



January 5, 2011

Project 991.01001.111

U.S. Environmental Protection Agency
ATTN: Remediation General Permit NOI Processing
5 Post Office Square, Suite 100
Mail Code: OEP06-4
Boston, MA 02109-3912

RE: Notice of Intent for Remediation General Permit
Former GI Plastek Facility
3 Perkins Way
Newburyport, Massachusetts
MA DEP Release Tracking No 3-12652

To Whom It May Concern:

On behalf of Bradford & Bigelow, Inc., Ransom Environmental Consultants, Inc. (Ransom) is submitting the attached Notice of Intent (NOI) to be covered by the National Pollution Discharge Elimination System (NPDES) Remediation General Permit (RGP) for the former GI Plastek Facility Site located at 3 Perkins Way in Newburyport, Massachusetts (the Site).

The groundwater recovery and treatment system (the System) installed at the Site to treat chlorinated volatile organic compounds (CVOCs) consists of a groundwater recovery well (RW1) connected via underground piping to a particle-filtration system to remove sediment from groundwater, followed by two 200-pound granular activated carbon (GAC) vessels connected in series inside the Site building. As of November 2008, the System was upgraded to include two in-line granular ferris hydroxide (GFH) ion-exchange resin vessels to treat incoming groundwater for naturally occurring arsenic.

Treated groundwater is discharged to the drainage swale and associated stormwater system located at the eastern edge of the Site. The discharge to the stormwater drainage system was authorized by the U. S. Environmental Protection Agency (U.S. EPA) in a letter dated June 9, 1999, granting a permit exclusion under the National Pollution Discharge Elimination System (NPDES). An application for an NPDES permit was transmitted to the U.S. EPA on December 21, 2000. The System was installed during the summer of 1999 and became operational during July 1999. On September 17, 2008, Ransom submitted a NOI to the U.S. EPA to have the operation of the System covered by the NPDES RGP. On September 18, 2008, the U.S. EPA authorized the discharge (MAG910380) under the RGP.

As previously reported to the U.S. EPA, on September 8, 2009, Ransom observed that CVOCs were detected at concentrations which exceed their respective RGP effluent limits in the sample collected from the System effluent on August 26, 2009. The System was shut down on September 8, 2009, when the RGP exceedances were identified.

100 Kent Way, Suite 100, Byfield, Massachusetts 01922, Tel (978) 465-1822, Fax (978) 465-2986
400 Commercial Street, Suite 404, Portland, Maine 04101, Tel (207) 772-2891
Pease International Tradeport, 112 Corporate Drive, Portsmouth, New Hampshire 03801, Tel (603) 436-1490
2127 Hamilton Avenue, Hamilton, New Jersey 08619, Tel (609) 584-0090
60 Valley Street, Building F, Suite 106, Providence, Rhode Island 02909, Tel (401) 433-2160

www.ransomenv.com

U.S. Environmental Protection Agency
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Ransom's wastewater operator inspected the System along with a representative from Siemens Water Technologies Corporation, the provider of the GFH treatment vessels. Ransom and Siemens determined that the booster pump was likely pulling water through the two GAC vessels and creating preferential pathways which were allowing some of the groundwater to pass through the GAC vessels essentially untreated and leading to the exceedance of the RGP discharge limits. The recommended corrective action was to install a holding tank after the GAC vessels and before the booster pump; in so doing the preferential pathways created by the vacuum imparted on the GAC vessels by the booster pump would be eliminated. Pending delivery from Bisco Environmental, Inc., the System will be upgraded with the holding tank. Therefore, the NOI is being submitted for the future discharges from the upgraded System.

If you have any questions regarding the enclosed material, please do not hesitate to contact either of the undersigned.

Sincerely,

RANSOM ENVIRONMENTAL CONSULTANTS, INC.

Heather E. Dudley-Tatman, P.G.
Project Manager

Timothy J. Snay, LSP
Licensed Site Professional

HED/TJS:sh
Attachment

cc: Carmen Frederico, Bradford & Bigelow
MA DEP, Division of Watershed Management, Worcester
City of Newburyport

ATTACHMENT A

Notice of Intent (NOI)

Notice of Intent for Remediation General Permit
Former GI Plastek Facility
3 Perkins Way
Newburyport, Massachusetts
MA DEP Release Tracking No 3-12652

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

a) Name of facility/site : Bradford & Bigelow, Inc. (former GI Plastek)		Facility/site mailing address: 3 Perkins Way	
Location of facility/site : longitude: <u>70° 52' 58"</u> latitude: <u>42° 47' 59"</u>	Facility SIC code(s): 2731	Street: 3 Perkins Way	
b) Name of facility/site owner : Bradford & Bigelow, Inc.		Town: Newburyport	
Email address of facility/site owner: <u>cfrederico@bradford-bigelow.com</u>	State: MA	Zip: 01950	County: Essex
Telephone no. of facility/site owner : 978-904-3100		Owner is (check one): 1. Federal ____ 2. State/Tribal ____ 3. Private ☒ 4. Other ____ if so, describe:	
Fax no. of facility/site owner : 978-462-4907			
Address of owner (if different from site):			
Street:			
Town:	State:	Zip:	County:
c) Legal name of operator : Bradford & Bigelow, Inc.	Operator telephone no: <u>978-904-3100</u>		
	Operator fax no.: <u>978-462-4907</u>	Operator email: <u>cfrederico@bradford-bigelow.com</u>	
Operator contact name and title: Carmen Frederico, Chief Financial Officer			
Address of operator (if different from owner):	Street:		
Town:	State:	Zip:	County:
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: <u>99-174</u>			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y ☒ N ____, if Y, date and tracking #: <u>12/21/2000, RTN 3-12652</u>			
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/Formely 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: The discharge is from a groundwater recovery and treatment system. The system operates continuously. The flow rate through the treatment system is 1.2 gallons per minute. The treatment system does not contain processes that alter the temperature of the water prior to discharge.	
b) Provide the following information about each discharge:	
1) Number of discharge points: <u>one</u>	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <u>0.0033</u> Is maximum flow a design value ? Y ☐ N ☒ Average flow (include units) <u>0.0027 ft³/s.</u> Is average flow a design value or estimate? <u>estimate</u>
3) Latitude and longitude of each discharge within 100 feet: pt.1: lat. <u>42° 47' 52.97"</u> long. <u>70° 52' 58.27"</u> ; 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 <u>1/14/11</u> end <u>12/31/30</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).	

3. Contaminant information.

1) 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 addition 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 (µg/l)	mass (kg)	concentration (µg/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	grab	2540D	10,000 µg/l	260,000	1.85	260,000	1.85
2. Total Residual Chlorine (TRC)		☒	☐	1	grab	4500CL-D	200 µg/l	ND		ND	
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	1664A	4,400 µg/l	ND		ND	
4. Cyanide (CN)	57125	☒	☐	1	grab	4500CN-CE	5 µg/l	ND		ND	
5. Benzene (B)	71432	☒	☐	1	grab	8260B	1.0 µg/l	ND		ND	
6. Toluene (T)	108883	☒	☐	1	grab	8260B	1.0 µg/l	ND		ND	
7. Ethylbenzene (E)	100414	☒	☐	1	grab	8260B	1.0 µg/l	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	8260B	2.0 µg/l	ND		ND	
9. Total BTEX ²	n/a	☒	☐	1	grab	8260B	2.0 µg/l	ND		ND	
10. Ethylene Dibromide (EDB) (1,2- Dibromoethane) ³	106934	☒	☐	1	grab	504.1	0.01 µg/l	ND		ND	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	8260B	20 µg/l	ND		ND	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	8260B	100 µg/l	ND		ND	

* Numbering system is provided 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 (µg/l)	mass (kg)	concentration (µg/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	grab	8260B	20 µg/l	ND		ND	
14. Naphthalene	91203	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
15. Carbon Tetrachloride	56235	☒	☐	1	grab	8260B	1.0 µg/l	ND		ND	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	8260B	5.0 µg/l	ND		ND	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	8260B	5.0 µg/l	ND		ND	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	8260B	5.0 µg/l	ND		ND	
18a. Total dichlorobenzene		☒	☐	1	grab	8260B	5.0 µg/l	ND		ND	
19. 1,1 Dichloroethane (DCA)	75343	☐	☒	1	grab	8260B	1.5 µg/l	20	0.0001	20	0.0001
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	8260B	1.5 µg/l	ND		ND	
21. 1,1 Dichloroethene (DCE)	75354	☐	☒	1	grab	8260B	1.0 µg/l	3.5	2.49E-05	3.5	2.49E-05
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	1	grab	8260B	1.0 µg/l	72	0.0005	72	0.0005
23. Methylene Chloride	75092	☒	☐	1	grab	8260B	5.0 µg/l	ND		ND	
24. Tetrachloroethene (PCE)	127184	☐	☒	1	grab	8260B	1.5 µg/l	4.6	3.27E-05	4.6	3.27E-05
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	8260B	2.0 µg/l	ND		ND	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	8260B	1.5 µg/l	ND		ND	
27. Trichloroethene (TCE)	79016	☐	☒	1	grab	8260B	1.0 µg/l	17	0.0001	17	0.0001

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 (µg/l)	mass (kg)	concentration (µg/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☐	☒	1	grab	8260B	2.0 µg/l	5.8	4.12E-05	5.8	4.12E-05
29. Acetone	67641	☒	☐	1	grab	8260B	10 µg/l	ND		ND	
30. 1,4 Dioxane	123911	☒	☐	1	grab	8260B	2,000 µg/l	ND		ND	
31. Total Phenols	108952	☒	☐	1	grab	420.1	150 µg/l	ND		ND	
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab	8270	0.80 µg/l	ND		ND	
33. Total Phthalates (Phthalate esters) ⁴		☒	☐	1	grab	8270	5.0 µg/l	ND		ND	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab	8270	5.0 µg/l	ND		ND	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
a. Benzo(a) Anthracene	56553	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
b. Benzo(a)Pyrene	50328	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
c. Benzo(b)Fluoranthene	205992	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
d. Benzo(k)Fluoranthene	207089	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
e. Chrysene	21801	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	

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 (µg/l)	mass (kg)	concentration (µg/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
i. Acenaphthylene	208968	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
j. Anthracene	120127	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
k. Benzo(ghi) Perylene	191242	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
l. Fluoranthene	206440	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
m. Fluorene	86737	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
n. Naphthalene	91203	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
o. Phenanthrene	85018	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
p. Pyrene	129000; 85687; 84742; 84662;	☒	☐	1	grab	8270M	0.2 µg/l	ND		ND	
37. Total Polychlorinated Biphenyls (PCBs)	131113; 117817.	☒	☐	1	grab	608	0.250 µg/l	ND		ND	
38. Chloride	16887006	☐	☒	1	grab	9251	10,000 µg/l	310,000	2.20	310,000	2.20
39. Antimony	7440360	☐	☒	1	grab	6020	0.5 µg/l	1.2		ND	
40. Arsenic	7440382	☐	☒	1	grab	6020	0.5 µg/l	29.4	0.0002	29.4	0.0002
41. Cadmium	7440439	☐	☒	1	grab	6020	0.2 µg/l	0.3	2.13E-06	0.3	2.13E-06
42. Chromium III (trivalent)	16065831	☐	☒	1	grab	6020	0.5 µg/l	31.0	0.0002	31.0	0.0002
43. Chromium VI (hexavalent)	18540299	☒	☐	1	grab	3500Cr-D	10 µg/l	ND	0.0001	ND	0.0001
44. Copper	7440508	☐	☒	1	grab	6020	0.5 µg/l	17.5	0.0001	17.5	0.0001
45. Lead	7439921	☐	☒	1	grab	6020	0.5 µg/l	7.4	0.0001	ND	0.0001
46. Mercury	7439976	☒	☐	1	grab	245.1	0.2 µg/l	ND		ND	
47. Nickel	7440020	☐	☒	1	grab	6020	0.5 µg/l	24.5	0.0002	24.5	0.0002
48. Selenium	7782492	☐	☒	1	grab	6020	1 µg/l	1.0	7.11E-06	1.0	7.11E-06
49. Silver	7440224	☒	☐	1	grab	6020	0.4 µg/l	ND		ND	
50. Zinc	7440666	☐	☒	1	grab	6020	5 µg/l	74.4	0.0005	74.4	0.0005

51. Iron	7439896	☐	☒	I	grab	200.7	50 µg/l	19,000	0.135	19,000	0.135
Other (describe):		☐	☐								

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

<i>Step 1:</i> 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? <u>Arsenic, cadmium, copper, lead, zinc, and iron</u>
<i>Step 2:</i> 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: <u>arsenic</u> DF: <u>0</u> Metal: <u>cadmium</u> DF: <u>0</u> Metal: <u>copper</u> DF: <u>0</u> Metal: <u>lead</u> DF: <u>0</u> Metal: <u>zinc</u> DF: <u>0</u>	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: <u>Arsenic, cadmium, copper, lead, zinc, and iron</u>
Metal: <u>iron</u> DF: <u>0</u>	

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:

The objective of the treatment system is to recover and treat groundwater impacted by trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) as part of a groundwater remediation program designed to control off-site migration. The treatment system consists of one groundwater recovery well (RW1) connected via underground piping to a particle-filtration system to remove sediment, followed by two 200-pound granular activated carbon (GAC) vessels, into a holding tank, through a booster pump to a second particle-filtration system, and into two 1.2 cf granular ferric hydroxide (GFH) ion-exchange resin tanks located in series inside the Site building. Treated groundwater is discharged via underground piping to the drainage swale.

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):
Ion Exchange Resin (IER)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 1.2 gpm Maximum flow rate of treatment system 1.5 gpmDesign flow rate of treatment system 1.2 gpmd) 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): _____
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: Treated effluent from the groundwater treatment system is discharged via a buried pipe to a drainage swale and the associated stormwater system for the industrial park, which is hydraulically connected via a subsurface drainage system through a drainage easement located approximately 285 feet southeast of the drainage swale which ultimately drains to the Little 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 <u>Class B</u>					
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>0</u> 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)? <u>pathogens</u> Is there a final TMDL? Y ☒ N ☐ If yes, for which pollutant(s)? <u>Pathogens (TMDL has not been approved yet)</u>					

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.

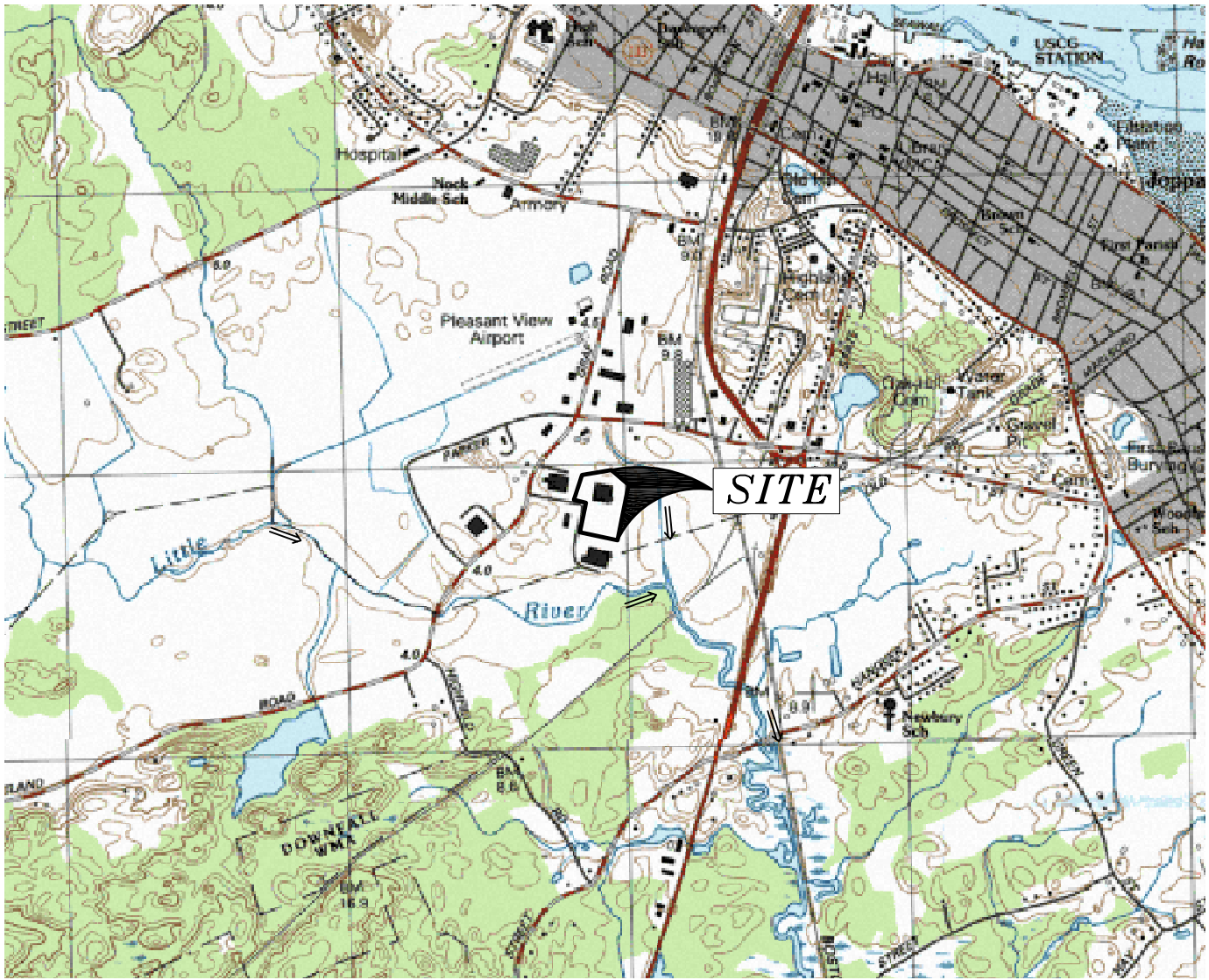
7. Supplemental information.

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

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: Bradford & Bigelow, Inc. (former GI Plastek)
Operator Signature: 
Printed Name & Title: Carmen Frederico, Chief Financial Officer
Date: 1/3/11

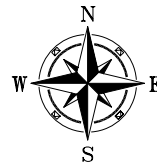


TAKEN FROM U.S.G.S. 7.5x15 MINUTE SERIES TOPOGRAPHIC MAP OF NEWBURYPORT, MASSACHUSETTS- 1987.

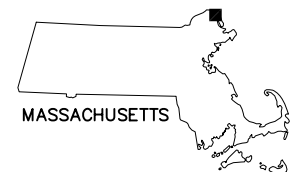
CONTOUR INTERVAL IS 3 METERS

SITE COORDINATES: LATITUDE 42°47'51"
LONGITUDE 70°53'03"

UTM COORDINATES: 47: 39: 838mN
3: 45: 914mE



LEGEND:
⇒ FLOW DIRECTION



QUADRANGLE LOCATION



SCALE in FEET
1:25,000



Environmental
Consultants, Inc.

PREPARED FOR:

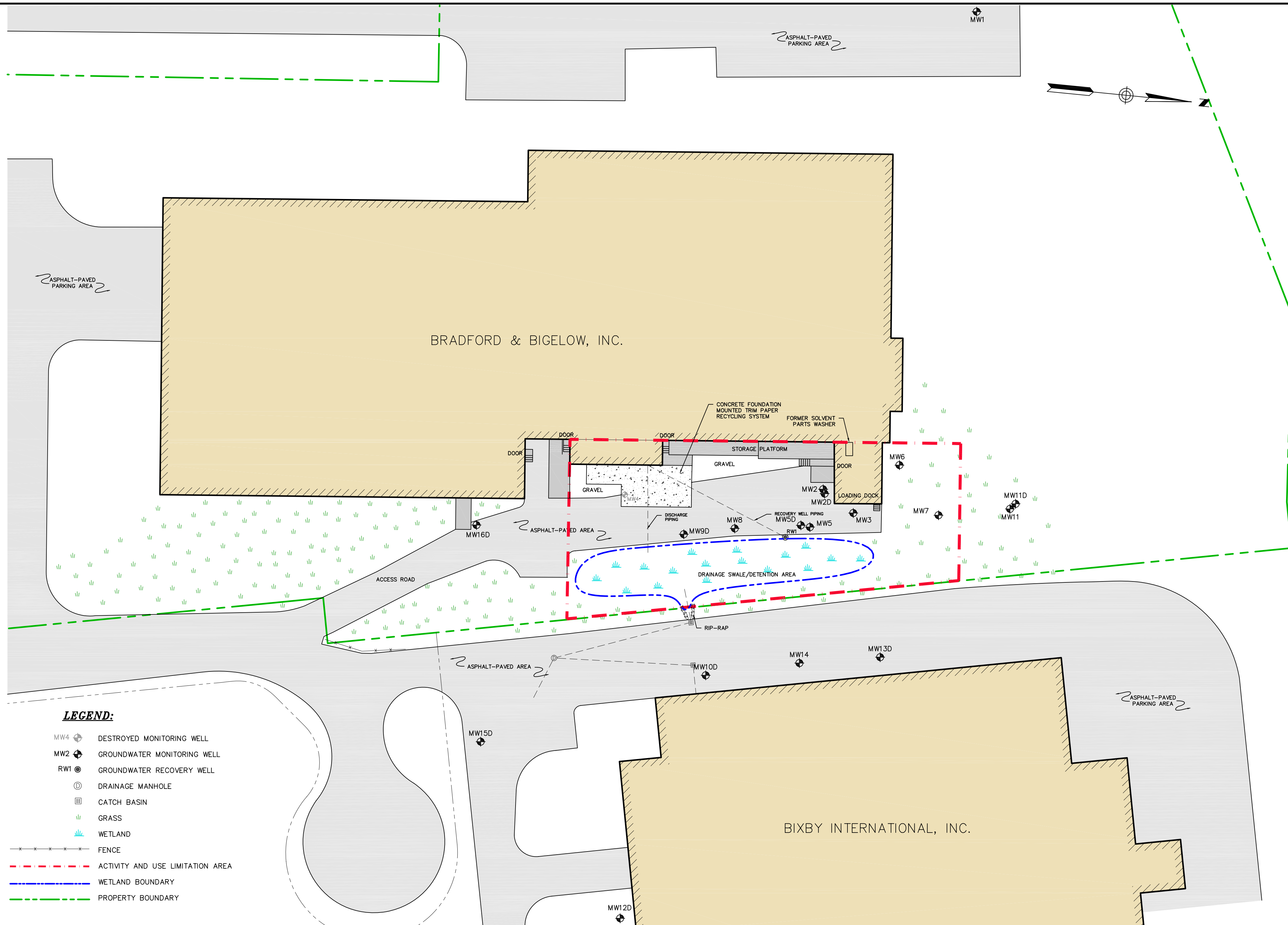
BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

SITE:

BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

SITE LOCATION MAP

DATE: JANUARY 2011
PROJECT: 991001.1
FIGURE: 1



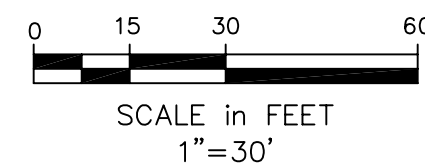
LEGEND:

- MW4 DESTROYED MONITORING WELL
- MW2 GROUNDWATER MONITORING WELL
- RW1 GROUNDWATER RECOVERY WELL
- DRAINAGE MANHOLE
- CATCH BASIN
- GRASS
- WETLAND
- FENCE
- ACTIVITY AND USE LIMITATION AREA
- WETLAND BOUNDARY
- PROPERTY BOUNDARY

NOTES:

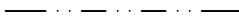
1. FIGURE BASED ON OBSERVATIONS AND MEASUREMENTS MADE IN THE FIELD BY RANSOM ENVIRONMENTAL CONSULTANTS, INC. ON AUGUST 6, 1995 AND UPDATED WITH AN ELEVATION AND LOCATION SURVEY PERFORMED ON AUGUST 4, 1997; JANUARY 9, 1998; APRIL 10, 2001; NOVEMBER 27, 2006 AND JANUARY 5, 2007.
2. SOME LOCATIONS ARE APPROXIMATE AND FIGURE IS SCHEMATIC IN NATURE.

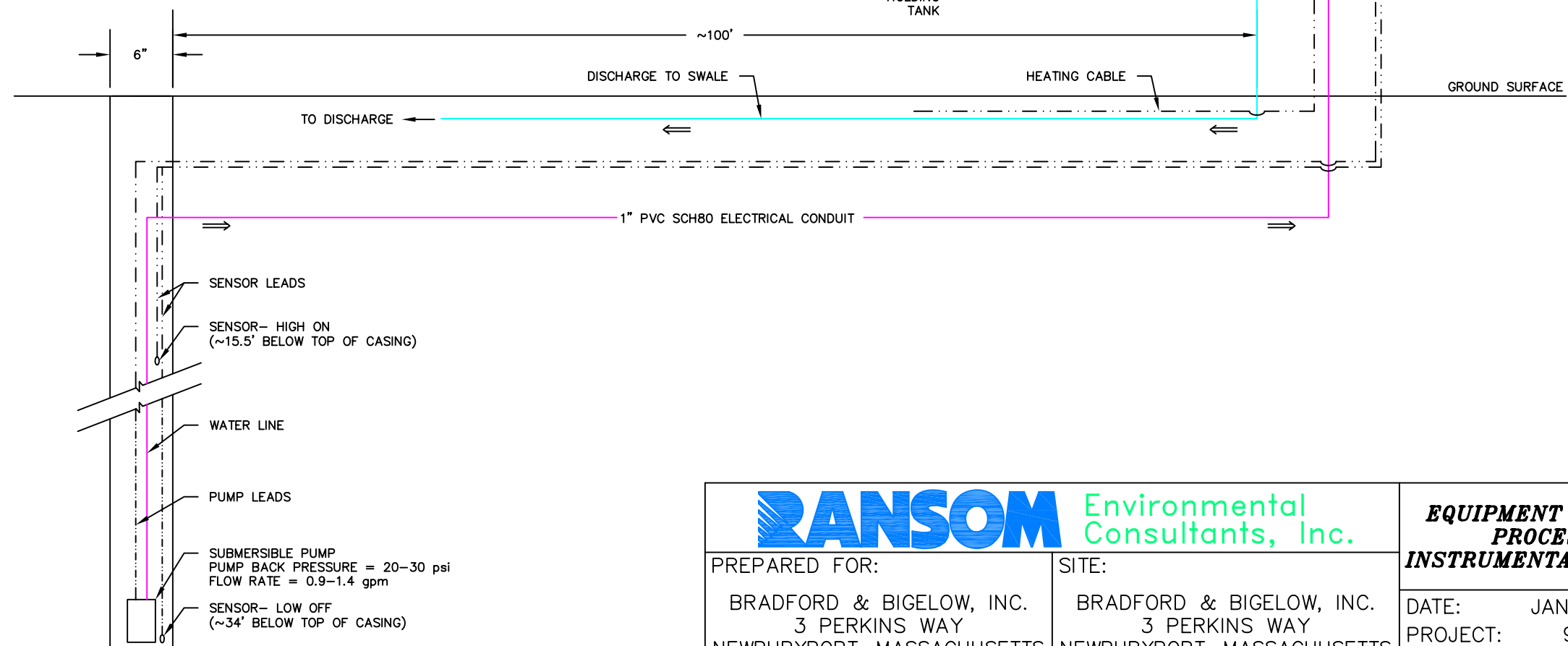
P:\1999\991001.1\Phase V\Semi-Annual Reports\No 19\991001-19.dwg Jan 04, 2011 - 12:53pm



RANSOM Environmental Consultants, Inc.		SITE PLAN
PREPARED FOR:	SITE:	DATE: JANUARY 2011
BRADFORD & BIGELOW, INC. 3 PERKINS WAY NEWBURYPORT, MASSACHUSETTS	BRADFORD & BIGELOW, INC. 3 PERKINS WAY NEWBURYPORT, MASSACHUSETTS	PROJECT: 991001.1
		FIGURE: 2

LEGEND:

-  VACUUM BREAKER
-  FLOW TOTALIZER
-  PRESSURE GAUGE— (0–60 psi)
-  GATE VALVE
-  BALL VALVE— 3/4" PVC SCH80
-  SAMPLE PORT— 3/4" PVC SCH80 TEE, BUSHING, OR BALL VALVE
-  1/2" CHECK VALVE
-  WATER LINE— UNTREATED
-  WATER LINE— TREATED
-  ELECTRICAL LINE
-  DIRECTION OF WATER FLOW
- GAC GRANULAR ACTIVATED CARBON VESSEL
- IER ION EXCHANGE RESIN TANK



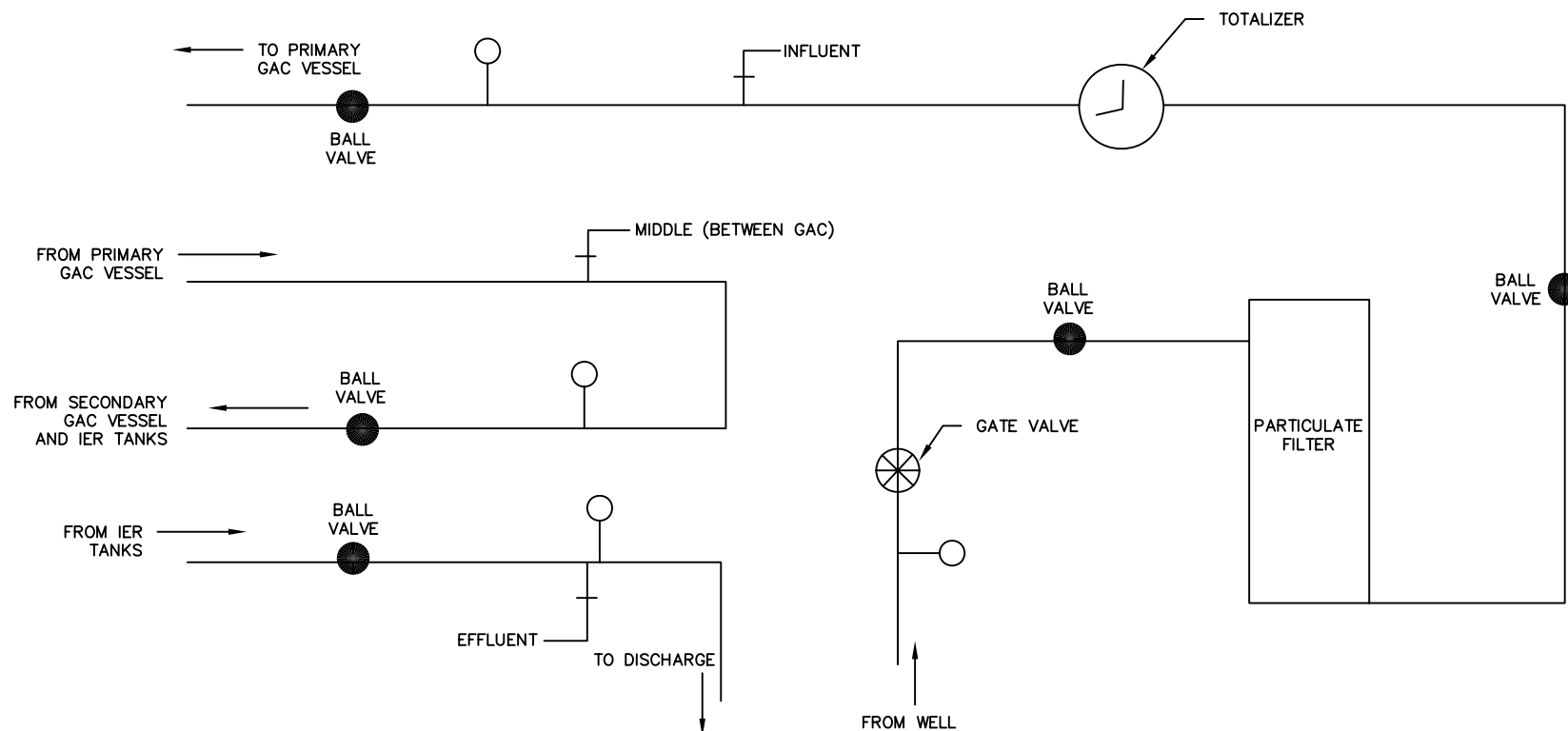
RANSOM Environmental Consultants, Inc.

PREPARED FOR:
BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

SITE:
BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

**EQUIPMENT LAYOUT AND
PROCESS AND
INSTRUMENTATION DIAGRAM**

DATE: JANUARY 2011
PROJECT: 991001.1
FIGURE: 3



LEGEND:

- GAC GRANULAR ACTIVATED CARBON
- IER ION EXCHANGE RESIN
-  PRESSURE GAUGE
-  SAMPLING PORT



PREPARED FOR:

BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

SITE:

BRADFORD & BIGELOW, INC.
3 PERKINS WAY
NEWBURYPORT, MASSACHUSETTS

***HARD PIPING FLOW
DIAGRAM***

DATE: JANUARY 2011
PROJECT: 991001.1
FIGURE: 4



ANALYTICAL REPORT

Lab Number:	L1016708
Client:	Ransom Environmental Browns Wharf Newburyport, MA 01950
ATTN:	Heather Dudley-Tatman
Phone:	(978) 465-1822
Project Name:	BRADFORD & BIGELOW
Project Number:	991001.1
Report Date:	10/30/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016708-01	INF-W1-102210	NEWBURYPORT, MA	10/22/10 10:00

Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Solids, Total Suspended

L1016708-01 has an elevated detection limit due to the dilution required by the sample matrix.

Chloride

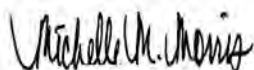
L1016708-01 has an elevated detection limit due to the dilution required to quantitate the result within the calibration range.

Phenolics, Total

L1016708-01 has an elevated detection limit due to the dilution required by the sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 10/30/10

ORGANICS

VOLATILES

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS**

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 10/27/10 14:03
Analyst: SH

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified
Extraction Date: 10/27/10 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--	1

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS**

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water
Analytical Method: 5,624
Analytical Date: 10/25/10 12:03
Analyst: TT

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	20		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	4.6		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	10	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	5.8		ug/l	2.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	3.5		ug/l	1.0	--	1
trans-1,2-Dichloroethene	1.7		ug/l	1.5	--	1
cis-1,2-Dichloroethene	72		ug/l	1.0	--	1
Trichloroethene	17		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS****Lab ID:** L1016708-01**Date Collected:** 10/22/10 10:00**Client ID:** INF-W1-102210**Date Received:** 10/22/10**Sample Location:** NEWBURYPORT, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	10	--	1
Vinyl acetate	ND		ug/l	20	--	1
4-Methyl-2-pentanone	ND		ug/l	10	--	1
2-Hexanone	ND		ug/l	10	--	1
Acrolein	ND		ug/l	8.0	--	1
Acrylonitrile	ND		ug/l	10	--	1
Methyl tert butyl ether	ND		ug/l	20	--	1
Dibromomethane	ND		ug/l	1.0	--	1
1,4-Dioxane	ND		ug/l	2000	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		80-120
Fluorobenzene	96		80-120
4-Bromofluorobenzene	99		80-120

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 5,624

Analytical Date: 10/25/10 07:55

Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG438822-6					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	10	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	2.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 5,624

Analytical Date: 10/25/10 07:55

Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG438822-6					
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	10	--
Vinyl acetate	ND		ug/l	20	--
4-Methyl-2-pentanone	ND		ug/l	10	--
2-Hexanone	ND		ug/l	10	--
Acrolein	ND		ug/l	8.0	--
Acrylonitrile	ND		ug/l	10	--
Methyl tert butyl ether	ND		ug/l	20	--
Dibromomethane	ND		ug/l	1.0	--
1,4-Dioxane	ND		ug/l	2000	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	98		80-120
Fluorobenzene	98		80-120
4-Bromofluorobenzene	104		80-120

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**Method Blank Analysis**
Batch Quality Control**Analytical Method:** 14,504.1**Analytical Date:** 10/27/10 11:58**Analyst:** SH**Extraction Date:** 10/27/10 10:00

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG439676-1					
1,2-Dibromoethane	ND		ug/l	0.010	--
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--

Lab Control Sample Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG438822-5								
Methylene chloride	100		-		1-221	-		30
1,1-Dichloroethane	110		-		59-155	-		30
Chloroform	107		-		51-138	-		30
Carbon tetrachloride	119		-		70-140	-		30
1,2-Dichloropropane	105		-		1-210	-		30
Dibromochloromethane	113		-		53-149	-		30
1,1,2-Trichloroethane	108		-		52-150	-		30
2-Chloroethylvinyl ether	99		-		1-305	-		30
Tetrachloroethene	120		-		64-148	-		30
Chlorobenzene	85		-		37-160	-		30
Trichlorofluoromethane	114		-		17-181	-		30
1,2-Dichloroethane	112		-		49-155	-		30
1,1,1-Trichloroethane	110		-		52-162	-		30
Bromodichloromethane	113		-		35-155	-		30
trans-1,3-Dichloropropene	108		-		17-183	-		30
cis-1,3-Dichloropropene	103		-		1-227	-		30
Bromoform	96		-		45-169	-		30
1,1,2,2-Tetrachloroethane	92		-		46-157	-		30
Benzene	99		-		37-151	-		30
Toluene	102		-		47-150	-		30
Ethylbenzene	90		-		37-162	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG438822-5								
Chloromethane	193		-		1-273	-		30
Bromomethane	113		-		1-242	-		30
Vinyl chloride	125		-		1-251	-		30
Chloroethane	112		-		14-230	-		30
1,1-Dichloroethene	119		-		1-234	-		30
trans-1,2-Dichloroethene	110		-		54-156	-		30
cis-1,2-Dichloroethene	96		-		60-140	-		30
Trichloroethene	99		-		71-157	-		30
1,2-Dichlorobenzene	92		-		18-190	-		30
1,3-Dichlorobenzene	91		-		59-156	-		30
1,4-Dichlorobenzene	93		-		18-190	-		30
p/m-Xylene	90		-		40-160	-		30
o-Xylene	83		-		40-160	-		30
XYLENE (TOTAL)	88		-		40-160	-		30
Styrene	81		-		40-160	-		30
Acetone	109		-		40-160	-		30
Carbon disulfide	106		-		40-160	-		30
2-Butanone	104		-		40-160	-		30
Vinyl acetate	107		-		40-160	-		30
4-Methyl-2-pentanone	111		-		40-160	-		30
2-Hexanone	113		-		40-160	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG438822-5								
Acrolein	105		-		40-160	-		30
Acrylonitrile	112		-		40-160	-		30
Dibromomethane	87		-		70-130	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	101				80-120
Fluorobenzene	97				80-120
4-Bromofluorobenzene	99				80-120

Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG439676-2								
1,2-Dibromoethane	127		-		70-130	-		20
1,2-Dibromo-3-chloropropane	128		-		70-130	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-3 QC Sample: L1016610-02 Client ID: MS Sample												
Methylene chloride	ND	20	22	109	-	-	-	-	1-221	-	-	30
1,1-Dichloroethane	ND	20	26	128	-	-	-	-	59-155	-	-	30
Chloroform	ND	20	23	116	-	-	-	-	51-138	-	-	30
Carbon tetrachloride	ND	20	27	133	-	-	-	-	70-140	-	-	30
1,2-Dichloropropane	ND	20	24	118	-	-	-	-	1-210	-	-	30
Dibromochloromethane	ND	20	23	115	-	-	-	-	53-149	-	-	30
1,1,2-Trichloroethane	ND	20	21	107	-	-	-	-	52-150	-	-	30
2-Chloroethylvinyl ether	ND	20	19	94	-	-	-	-	1-305	-	-	30
Tetrachloroethene	ND	20	24	118	-	-	-	-	64-148	-	-	30
Chlorobenzene	ND	20	17	84	-	-	-	-	37-160	-	-	30
Trichlorofluoromethane	ND	20	26	129	-	-	-	-	17-181	-	-	30
1,2-Dichloroethane	ND	20	25	125	-	-	-	-	49-155	-	-	30
1,1,1-Trichloroethane	ND	20	25	126	-	-	-	-	52-162	-	-	30
Bromodichloromethane	ND	20	23	116	-	-	-	-	35-155	-	-	30
trans-1,3-Dichloropropene	ND	20	23	114	-	-	-	-	17-183	-	-	30
cis-1,3-Dichloropropene	ND	20	21	104	-	-	-	-	1-227	-	-	30
Bromoform	ND	20	19	94	-	-	-	-	45-169	-	-	30
1,1,2,2-Tetrachloroethane	ND	20	18	92	-	-	-	-	46-157	-	-	30
Benzene	ND	20	22	112	-	-	-	-	35-151	-	-	30
Toluene	ND	20	21	105	-	-	-	-	47-150	-	-	30
Ethylbenzene	ND	20	19	94	-	-	-	-	37-162	-	-	30

Matrix Spike Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-3 QC Sample: L1016610-02 Client ID: MS Sample												
Chloromethane	ND	20	42	209		-	-		1-273	-		30
Bromomethane	ND	20	27	137		-	-		1-242	-		30
Vinyl chloride	ND	20	30	150		-	-		1-251	-		30
Chloroethane	ND	20	26	128		-	-		14-230	-		30
1,1-Dichloroethene	ND	20	27	134		-	-		1-234	-		30
trans-1,2-Dichloroethene	ND	20	24	120		-	-		54-156	-		30
cis-1,2-Dichloroethene	ND	20	21	103		-	-		60-140	-		30
Trichloroethene	ND	20	21	105		-	-		71-157	-		30
1,2-Dichlorobenzene	ND	20	18	89		-	-		18-190	-		30
1,3-Dichlorobenzene	ND	20	17	86		-	-		59-156	-		30
1,4-Dichlorobenzene	ND	20	18	90		-	-		18-190	-		30
p/m-Xylene	ND	40	37	92		-	-		40-160	-		30
o-Xylene	ND	20	17	85		-	-		40-160	-		30
XYLENE (TOTAL)	ND	60	54	90		-	-		40-160	-		30
Styrene	ND	20	16	82		-	-		40-160	-		30
Acetone	ND	50	53	107		-	-		40-160	-		30
Carbon disulfide	ND	20	23	116		-	-		40-160	-		30
2-Butanone	ND	50	56	112		-	-		40-160	-		30
Vinyl acetate	ND	40	49	123		-	-		40-160	-		30
4-Methyl-2-pentanone	ND	50	52	104		-	-		40-160	-		30
2-Hexanone	ND	50	55	110		-	-		40-160	-		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** BRADFORD & BIGELOW**Project Number:** 991001.1**Lab Number:** L1016708**Report Date:** 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-3 QC Sample: L1016610-02 Client ID: MS Sample												
Acrolein	ND	40	12	31	Q	-	-		40-160	-		30
Acrylonitrile	ND	40	55	139		-	-		40-160	-		30
Dibromomethane	ND	20	18	92		-	-			-		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
4-Bromofluorobenzene	98				80-120
Fluorobenzene	103				80-120
Pentafluorobenzene	99				80-120

Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439676-3 QC Sample: L1016599-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.251	0.310	124		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.251	0.297	119		-	-		70-130	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-4 QC Sample: L1016610-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-4 QC Sample: L1016610-02 Client ID: DUP Sample					
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene	ND	ND	ug/l	NC	30
o-xylene	ND	ND	ug/l	NC	30
Xylene (Total)	ND	ND	ug/l	NC	30
Styrene	ND	ND	ug/l	NC	30
Acetone	ND	ND	ug/l	NC	30
Carbon disulfide	ND	ND	ug/l	NC	30

Lab Duplicate Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438822-4 QC Sample: L1016610-02 Client ID: DUP Sample					
2-Butanone	ND	ND	ug/l	NC	30
Vinyl acetate	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone	ND	ND	ug/l	NC	30
2-Hexanone	ND	ND	ug/l	NC	30
Acrolein	ND	ND	ug/l	NC	30
Acrylonitrile	ND	ND	ug/l	NC	30
Dibromomethane	ND	ND	ug/l	NC	30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	92		95		80-120
Fluorobenzene	99		102		80-120
4-Bromofluorobenzene	99		103		80-120

SEMIVOLATILES

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS**

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 10/28/10 17:14
Analyst: JB

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/10 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	50	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	5.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	50	--	1
2,4-Dinitrotoluene	ND		ug/l	6.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	5.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	5.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	5.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	30	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	5.0	--	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	20	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	7.0	--	1
Dibenzofuran	ND		ug/l	5.0	--	1

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS****Lab ID:** L1016708-01**Date Collected:** 10/22/10 10:00**Client ID:** INF-W1-102210**Date Received:** 10/22/10**Sample Location:** NEWBURYPORT, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
n-Nitrosodimethylamine	ND		ug/l	50	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
P-Chloro-M-Cresol	ND		ug/l	5.0	--	1
2-Chlorophenol	ND		ug/l	6.0	--	1
2,4-Dichlorophenol	ND		ug/l	10	--	1
2,4-Dimethylphenol	ND		ug/l	10	--	1
2-Nitrophenol	ND		ug/l	20	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	30	--	1
4,6-Dinitro-o-cresol	ND		ug/l	20	--	1
Phenol	ND		ug/l	7.0	--	1
2-Methylphenol	ND		ug/l	6.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	10	--	1
Carbazole	ND		ug/l	5.0	--	1
Pyridine	ND		ug/l	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	93		33-120

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS**

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water
Analytical Method: 1,8270C-SIM
Analytical Date: 10/28/10 07:06
Analyst: AS

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/10 11:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS****Lab ID:** L1016708-01**Date Collected:** 10/22/10 10:00**Client ID:** INF-W1-102210**Date Received:** 10/22/10**Sample Location:** NEWBURYPORT, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	45		15-120
2,4,6-Tribromophenol	40		10-120
4-Terphenyl-d14	88		33-120

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 10/29/10 12:52
 Analyst: JB

Extraction Method: EPA 3510C
 Extraction Date: 10/26/10 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG439433-1					
Acenaphthene	ND		ug/l	5.0	--
Benzidine	ND		ug/l	50	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	5.0	--
2-Chloronaphthalene	ND		ug/l	6.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
3,3'-Dichlorobenzidine	ND		ug/l	50	--
2,4-Dinitrotoluene	ND		ug/l	6.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	5.0	--
Fluoranthene	ND		ug/l	5.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	5.0	--
4-Bromophenyl phenyl ether	ND		ug/l	5.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	10	--
Hexachlorocyclopentadiene	ND		ug/l	30	--
Hexachloroethane	ND		ug/l	5.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	5.0	--
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--



Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 10/29/10 12:52
 Analyst: JB

Extraction Method: EPA 3510C
 Extraction Date: 10/26/10 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG439433-1					
Benzo(a)anthracene	ND		ug/l	5.0	--
Benzo(a)pyrene	ND		ug/l	5.0	--
Benzo(b)fluoranthene	ND		ug/l	5.0	--
Benzo(k)fluoranthene	ND		ug/l	5.0	--
Chrysene	ND		ug/l	5.0	--
Acenaphthylene	ND		ug/l	5.0	--
Anthracene	ND		ug/l	5.0	--
Benzo(ghi)perylene	ND		ug/l	5.0	--
Fluorene	ND		ug/l	5.0	--
Phenanthrene	ND		ug/l	5.0	--
Dibenzo(a,h)anthracene	ND		ug/l	5.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	7.0	--
Pyrene	ND		ug/l	5.0	--
Aniline	ND		ug/l	20	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	7.0	--
Dibenzofuran	ND		ug/l	5.0	--
2-Methylnaphthalene	ND		ug/l	5.0	--
n-Nitrosodimethylamine	ND		ug/l	50	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
P-Chloro-M-Cresol	ND		ug/l	5.0	--
2-Chlorophenol	ND		ug/l	6.0	--
2,4-Dichlorophenol	ND		ug/l	10	--
2,4-Dimethylphenol	ND		ug/l	10	--
2-Nitrophenol	ND		ug/l	20	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	30	--
4,6-Dinitro-o-cresol	ND		ug/l	20	--



Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 10/29/10 12:52
 Analyst: JB

Extraction Method: EPA 3510C
 Extraction Date: 10/26/10 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG439433-1					
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	7.0	--
2-Methylphenol	ND		ug/l	6.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	10	--
Carbazole	ND		ug/l	5.0	--
Pyridine	ND		ug/l	50	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	79		33-120

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C-SIM
 Analytical Date: 10/27/10 10:27
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 10/26/10 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG439435-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**Method Blank Analysis**
Batch Quality ControlAnalytical Method: 1,8270C-SIM
Analytical Date: 10/27/10 10:27
Analyst: ASExtraction Method: EPA 3510C
Extraction Date: 10/26/10 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG439435-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	102		33-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG439433-2 WG439433-3								
Acenaphthene	64		74		37-111	14		30
1,2,4-Trichlorobenzene	50		62		39-98	21		30
2-Chloronaphthalene	67		80		40-140	18		30
1,2-Dichlorobenzene	51		64		40-140	23		30
1,4-Dichlorobenzene	49		60		36-97	20		30
2,4-Dinitrotoluene	83		95		24-96	13		30
2,6-Dinitrotoluene	72		82		40-140	13		30
Fluoranthene	86		96		40-140	11		30
4-Chlorophenyl phenyl ether	72		84		40-140	15		30
n-Nitrosodi-n-propylamine	59		68		41-116	14		30
Butyl benzyl phthalate	85		98		40-140	14		30
Anthracene	77		86		40-140	11		30
Pyrene	80		91		26-127	13		30
P-Chloro-M-Cresol	70		80		23-97	13		30
2-Chlorophenol	56		67		27-123	18		30
2-Nitrophenol	58		68		30-130	16		30
4-Nitrophenol	50		59		10-80	17		30
2,4-Dinitrophenol	72		83		20-130	14		30
Pentachlorophenol	92		99		9-103	7		30
Phenol	29		35		12-110	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG439433-2 WG439433-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	39		48		21-120
Phenol-d6	28		33		10-120
Nitrobenzene-d5	54		64		23-120
2-Fluorobiphenyl	55		59		15-120
2,4,6-Tribromophenol	72		82		10-120
4-Terphenyl-d14	76		83		33-120

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG439435-2 WG439435-3

Acenaphthene	55		73		37-111	28	40
2-Chloronaphthalene	57		83		40-140	37	40
Fluoranthene	78		102		40-140	27	40
Anthracene	75		90		40-140	18	40
Pyrene	74		97		26-127	27	40
Pentachlorophenol	74		91		9-103	21	40

Lab Control Sample Analysis**Batch Quality Control****Project Name:** BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG439435-2 WG439435-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	27		55		21-120
Phenol-d6	23		40		10-120
Nitrobenzene-d5	41		73		23-120
2-Fluorobiphenyl	40		58		15-120
2,4,6-Tribromophenol	78		94		10-120
4-Terphenyl-d14	85		109		33-120

PCBS

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**SAMPLE RESULTS**

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 10/29/10 00:47
Analyst: SS

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 10/27/10 00:48
Cleanup Method1: EPA 3665A
Cleanup Date1: 10/28/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 10/28/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Polychlorinated Biphenyls by GC - Westborough Lab

Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	42		30-150	A

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Analytical Method: 5,608
 Analytical Date: 10/28/10 23:58
 Analyst: SS

Extraction Method: EPA 608
 Extraction Date: 10/27/10 00:48
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 10/28/10
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 10/28/10

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG439598-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439598-3 QC Sample: L1016708-01 Client ID: INF-W1-102210

Aroclor 1016	ND	2	1.94	97		-	-		40-126	-		30
Aroclor 1260	ND	2	2.16	108		-	-		40-127	-		30

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	77				30-150	A
Decachlorobiphenyl	30				30-150	A

Lab Control Sample Analysis**Batch Quality Control****Project Name:** BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG439598-2								
Aroclor 1016	95		-		40-126	-		30
Aroclor 1260	101		-		40-127	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83				30-150	A
Decachlorobiphenyl	63				30-150	A

Lab Duplicate Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439598-4 QC Sample: L1016708-01 Client ID: INF-W1-102210						
Aroclor 1016	ND	ND	ug/l	NC		30
Aroclor 1221	ND	ND	ug/l	NC		30
Aroclor 1232	ND	ND	ug/l	NC		30
Aroclor 1242	ND	ND	ug/l	NC		30
Aroclor 1248	ND	ND	ug/l	NC		30
Aroclor 1254	ND	ND	ug/l	NC		30
Aroclor 1260	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		78		30-150	A
Decachlorobiphenyl	42		57		30-150	A

METALS

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

SAMPLE RESULTS

Lab ID: L1016708-01

Date Collected: 10/22/10 10:00

Client ID: INF-W1-102210

Date Received: 10/22/10

Sample Location: NEWBURYPORT, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0012		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Arsenic, Total	0.0294		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Cadmium, Total	0.0003		mg/l	0.0002	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Chromium, Total	0.0310		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Copper, Total	0.0175		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Iron, Total	19		mg/l	0.05	--	1	10/26/10 12:09	10/29/10 12:55	EPA 3005A	19,200.7	TD
Lead, Total	0.0074		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	--	1	10/26/10 16:32	10/27/10 11:24	EPA 245.1	3,245.1	EZ
Nickel, Total	0.0245		mg/l	0.0005	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Selenium, Total	0.001		mg/l	0.001	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM
Zinc, Total	0.0744		mg/l	0.0050	--	1	10/26/10 13:00	10/28/10 00:01	EPA 3005A	1,6020	BM



Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG439470-1									
Iron, Total	ND	mg/l	0.05	--	1	10/26/10 12:09	10/29/10 12:39	19,200.7	TD

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG439475-1									
Antimony, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Arsenic, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Cadmium, Total	ND	mg/l	0.0002	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Chromium, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Copper, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Lead, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Nickel, Total	ND	mg/l	0.0005	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Selenium, Total	ND	mg/l	0.001	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Silver, Total	ND	mg/l	0.0004	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM
Zinc, Total	ND	mg/l	0.0050	--	1	10/26/10 13:00	10/27/10 19:53	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG439530-1									
Mercury, Total	ND	mg/l	0.0002	--	1	10/26/10 16:32	10/27/10 11:15	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.1



Lab Control Sample Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG439470-2								
Iron, Total	96		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG439475-2								
Antimony, Total	97		-		80-120	-		
Arsenic, Total	97		-		80-120	-		
Cadmium, Total	105		-		80-120	-		
Chromium, Total	95		-		80-120	-		
Copper, Total	102		-		80-120	-		
Lead, Total	107		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Selenium, Total	97		-		80-120	-		
Silver, Total	96		-		80-120	-		
Zinc, Total	104		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG439530-2								
Mercury, Total	115		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439470-4 QC Sample: L1016249-01 Client ID: MS Sample												
Iron, Total	0.24	1	1.2	96		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439475-4 QC Sample: L1016790-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4728	94		-	-		80-120	-		20
Arsenic, Total	ND	0.12	0.1142	95		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0522	102		-	-		80-120	-		20
Chromium, Total	0.0009	0.2	0.1856	92		-	-		80-120	-		20
Copper, Total	0.0130	0.25	0.2594	98		-	-		80-120	-		20
Lead, Total	ND	0.51	0.5400	106		-	-		80-120	-		20
Nickel, Total	0.0024	0.5	0.4936	98		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.115	96		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0480	96		-	-		80-120	-		20
Zinc, Total	0.0323	0.5	0.5372	101		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439530-4 QC Sample: L1016708-01 Client ID: INF-W1-102210												
Mercury, Total	ND	0.001	0.0012	121		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439470-3 QC Sample: L1016249-01 Client ID: DUP Sample						
Iron, Total	0.24	0.24	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439475-3 QC Sample: L1016790-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0009	0.0009	mg/l	1		20
Copper, Total	0.0130	0.0131	mg/l	1		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.0024	0.0023	mg/l	0		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0323	0.0321	mg/l	1		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439530-3 QC Sample: L1016708-01 Client ID: INF-W1-102210						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

SAMPLE RESULTS

Lab ID: L1016708-01
Client ID: INF-W1-102210
Sample Location: NEWBURYPORT, MA
Matrix: Water

Date Collected: 10/22/10 10:00
Date Received: 10/22/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	260		mg/l	10	NA	2	-	10/25/10 12:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	10/26/10 16:00	10/28/10 11:39	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/22/10 20:30	30,4500CL-D	JW
Chloride	310		mg/l	10	--	10	-	10/25/10 17:41	1,9251	LA
TPH	ND		mg/l	4.40	--	1.1	10/27/10 14:30	10/28/10 15:00	74,1664A	JO
Phenolics, Total	ND		mg/l	0.15	--	5	10/29/10 10:45	10/29/10 14:13	4,420.1	TP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	10/22/10 19:45	10/22/10 19:45	30,3500CR-D	AT



Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439016-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/22/10 20:30	30,4500CL-D	JW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439137-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	10/25/10 12:50	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439218-2										
Chloride	ND		mg/l	1.0	--	1	-	10/25/10 18:39	1,9251	LA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439341-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	10/22/10 19:45	10/22/10 19:45	30,3500CR-D	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439496-2										
Cyanide, Total	ND		mg/l	0.005	--	1	10/26/10 16:00	10/28/10 11:28	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439748-2										
TPH	ND		mg/l	4.00	--	1	10/27/10 14:30	10/28/10 15:00	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG440222-1										
Phenolics, Total	ND		mg/l	0.03	--	1	10/29/10 10:45	10/29/10 14:09	4,420.1	TP

Lab Control Sample Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439016-2								
Chlorine, Total Residual	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439218-1								
Chloride	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439341-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439496-1								
Cyanide, Total	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439748-1								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG440222-2								
Phenolics, Total	104		-		82-111	-		12

Matrix Spike Analysis

Batch Quality Control

Project Name: BRADFORD & BIGELOW

Lab Number: L1016708

Project Number: 991001.1

Report Date: 10/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439218-3 QC Sample: L1016706-06 Client ID: MS Sample												
Chloride	232	20	254	110		-	-		58-140	-		7
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439341-3 QC Sample: L1016708-01 Client ID: INF-W1-102210												
Chromium, Hexavalent	ND	0.1	0.106	106		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439496-3 QC Sample: L1016228-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.203	102		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439748-3 QC Sample: L1016871-02 Client ID: MS Sample												
TPH	ND	21.3	16.4	77		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG440222-3 QC Sample: L1016675-02 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.70	88		-	-		77-124	-		12

Lab Duplicate Analysis Batch Quality Control

Project Name: BRADFORD & BIGELOW

Project Number: 991001.1

Lab Number: L1016708

Report Date: 10/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439016-3 QC Sample: L1016708-01 Client ID: INF-W1-102210						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439137-2 QC Sample: L1016491-01 Client ID: DUP Sample						
Solids, Total Suspended	170	170	mg/l	0		32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439218-4 QC Sample: L1016706-06 Client ID: DUP Sample						
Chloride	232	228	mg/l	2		7
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439341-4 QC Sample: L1016708-01 Client ID: INF-W1-102210						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439496-4 QC Sample: L1016228-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG439748-4 QC Sample: L1016871-01 Client ID: DUP Sample						
TPH	ND	5.15	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG440222-4 QC Sample: L1016762-03 Client ID: DUP Sample						
Phenolics, Total	0.99	0.94	mg/l	5		12

Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1016708-01A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	504(14)
L1016708-01B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	504(14)
L1016708-01C	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	624(7)
L1016708-01D	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	624(7)
L1016708-01E	Plastic 250ml NaOH preserved	A	>12	2	Y	Absent	TCN-4500(14)
L1016708-01F	Plastic 500ml unpreserved	A	7	2	Y	Absent	HEXCR-3500(1)
L1016708-01G	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1016708-01H	Plastic 500ml unpreserved	A	7	2	Y	Absent	CL-9251(28),TRC-4500(1)
L1016708-01I	Plastic 1000ml unpreserved	A	7	2	Y	Absent	TSS-2540(7)
L1016708-01J	Amber 1000ml H2SO4 preserved	A	<2	2	Y	Absent	TPHENOL-420(28)
L1016708-01K	Amber 1000ml HCl preserved	A	N/A	2	Y	Absent	TPH-1664(28)
L1016708-01L	Amber 1000ml HCl preserved	A	N/A	2	Y	Absent	TPH-1664(28)
L1016708-01M	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1016708-01N	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1016708-01O	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	PCB-608(7)
L1016708-01P	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	PCB-608(7)
L1016708-01R	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	-
L1016708-01S	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	-
L1016708-01Y	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1016708-01Z	Amber 1000ml unpreserved	A	7	2	Y	Absent	8270TCL(7),8270TCL-SIM(7)

Container Comments

L1016708-01P

*Values in parentheses indicate holding time in days



Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

GLOSSARY

Acronyms

EPA	· Environmental Protection Agency.
LCS	· Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	· Laboratory Control Sample Duplicate: Refer to LCS.
MDL	· Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	· Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	· Matrix Spike Sample Duplicate: Refer to MS.
NA	· Not Applicable.
NC	· Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	· Not Ignitable.
RL	· Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	· Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	· Spectra identified as "Aldol Condensation Product".
B	· The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
D	· Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	· Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
H	· The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	· The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
P	· The RPD between the results for the two columns exceeds the method-specified criteria.
Q	· The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
R	· Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: BRADFORD & BIGELOW**Lab Number:** L1016708**Project Number:** 991001.1**Report Date:** 10/30/10***Data Qualifiers*****RE** - Analytical results are from sample re-extraction.**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).**ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: BRADFORD & BIGELOW
Project Number: 991001.1

Lab Number: L1016708
Report Date: 10/30/10

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

Non-Potable Water

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO₃-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. *Organic Parameters:* 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH₃-H, 4500NH₃-E, 4500NO₂-B, 4500P-E, 4500-S₂-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. *Organic Parameters:* SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. *Organic Parameters:* SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO₃-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. *Organic Parameters:* 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO₃-F, 4500NO₂-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B₅+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH₃-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. *Organic Parameters:* SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. *Organic Parameters:* SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO₃-F, 2540C, EPA 120.1, SM 2510B. *Organic Parameters:* EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH₃-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO₃-F, 4500-NO₂-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. *Organic Parameters:* EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. *Organic Parameters:* EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. NELAP Accredited.

Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. *Organic Parameters:* 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. *Organic Parameters:* EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. *Organic Parameters:* EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO₄-E, 426C, 4500NH₃-B, 4500NH₃-H, 4500NO₃-F, 4500NO₂-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S₂-AD, 3005A, 3015, 9010B, 9030B. *Organic Parameters:* EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, *Organic Parameters:* EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

OCT - 5 2010

Timothy Montague
Ransom Environmental Consultants, Inc.
Brown's Wharf
Newburyport, Massachusetts 01950

Re: Bradford & Bigelow, Inc.

Dear Mr. Montague,

This is in response to your letter dated October 4, 2010 requesting information on the presence of species listed by NOAA's National Marine Fisheries Service (NMFS) in the vicinity of remediation activities to be located at the Bradford & Bigelow property located at 3 Perkins Way, Newburyport, Massachusetts.

While several species of listed whales and sea turtles occur seasonally in waters off the Massachusetts coast and populations of the federally endangered shortnose sturgeon occur in the Connecticut and Merrimack Rivers, no listed species are known to occur in the vicinity of your proposed project. As such, NMFS Protected Resources Division does not intend to offer additional comments on this proposal. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. If you have any questions regarding these comments, please contact Danielle Palmer at (978) 282-8468.

Sincerely,

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

File Code: See 7 no species present 2010



RECEIVED ML

OCT 5 2010

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

MASS. HIST. COMM

⊗ 39640

APPENDIX A
MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Badford & Bigelow (formerly GI Plaster)
Location / Address: 3 Perkins Way
City / Town: Newburyport, MA
Project Proponent
Name: Timothy Montague - Ransom Environmental
Address: Brown's Wharf
City/Town/Zip/Telephone: Newburyport, MA 01950 (978) 465-1822

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name

U.S. EPA

Type of License or funding (specify)

Notice of Intent

Project Description (narrative):

See Attached

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

No

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

No

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

5/31/96 (Effective 7/1/93) - corrected

950 CMR - 275

12-39640

[Signature] 10/12/10
Jonathan K. Patton Date
Archaeologist / Preservation Planner
Massachusetts Historical Commission
cc: Lois K. Adams, EPA



Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

November 03, 2010

Timothy Montague
Ransom Environmental Consultants, Inc.
400 Commercial St
Suite 404
Portland ME 04101

RE: Project Location: 3 Perkins Way
Town: NEWBURYPORT
NHESP Tracking No.: 10-28706

To Whom It May Concern:

Thank you for contacting the Natural Heritage and Endangered Species Program ("NHESP") of the MA Division of Fisheries & Wildlife for information regarding state-listed rare species in the vicinity of the above referenced site.

Based on the information provided, the NHESP has determined that at this time the site is not mapped as Priority or Estimated Habitat. The NHESP database does not contain any state-listed species records in the immediate vicinity of this site.

This evaluation is based on the most recent information available in the NHESP database, which is constantly being expanded and updated through ongoing research and inventory. If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6361.

Sincerely,

Thomas W. French, Ph.D.
Assistant Director

www.masswildlife.org



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office

70 Commercial Street, Suite 300

Concord, New Hampshire 03301-5087

<http://www.fws.gov/northeast/newenglandfieldoffice>



November 4, 2010

Reference:	<u>Project</u>	<u>Location</u>
	NOI, NPDES remediation general permit	Newburyport, MA

Timothy R. Montague
Ransom Environmental Consultants, Inc.
Brown's Wharf
Newburyport, MA 01950

Dear Mr. Montague:

This responds to your recent correspondence requesting information on the presence of federally-listed and/or proposed endangered or threatened species in relation to the proposed activity(ies) referenced above.

Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required.

This concludes our review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

In order to curtail the need to contact this office in the future for updated lists of federally-listed or proposed threatened or endangered species and critical habitats, please visit the Endangered Species Consultation page on the New England Field Office's website:

www.fws.gov/newengland/endangeredspec-consultation.htm

In addition, there is a link to procedures that may allow you to conclude if habitat for a listed species is present in the project area. If no habitat exists, then no federally-listed species are present in the project area and there is no need to contact us for further consultation. If the above conclusion cannot be reached, further consultation with this office is advised. Information describing the nature

Timothy R. Montague
November 4, 2010

2

and location of the proposed activity that should be provided to us for further informal consultation can be found at the above-referenced site.

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

Sincerely yours,



Acting for Thomas R. Chapman
Supervisor
New England Field Office