharge ongoing Yes ☐ No ☒
c) Expected dates of discharge (mm/dd/yy): start 10/01/08 end 06/30/10		
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).		

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	GRAB	2540D	5,000	<4,000	1.64	<4,000	1.10
2. Total Residual Chlorine	✓		2	GRAB	4500CLF	20	<50	0	<50	0
3. Total Petroleum Hydrocarbons		✓	2	GRAB	1664	5,000	<200	0.082	<200	0.055
4. Cyanide		✓	2	GRAB	335.4	10	22	0.009	13.5	0.004
5. Benzene	✓		2	GRAB	8260B	2	<0.50	0	<0.50	0
6. Toluene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
7. Ethylbenzene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
8. (m,p,o) Xylenes	✓		2	GRAB	8260B	10	<1.0	0	<1.0	0
9. Total BTEX ⁴	✓		2	GRAB	8260B	2	<3.5	0	<1.0	0

⁴BTEX = 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 ⁵ (1,2- Dibromo-methane)	✓		2	GRAB	8260B	0.1	<2.0	0	<2.0	0
11. Methyl-tert-Butyl Ether (MTBE)	✓		2	GRAB	8260B	5	<1.0	0	<1.0	0
12. tert-Butyl Alcohol (TBA)	✓		2	GRAB	8260B	100	<20	0	<20	0
13. tert-Amyl Methyl Ether (TAME)	✓		2	GRAB	8260B	0.5	<2.0	0	<2.0	0
14. Naphthalene	✓		2	GRAB	8260B	5.0	<5.0	0	<5.0	0
15. Carbon Tetra-chloride	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
16. 1,4 Dichlorobenzene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
17. 1,2 Dichlorobenzene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
18. 1,3 Dichlorobenzene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
19. 1,1 Dichloroethane	✓		2	GRAB	8260B	1	<1.0	0	<1.0	0
20. 1,2 Dichloroethane	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
21. 1,1 Dichloroethylene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
22. cis-1,2 Dichloro-ethylene		✓	2	GRAB	8260B	2	1.3	0.001	1.3	0.0003
23. Dichloromethane (Methylene Chloride)	✓		2	GRAB	8260B	2	<2.0	0	<2.0	0
24. Tetrachloroethylene	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0

⁵ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

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	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
26. 1,1,2 Trichloroethane	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
27. Trichloroethylene		✓	2	GRAB	8260B	2	1.9	0.001	1.3	0.0003
28. Vinyl Chloride	✓		2	GRAB	8260B	2	<1.0	0	<1.0	0
29. Acetone	✓		2	GRAB	8260B	50	<50	0	<50	0
30. 1,4 Dioxane	✓		2	GRAB	8260B	50	<25	0	<25	0
31. Total Phenols	✓		2	GRAB	8270C	1	<1.7	0	<1.7	0
32. Pentachlorophenol	✓		2	GRAB	8270C	5	<1.7	0	<1.7	0
33. Total Phthalates ⁶ (Phthalate esters)	✓		2	GRAB	8270C	5	<2.0	0	<2.0	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		2	GRAB	8270C	5	<2.0	0	<2.0	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)			NA	NA	NA	NA	NA	NA	NA	NA
a. Benzo(a) Anthracene	✓		2	GRAB	8270C	5	<5.0	0	<5.0	0
b. Benzo(a) Pyrene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
c. Benzo(b)Fluoranthene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
d. Benzo(k) Fluoranthene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
e. Chrysene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0

⁶The 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	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
g. Indeno(1,2,3-cd)Pyrene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)				NA	NA	NA	NA	NA	NA	NA
h. Acenaphthene	✓		2	GRAB	8270C	1	<0.23	0	<0.23	0
i. Acenaphthylene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
j. Anthracene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
k. Benzo(ghi) Perylene	✓		2	GRAB	8270C	5	<5.0	0	<5.0	0
l. Fluoranthene	✓		2	GRAB	8270C	1	<0.19	0	<0.19	0
m. Fluorene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
n. Naphthalene-	✓		2	GRAB	8270C	2	<0.35	0	<0.35	0
o. Phenanthrene	✓		2	GRAB	8270C	5	<5.0	0	<5.0	0
p. Pyrene	✓		2	GRAB	8270C	10	<5.0	0	<5.0	0
37. Total Polychlorinated Biphenyls (PCBs)	✓		2	GRAB	8082	0.50	<0.27	0	<0.27	0
38. Antimony	✓		2	GRAB	6010B	50	<6.0	0	<6.0	0
39. Arsenic		✓	2	GRAB	6010B	5	<10	0.004	<10	0.003
40. Cadmium		✓	2	GRAB	6010B	5	<4.0	0.002	<4.0	0.001
41. Chromium III	✓		2	GRAB	6010B	10	<10	0	<10	0
42. Chromium VI	✓		2	GRAB	7196A	10	<0.01	0	<0.01	0

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		✓	2	GRAB	6010B	5	<25	0.010	<25	0.007
44. Lead		✓	2	GRAB	6010B	40	<5.0	0.002	<5.0	0.001
45. Mercury	✓		2	GRAB	7470A	0.20	<0.20	0	<0.20	0
46. Nickel		✓	2	GRAB	6010B	10	<40	0.016	<40	0.011
47. Selenium	✓		2	GRAB	6010B	50	10	0	<10	0
48. Silver	✓		2	GRAB	6010B	10	5.0	0	5.0	0
49. Zinc		✓	2	GRAB	6010B	10	34.5	0.014	<22.25	0.006
50. Iron		✓	2	GRAB	6010B	NA	148	0.061	<99	0.027
Other (describe):										

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

<i>Step 1:</i> Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ☒ N ☐	If yes, which metals? As, Cd, Cu, Pb, Zn, Fe
<i>Step 2:</i> For any metals which have reasonable potential to 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? Metals: As: 500 ug/l; Cd: 10 ug/l; Cu: 260 ug/l; Pb: 66 ug/l; Zn: 1,480 ug/l; Fe: 5,000 ug/l DF: 59.59	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 "Yes," 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:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper	Oil/water separator	Equalization tanks	Bag filter ☒	GAC filter ☒
	Chlorination	Dechlorination	Other (please describe):			
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 <u>50</u> Maximum flow rate of treatment system <u>75</u> Design flow rate of treatment system <u>75</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): <u>NA</u>						

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 ☒	River/brook ☒	Wetlands	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: Discharge will be through on-site catch basins to the Aberjona River or by surface pipe direct to Aberjona 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 discharges, 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 <u>B</u> .						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>9.8</u> cfs Please attach any calculation sheets used to support stream flow and dilution calculations. Section 7						
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? Yes ☒ No ☒ or is consultation underway? Yes ☒ 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.

Supplemental information for Section 7 is provided following Section 8.

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:

620 Washington Street

Operator signature:

(Winchester Hospital - Owner)

Title: Director Facilities & Engineering Services

Date:

9/2/09

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? Yes ☒ No ☒ or is consultation underway? Yes ☒ 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 ☒	

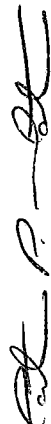
7. Supplemental information.:

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

Supplemental information for Section 7 is provided following Section 8.

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:	620 Washington Street
Operator signature:	(A.J. Martini - Operator) 
Title:	Director of Wastewater
Date:	8/29/08

Section 7: Supplemental Information

Notes:

- #1. The following compounds are contaminants of concern at the Site but were not detected in the samples collected to support this RGP NOI: total suspended solids, total petroleum hydrocarbons, arsenic, cadmium, copper, lead, and nickel. We have identified these compounds as "believed present" and to calculate the Maximum and Average Daily Values for these compounds we used the associated laboratory reporting requirement or method detection limit.
- #2. The laboratory reporting limits for total phenols, pentachlorophenol, total phthalates, acenaphthene, fluoranthene, and naphthalene exceed the EPA Minimum Level and in these cases we have instead reported the laboratory method detection limit in the table in Section 3.b.
- #3. Maximum Daily Values were calculated for compounds "believed present" using the estimated maximum discharge flow rate (75 gpm [0.167 cfs]) and the maximum contaminant concentration.
- #4. Average Daily Values were calculated for compounds "believed present" using the estimated average discharge flow rate (50 gpm [0.112 cfs]) and the average contaminant concentration.
- #5. The dilution factor (DF) has been calculated as follows: $DF = (Q_d + Q_s) / Q_d$ where Q_d is the maximum flow rate of the discharge in cfs (0.16725), and where Q_s is the minimum flow for 7 consecutive days with a recurrence interval of 10 years ($7Q_{10} = 9.8$ cfs – see #6 below for information on the $7Q_{10}$ value). Therefore, $DF = (0.16725 \text{ cfs} + 9.8 \text{ cfs}) / 0.16725 = 59.59$. The DF was then compared to Appendix IV of the RGP NOI entitled, "Total Recoverable Metals Limitations (ug/l) at Selected Dilution Factor Ranges and Technology Based Ceiling Limitations for Facilities Located in Massachusetts (for discharges to freshwater at $H = 50 \text{ mg/L}$)" to establish the discharge limit for the applicable metals. Appendix IV is attached.
- #6. The $7Q_{10}$ Value for the receiving water body was obtained online from the USGS (<http://waterdata.usgs.gov/ma/nwis/current/?type=flow>). The $7Q_{10}$ value provided (9.8 cfs), is for the Aberjona River in Winchester. The value is conservative as the USGS stream gauge is located approximately 2 miles downstream from the project Site.
- #7. Determination that no listed species or critical habitat are in proximity to the project site and discharge location was made through the following steps:
 - A review of the National Heritage and Endangered Species Program's, "Rare Species Occurrence" list for Winchester (www.mass.gov/dfwele/nhesp)
 - A review of the list of Areas of Critical Environmental Concern (ACEC) (www.epa.gov/region/nhpdcs/remediation/Appendix-I-list-n-map.pdf)
 - A review of the Natural Heritage And Endangered Species Program's "Biomap" (www.massgis.state.ma.us/biomap/viewer.htm)
- #8. Attachments to this application include:
 - Analytical results for samples 044788-RWG-102 and 044788-RWG-104, sample date May 14, 2008.
 - Site location map
 - Treatment system schematic

Report of Analysis

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Client Sample ID: 044788-RWG-104
 Lab Sample ID: M73438-1
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Washington Street Winchester MA

Date Sampled: 05/14/08
 Date Received: 05/15/08
 Percent Solids: n/a

VOA MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.16	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.15	ug/l	
563-58-6	1,1-Dichloropropane	ND	5.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.10	ug/l	
123-91-1	1,4-Dioxane	ND	25	8.5	ug/l	
60-29-7	Ethyl Ether	ND	5.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.51	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.24	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.20	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	5.0	0.24	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.24	ug/l	
100-42-5	Styrene	ND	5.0	0.15	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.11	ug/l	
75-65-0	Tert Butyl Alcohol	ND	20	3.7	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.098	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	10	0.54	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.65	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.38	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.18	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.14	ug/l	
79-01-6	Trichloroethene	1.3	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	1.0	ug/l	

Report of Analysis

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Client Sample ID: 044788-RWG-104	Date Sampled: 05/14/08
Lab Sample ID: M73438-1	Date Received: 05/15/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Washington Street Winchester MA	

VOA MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-130%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	044788-RWG-104	Date Sampled:	05/14/08
Lab Sample ID:	M73438-1	Date Received:	05/15/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	Washington Street Winchester MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I53777.D	1	05/29/08	PN	05/20/08	OP15793	MSI1676
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	0.56	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.29	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.43	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.49	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.83	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	10	0.51	ug/l	
	3&4-Methylphenol	ND	10	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	10	0.53	ug/l	
100-02-7	4-Nitrophenol	ND	20	1.0	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.7	ug/l	
108-95-2	Phenol	ND	5.0	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	1.8	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.37	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.23	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.19	ug/l	
98-86-2	Acetophenone	ND	10	0.20	ug/l	
62-53-3	Aniline	ND	10	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	0.16	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.28	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.30	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.34	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.80	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.45	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.23	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.20	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.79	ug/l	
218-01-9	Chrysene	ND	5.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.21	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.78	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 044788-RWG-104
 Lab Sample ID: M73438-1
 Matrix: AQ - Ground Water
 Method: SW846 8270C SW846 3510C
 Project: Washington Street Winchester MA

Date Sampled: 05/14/08
 Date Received: 05/15/08
 Percent Solids: n/a

ABN MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.21	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.85	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.20	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.44	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.67	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.79	ug/l	
84-74-2	Di-n-butyl phthalate	2.6	5.0	0.17	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.0	0.22	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.13	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.19	ug/l	
86-73-7	Fluorene	ND	5.0	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.29	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.28	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.44	ug/l	
78-59-1	Isophorone	ND	5.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	0.35	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.89	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.23	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.92	ug/l	
129-00-0	Pyrene	ND	5.0	0.34	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		15-110%
4165-62-2	Phenol-d5	27%		15-110%
118-79-6	2,4,6-Tribromophenol	95%		15-110%
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-120%
1718-51-0	Terphenyl-d14	63%		30-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	044788-RWG-104	Date Sampled:	05/14/08
Lab Sample ID:	M73438-1	Date Received:	05/15/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	Washington Street Winchester MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB19282.D	1	06/07/08	CZ	06/06/08	OP15924	GBB796
Run #2	BB19148.D	1	05/30/08	CZ	05/21/08	OP15807	GBB792

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2	1000 ml	5.0 ml

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%	39%	32-149%
877-09-8	Tetrachloro-m-xylene	79%	47%	32-149%
2051-24-3	Decachlorobiphenyl	51%	50%	30-150%
2051-24-3	Decachlorobiphenyl	99%	104%	30-150%

(a) Sample re-extracted beyond recommended holding time.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	044788-RWG-104	Date Sampled:	05/14/08
Lab Sample ID:	M73438-1	Date Received:	05/15/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846-8015 SW846 3510C		
Project:	Washington Street Winchester MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH55652.D	1	05/30/08	WZ	05/20/08	OP15796	GGH3917
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.20	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	74%		39-145%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 044788-RWG-104	Date Sampled: 05/14/08
Lab Sample ID: M73438-1	Date Received: 05/15/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Washington Street Winchester MA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Arsenic	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Iron	148	100	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	05/20/08	05/21/08 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Zinc	34.5	20	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³

- (1) Instrument QC Batch: MA9289
 (2) Instrument QC Batch: MA9318
 (3) Prep QC Batch: MP11922
 (4) Prep QC Batch: MP11930

RL = Reporting Limit

Report of Analysis

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Client Sample ID: 044788-RWG-104**Lab Sample ID:** M73438-1**Matrix:** AQ - Ground Water**Project:** Washington Street Winchester MA**Date Sampled:** 05/14/08**Date Received:** 05/15/08**Percent Solids:** n/a**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	05/15/08 14:55	MA	SW846 7196A
Cyanide	0.022	0.010	mg/l	1	05/20/08 16:12	MA	EPA 335.4
Solids, Total Suspended	< 4.0	4.0	mg/l	1	05/15/08	BF	SM21 2540D
Total Residual Chlorine	< 0.050	0.050	mg/l	1	05/15/08 15:15	MA	SM21 4500CL F

RL = Reporting Limit

Report of Analysis

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Client Sample ID: 044788-RWG-102
 Lab Sample ID: M73438-2
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Washington Street Winchester MA

Date Sampled: 05/14/08
 Date Received: 05/15/08
 Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H46990.D	1	05/27/08	PB	n/a	n/a	MSH1467
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	1.9	ug/l	
71-43-2	Benzene	ND	0.50	0.15	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.17	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.92	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.14	ug/l	
75-25-2	Bromoform	ND	1.0	0.19	ug/l	
74-83-9	Bromomethane	ND	2.0	0.55	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	0.92	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.27	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.54	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	2.0	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.16	ug/l	
74-87-3	Chloromethane	ND	2.0	0.19	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.21	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.097	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.77	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.11	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.11	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.26	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.3	1.0	0.16	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID: 044788-RWG-102
 Lab Sample ID: M73438-2
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Washington Street Winchester MA

Date Sampled: 05/14/08
 Date Received: 05/15/08
 Percent Solids: n/a

VOA MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.16	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.15	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.10	ug/l	
123-91-1	1,4-Dioxane	ND	25	8.5	ug/l	
60-29-7	Ethyl Ether	ND	5.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.51	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.24	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.20	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	5.0	0.24	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.24	ug/l	
100-42-5	Styrene	ND	5.0	0.15	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.11	ug/l	
75-65-0	Tert Butyl Alcohol	ND	20	3.7	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.098	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	10	0.54	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.65	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.38	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.18	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.14	ug/l	
79-01-6	Trichloroethene	1.9	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.25	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.62	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	

ND = Not detected MDL - Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 044788-RWG-102	Date Sampled: 05/14/08
Lab Sample ID: M73438-2	Date Received: 05/15/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Washington Street Winchester MA	

VOA MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-130%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	044788-RWG-102	Date Sampled:	05/14/08
Lab Sample ID:	M73438-2	Date Received:	05/15/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	Washington Street Winchester MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I53778.D	1	05/29/08	PN	05/20/08	OP15793	MSI1676
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	0.56	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.29	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.43	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.49	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.83	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	10	0.51	ug/l	
	3&4-Methylphenol	ND	10	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	10	0.53	ug/l	
100-02-7	4-Nitrophenol	ND	20	1.0	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.7	ug/l	
108-95-2	Phenol	ND	5.0	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	1.8	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.37	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.23	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.19	ug/l	
98-86-2	Acetophenone	ND	10	0.20	ug/l	
62-53-3	Aniline	ND	10	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	0.16	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.28	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.30	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.34	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.80	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.45	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.23	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.20	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.79	ug/l	
218-01-9	Chrysene	ND	5.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.21	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.78	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.22	ug/l	

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RL = Reporting Limit

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Report of Analysis

Page 2 of 2

Client Sample ID: 044788-RWG-102
 Lab Sample ID: M73438-2
 Matrix: AQ - Ground Water
 Method: SW846 8270C SW846 3510C
 Project: Washington Street Winchester MA

Date Sampled: 05/14/08
 Date Received: 05/15/08
 Percent Solids: n/a

ABN MCP List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.21	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.85	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.20	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.44	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.67	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.79	ug/l	
84-74-2	Di-n-butyl phthalate	2.8	5.0	0.17	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.0	0.22	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.13	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.19	ug/l	
86-73-7	Fluorene	ND	5.0	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.29	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.28	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.44	ug/l	
78-59-1	Isophorone	ND	5.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	0.35	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.89	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.23	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.92	ug/l	
129-00-0	Pyrene	ND	5.0	0.34	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		15-110%
4165-62-2	Phenol-d5	27%		15-110%
118-79-6	2,4,6-Tribromophenol	107%		15-110%
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-120%
1718-51-0	Terphenyl-d14	70%		30-120%

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Report of Analysis

Page 1 of 1

Client Sample ID: 044788-RWG-102

Lab Sample ID: M73438-2

Matrix: AQ - Ground Water

Method: SW846 8082 SW846 3510C

Project: Washington Street Winchester MA

Date Sampled: 05/14/08

Date Received: 05/15/08

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB19283.D	1	06/07/08	CZ	06/06/08	OP15924	GBB796
Run #2	BB19149.D	1	05/30/08	CZ	05/21/08	OP15807	GBB792

	Initial Volume	Final Volume
Run #1	920 ml	5.0 ml
Run #2	950 ml	5.0 ml

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.27	ug/l	
11104-28-2	Aroclor 1221	ND	0.27	ug/l	
11141-16-5	Aroclor 1232	ND	0.27	ug/l	
53469-21-9	Aroclor 1242	ND	0.27	ug/l	
12672-29-6	Aroclor 1248	ND	0.27	ug/l	
11097-69-1	Aroclor 1254	ND	0.27	ug/l	
11096-82-5	Aroclor 1260	ND	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%	40%	32-149%
877-09-8	Tetrachloro-m-xylene	78%	47%	32-149%
2051-24-3	Decachlorobiphenyl	49%	46%	30-150%
2051-24-3	Decachlorobiphenyl	96%	97%	30-150%

(a) Sample re-extracted beyond recommended holding time.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 044788-RWG-102

Lab Sample ID: M73438-2

Matrix: AQ - Ground Water

Method: SW846-8015 SW846 3510C

Project: Washington Street Winchester MA

Date Sampled: 05/14/08

Date Received: 05/15/08

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH55653.D	1	05/30/08	WZ	05/20/08	OP15796	GGH3917
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.21	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	76%		39-145%

ND = Not detected

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E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 044788-RWG-102

Lab Sample ID: M73438-2

Matrix: AQ - Ground Water

Date Sampled: 05/14/08

Date Received: 05/15/08

Percent Solids: n/a

Project: Washington Street Winchester MA

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Arsenic	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Barium	217	200	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Iron	< 100	100	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	05/20/08	05/21/08 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/20/08	05/27/08 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA9289

(2) Instrument QC Batch: MA9318

(3) Prep QC Batch: MP11922

(4) Prep QC Batch: MP11930

RL = Reporting Limit

Report of Analysis

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Client Sample ID: 044788-RWG-102	Date Sampled: 05/14/08
Lab Sample ID: M73438-2	Date Received: 05/15/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Washington Street Winchester MA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	05/15/08 14:55	MA	SW846 7196A
Cyanide	< 0.010	0.010	mg/l	1	05/20/08 16:11	MA	EPA 335.4
Solids, Total Suspended	< 4.0	4.0	mg/l	1	05/15/08	BF	SM21 2540D
Total Residual Chlorine	< 0.050	0.050	mg/l	1	05/15/08 15:15	MA	SM21 4500CL F

RL = Reporting Limit