



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

**5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL

November 17, 2010

William Forsyth, Superintendent
J.H. Lynch and Sons, Inc.
18 McCracken Road
Millbury, MA 01527

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG 910000. Worcester Crossing Phase C site located at Tobias Boland Way, Worcester, MA 01607, Worcester County. Authorization #MAG910468.

Dear Mr. Forsyth:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Madison Worcester Holdings, LLC, by the firm Tetra Tech, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants for which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the check list does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at:
<http://www.epa.gov/region1/npdes/mass.html#dgp>.

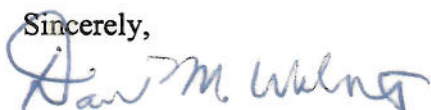
Please note also the following: (1) the list of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months, and (2) not having received the required dilution calculations with the NOI application, EPA is not able to verify the reported dilution. Using the latitude and longitude coordinates we determined that the discharge is at a considerably distance from

the Blackstone River discharge location you suggested. Based on this findings we have determined that the compliance limits for this discharge will be based on the 1-5 Dilution Factor Range (DFR) and not the 10.1 DFR you have reported. Therefore, the compliance limits for the metals copper of 5.2 ug/L, lead of 1.3 ug/L , nickel of 29 ug/L, selenium of 5 ug/L, zinc of 66.6 ug/L and iron of 1,000 ug/L, are required.

This general permit and authorization to discharge will expire on September 9, 2015. This project reportedly will terminate on July 31, 2012. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,



David M. Webster, Chief Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP
Ian S. Cannan, Tetra, Tech, Inc.

**2010 Remediation General Permit
Summary Of. Monitoring Parameters^[1]**

NPDES Permit Number:	MAG910468
Date Permit Issued:	November, 2010
Facility/Site Name:	Worcester Crossing Phase C
Facility/Site Address:	25 Tobias Boland Way, Worcester, MA 01607, Worcester County Name & Email address of Owner: Madison Worcester Holdings, LLC ; ;dpdowdle@earthlink.net; Phone n: 617.948.2525
Legal Name of Operator:	J.H. Lynch and Sons, Inc.
Operator contact name, title, and Address:	William Fotsythe, Superintendent, 18 McCracken Road, Millbury, MA 01527; Phone n: 508 756-6244 Email goswitt@jhllynch.com
Estimated Date of Completion:	July 31, 2012
Category and Sub-Category:	Category III- Contaminated Site Remediation, Sub-category B- Known Contaminated Sites
Receiving Water:	Drainage swale to Blackstone River

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/l ** Saltwater = 7.5 ug/l **/ Me#330.5/ML 20ug/L
	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l/ Me# 1664A/5.0mg/LmL
	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/l)/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
✓	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l /Me#8260C/ ML 10ug/L
✓	12.tert-Butyl Alcohol (TBA)	M.O. / Me#8260C/ ML 10ug/L, or

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
	(TertiaryButanol)	
✓	13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L) /Me#8260C/ ML 10ug/L
	14. Naphthalene ⁵	20 ug/l /Me#8260C/ ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/l /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/l /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/l /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/l - NH only /Me#8260C/ ML5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/l /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/l/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/l /Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/l/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/l/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/l /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only (ug/L) /Me#8260C/ ML 50ug/L
✓	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML50 ug/L
	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML50 ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML5ug/L,Me#604 &625/ML10ug/L
✓	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
✓	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
	a. Benzo(a) Anthracene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	b. Benzo(a) Pyrene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L,

	Metal parameter	Total Recoverable Metal Limit @ $H^{10} = 50$ mg/l CaCO₃ for discharges in Massachusetts (ug/l) 11			
		Freshwater	Saltwater		
	**				
✓	44. Copper **	5.2	3.7		
✓	45. Lead **	1.3	8.5		
	46. Mercury **	0.9	1.1		
✓	47. Nickel **	29	8.2		
✓	48. Selenium **	5	71		
	49. Silver	1.2	2.2		
✓	50. Zinc **	66.6	85.6		
✓	51. Iron	1,000			

	Other Parameters	Limit
	52. Instantaneous Flow	Site specific in CFS
	53. Total Flow	Site specific in CFS
✓	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA - Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in which case it is a Monthly Average Limit)
		Me#610/ML5ug/L & Me#625/ML5ug/L
	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	e. Chrysene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
	h. Acenaphthene	X/Me#8270D/ML5ug/L, Me#610/ML5ug /L & Me#625/ML5ug/L
	i. Acenaphthylene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	m. Fluorene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	n. Naphthalene ⁵	20 ug/l / Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	o. Phenanthrene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L / Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	Metal parameter	Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ¹¹			
		Freshwater	Saltwater		
	39. Antimony	5.6			
✓	40. Arsenic **	10	36		
	41. Cadmium **	0.2	8.9		
✓	42. Chromium III (trivalent) **	48.8	100		
	43. Chromium VI (hexavalent)	11.4	50.3		

- ¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
- ² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
- ³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
- ⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
- ⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
- ⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
- Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.*
- ⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
- ⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
- ⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
- ¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
- ¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, etc. not to exceed the DF=5.
- ¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
- ¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
- ¹⁴ Temperature sampling per Method 170.1



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November 2, 2010

Electronic Mail Submission (NPDES.Generalpermits@epa.gov)
U.S. Environmental Protection Agency
RGP-NOI Processing
Municipal Assistance Unit (CMU)
One Congress Street, Suite 1100
Boston, MA 02114-2023

**Re: Notice of Intent
NPDES Remediation General Permit
25 Tobias Boland Way
Worcester, MA 01607
RTN 2-0187**

Dear Sir or Madam:

On behalf of Madison Worcester Holdings, LLC, Tetra Tech, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP), Massachusetts General Permit Number MAG910000. This NOI was prepared in accordance with the requirements of the RGP as effective under Federal Register Volume 75, No. 174, September 9, 2010. And related guidance documents provided by the U.S. Environmental Protection Agency (EPA).

The signed and completed NOI form is attached to this letter. The following sections provide additional information in support of the NOI.

Site Information:

This NOI address the proposed discharge of treated water recovered during construction-related excavation dewatering at the above-referenced site during redevelopment activities. The Site is being redeveloped for retail use. The area subject to redevelopment is part of a 44-acre property, which prior to 2008 was improved by 6 industrial/commercial buildings with an aggregate area of approximately 350,000 square feet. The former buildings were demolished in August and September 2008 in association with preliminary redevelopment activities. The construction excavation dewatering activities associated with this NOI are primarily associated with construction of a proposed fuel station at a portion of the redevelopment area identified as "Phase C". A topographic map is provide showing the geographic location of the Site and a detailed



Site Plan is provided showing the location of the proposed construction dewatering activities and discharge location.

The Phase C redevelopment activities are being conducted under the Massachusetts Contingency Plan (MCP) under Release Tracking Number (RTN) 2-0187. The redevelopment activities are associated with a Phase IV Remedy Implementation Plan (RIP) which was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on July 26, 2010. It is noted that a Release Abatement Measure (RAM) Plan was also recently submitted under RTN 2-0187 for an adjacent parcel of land associated with the construction of a restaurant. This NPDES RGP authorization would apply only to discharges of excavation dewatering associated with the July 26, 2010 Phase IV RIP for construction of the fuel station and possibly with associated utilities.

Madison Worcester Holdings, LLC (Madison) as owner of the property. Madison has contracted J.H. Lynch and Sons, Inc. (Lynch) who will assume responsibility as the Operator under the NPDES RGP for this Site. As operator, Lynch may employ subcontractors to facilitate different aspects of the project including dewatering, water treatment, and compliance sampling/reporting. However, as a general contractor, Lynch will retain overall control of the design and operation of structures and control systems for the Site.

Treatment System Design:

Water will be recovered from sumps or temporary well points within or proximate to excavation areas. The discharges are expected to be intermittent, with likely increased flows during initial drawdown of static water levels and decreased flows following stabilization at the depressed water level. To minimize pumping of highly turbid waters, sumps or well points with a stone or sand filter pack and/or filtration fabric will be utilized as feasible.

A representative groundwater monitoring well within the proposed excavation area was sampled on October 19, 2010 using a submersible pump under conditions expected to be representative of the proposed dewatering effort. The samples were analyzed at Alpha Analytical of Westborough, Massachusetts for the NPDES RGP parameters. A summary of the laboratory analysis results and the laboratory certificates of analysis are appended to this submittal. Laboratory analysis of the proposed influent to the treatment system detected total suspended solids (TSS), methyl-tert-butyl ether (MtBE), tert-amyl methyl ether (TAME), bis(2-ethylhexyl)phthalate, and metals (arsenic, chromium, copper, iron, lead, nickel, selenium, and zinc).



Water from excavation areas will be pumped to a temporary mobile treatment system. The temporary treatment system will be mobilized to the Site and will be able to be re-located on-site as necessary to keep the treatment system in near proximity to excavation dewatering areas. The recovered water will require treatment to remove potential contaminants including TSS, volatile organic compounds (VOCs), bis(2-ethylhexyl)phthalate and total metals. The treatment system will consist of settlement in one or more fractionation tanks (approximately 21,000 gallons each), settlement may be added by the use of Stormclear flocculate (MSDS attached). Following settlement the water will undergo filtration through bag filters with a minimum aperture size of 25-microns to remove excess solids that pass through settlement, and finally adsorption using granular activated carbon (GAC). The proposed treatment system will be capable of pumping an average flow rate of 100 gallons per minute (gpm). The maximum flow rate expected to be required for excavation dewatering purposes is 145 gpm however, this is not a design maximum for the proposed treatment system. The design maximum flow rate of the proposed treatment system is 150 gpm. The treatment system will have sample ports to collect water samples from the system influent, midpoint (between GAC units) and effluent. A flow meter (totalizer and instantaneous flow meter) will also be installed at the effluent of the treatment system. A schematic of the proposed treatment system is attached to this submittal.

The water will be discharged to the on-site stormwater drainage system via available inlets (i.e. catchbasins). The project is being conducted under the NPDES Construction General Permit and includes a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes treatments of the stormwater system for water quality including: regular parking lot sweepings, deep sump catch basins with trap hoods, and Vortech water quality units. The stormwater drainage system discharges to the Blackstone River (a Class B water) proximate to the Site.

ESA and NHPA Eligibility

During the NPDES permitting associated with the Construction General Permit, the Site Engineer (Bohler Engineering, P.C.) communicated with the U.S. Department of the Interior, Fish and Wildlife Service (FWS), New England Field Office and the Massachusetts Historical Commission. This eligibility review is considered adequate to comply with Parts I.A.4 of the NPDES RGP program requirements. A copy of the letters received from regulatory authorities is attached to this submittal.

Correspondence from the U.S. FWS indicates that there are no federally-listed threatened or proposed, threatened or endangered species or critical habitat under their jurisdiction



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known to occur in the project area. Accordingly the facility meets Criterion A for eligibility under the NPDES RGP.

Based on our review of correspondence from the Massachusetts Historical Commission and subsequent information provided to us by the owner we believe the project meets the eligibility criteria 3 under Appendix VII of the NPDES RGP. The project does involve construction of new buildings within and/or proximate to a historic district however, the historic properties that were located in the path of the discharge were demolished during initial site redevelopment activities and will not be affected by the proposed dewatering or discharge operations.

Summary and Request for Coverage under NPDES RGP

In consideration of the nature of this discharge and the requirements of the NPDES RGP, it is our opinion that the subject discharge is eligible for coverage under the NPDES RGP. Madison and Lynch request coverage under the NPDES RGP for the discharge of treated water recovered from excavations to the surface waters of the Blackstone River.

The attached NOI form and this letter provide the requisite information pertaining to this NOI and the appropriate signature of the facility Operator (Lynch). In accordance with Part 1.B. of the NPDES RGP, Lynch is considered the "Operator" of the subject facility and has assumed responsibility under federal, state and/or local regulations. Tetra Tech has been subcontracted to the owner as an environmental consultant to aid in the preparation of this NOI. However, additional "Operators" may be designated in the future and EPA will be notified of such an administrative change.

Pending authorization from the EPA, discharge of treated water is scheduled to begin on or about November 15, 2010. It is expected that discharge will be completed within a few months however, redevelopment activities are scheduled to extend until July 2012 and it may be necessary to keep this NPDES RGP authorization active during that period.

Please contact the undersigned at (508) 903-2000 if you have any questions regarding this NOI.

Very truly yours,

Ian S. Cannan, CHMM
Sr. Project Scientist

William Phelps
Project Manager

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

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

a) Name of facility/site:		Worcester Crossing Phase C		Facility/site mailing address:	
Location of facility/site:		Facility SIC code(s):		Street:	
longitude:	71.7914	1794		25 Tobias Boland Way	
latitude:	42.2320	NAD83			
b) Name of facility/site owner:					
Email address of facility/site owner:		Town:			
dpdowdle@earthlink.net		Worcester			
Telephone no. of facility/site owner:		State:		Zip:	
617-948-2525		MA		01607	
Fax no. of facility/site owner:		County:			
		Worcester			
Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☒ 4. Other ☐ if so, describe:					
Madison Worcester Holdings, LLC					
Address of owner (if different from site):					
Street: 20 Park Plaza					
Town: Boston		State: MA		Zip: 02116	
				County: Suffolk	
c) Legal name of operator:					
J.H. Lynch and Sons, Inc.		Operator telephone no.:		(508) 756-6244	
		Operator fax no.:		Operator email: goswitt@jhlynch.com	
Operator contact name and title: William Forsythe					
Address of operator (if different from owner):		Street: 18 McCracken Road			
Town: Millbury		State: MA		Zip: 01527	
				County: Worcester	

d) Check Y for "yes" or N for "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Y ☐ N ☒ if Y, number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y ☐ N ☒ if Y, date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ☒ N ☐ 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ☒ N ☐	
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ☒ N ☐ If Y, please list: 1. site identification # assigned by the state of NH or MA: RTN 2-0187 2. permit or license # assigned: Post Class C RAO Phase IV RIP 3. state agency contact information: name, location, and telephone number: MassDEP, BWSC Central Regional Office (508) 792-7650 Joseph Laughton 627 Main St., Worcester, MA	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: MAR100000 4. Individual NPDES permit? Y ☐ N ☒ if Y, number: 5. any other water quality related individual or general permit? Y ☒ N ☐ if Y, number: MassDEP 349-988
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 I - Petroleum Related Site Remediation II - Non Petroleum Site Remediation III - Contaminated Construction Dewatering	Activity Sub-Category A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐ A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐ A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☒

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

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
construction related excavation dewatering from former industrial site with a history of petroleum, SVOCs and metals related contamination in soil and groundwater.	
b) Provide the following information about each discharge:	
1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow 0.32 Is maximum flow a design value? Y ☐ N ☒ Average flow (include units) 0.22 Is average flow a design value or estimate? estimate
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat 42.2320 long -71.7914	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.
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 11/1/2010 end 7/31/2012	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s) see attached drawing	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	grab	2540D	5.0	22000	17.4	22000	12
2. Total Residual Chlorine (TRC)		☒	☐	1	grab	4500CL-D	20	0	0	0	0
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	1664A	4.40	0	0	0	0
4. Cyanide (CN)	57125	☒	☐	1	grab	9014	5	0	0	0	0
5. Benzene (B)	71432	☒	☐	1	grab	8260B	1.0	0	0	0	0
6. Toluene (T)	108883	☒	☐	1	grab	8260B	1.0	0	0	0	0
7. Ethylbenzene (E)	100414	☒	☐	1	grab	8260B	1.0	0	0	0	0
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	8260B	2.0	0	0	0	0
9. Total BTEX ²	n/a	☒	☐	1	grab			0	0	0	0
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐	1	grab	504.1	0.010	0	0	0	0
11. Methyl-tert-Butyl Ether (MTBE)	1634044	☐	☒	1	grab	8260B	2.0	76	6.01E-02	76	4.14E-02
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	8260B	30	0	0	0	0

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

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☐	☒	1	grab	8260B	2.0	7.6	6.01E-03	7.6	4.14E-03
14. Naphthalene	91203	☒	☐	1	grab	8260B	2.0	0	0	0	0
15. Carbon Tetrachloride	56235	☒	☐	1	grab	8260B	1.0	0	0	0	0
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	8260B	1.0	0	0	0	0
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	8260B	1.0	0	0	0	0
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	8260B	1.0	0	0	0	0
18a. Total dichlorobenzene		☒	☐	1	grab			0	0	0	0
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	8260B	1.0	0	0	0	0
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	8260B	1.0	0	0	0	0
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	8260B	1.0	0	0	0	0
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	8260B	1.0	0	0	0	0
23. Methylene Chloride	75092	☒	☐	1	grab	8260B	2.0	0	0	0	0
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	8260B	1.0	0	0	0	0
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	8260B	1.0	0	0	0	0
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	8260B	1.0	0	0	0	0
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	8260B	1.0	0	0	0	0

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	grab	8260B	1.0	0	0	0	0
29. Acetone	67641	☒	☐	1	grab	8260B	5.0	0	0	0	0
30. 1,4 Dioxane	123911	☒	☐	1	grab	8260B	250	0	0	0	0
31. Total Phenols	108952	☒	☐	1	grab	8270C		0	0	0	0
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab	8270C	0.80	0	0	0	0
33. Total Phthalates (Phthalate esters) ⁴		☐	☒	1	grab	8270C		24	1.90E-02	24	1.31E-02
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☐	☒	1	grab	8270C	5.0	24	1.90E-02	24	1.31E-02
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270C		0	0	0	0
a. Benzo(a) Anthracene	56553	☒	☐	1	grab	8270C	0.20	0	0	0	0
b. Benzo(a) Pyrene	50328	☒	☐	1	grab	8270C	0.20	0	0	0	0
c. Benzo(b) Fluoranthene	205992	☒	☐	1	grab	8270C	0.20	0	0	0	0
d. Benzo(k) Fluoranthene	207089	☒	☐	1	grab	8270C	0.20	0	0	0	0
e. Chrysene	21801	☒	☐	1	grab	8270C	0.20	0	0	0	0
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab	8270C	0.20	0	0	0	0
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab	8270C	0.20	0	0	0	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	8270C		0	0	0	0

⁴ The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	grab	8270C	0.20	0	0	0	0
i. Acenaphthylene	208968	☒	☐	1	grab	8270C	0.20	0	0	0	0
j. Anthracene	120127	☒	☐	1	grab	8270C	0.20	0	0	0	0
k. Benzo(ghi) Perylene	191242	☒	☐	1	grab	8270C	0.20	0	0	0	0
l. Fluoranthene	206440	☒	☐	1	grab	8270C	0.20	0	0	0	0
m. Fluorene	86737	☒	☐	1	grab	8270C	0.20	0	0	0	0
n. Naphthalene	91203	☒	☐	1	grab	8270C	0.20	0	0	0	0
o. Phenanthrene	85018	☒	☐	1	grab	8270C	0.20	0	0	0	0
p. Pyrene	129000	☒	☐	1	grab	8270C	0.20	0	0	0	0
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	grab	8082	0.250	0	0	0	0
	38. Chloride	☒	☐	1	grab	4500CL-D	20	0	0	0	0
	39. Antimony	☒	☐	1	grab	6020A	0.5	0	0	0	0
	40. Arsenic	☐	☒	1	grab	6020A	0.5	19.6	1.55E-02	19.6	1.07E-02
	41. Cadmium	☒	☐	1	grab	6020A	0.2	0	0	0	0
42. Chromium III (trivalent)	16065831	☐	☒	1	grab	6020A	0.5	3.4	2.69E-03	3.4	1.85E-03
43. Chromium VI (hexavalent)	18540299	☒	☐	1	grab	7196A	10	0	0	0	0
44. Copper	7440508	☐	☒	1	grab	6020A	0.5	4.2	3.32E-03	4.2	2.29E-03
45. Lead	7439921	☐	☒	1	grab	6020A	0.5	2.9	2.29E-03	2.9	1.58E-03
46. Mercury	7439976	☒	☐	1	grab	7470A	0.2	0	0	0	0
47. Nickel	7440020	☐	☒	1	grab	6020A	0.5	5.6	4.43E-03	5.6	3.05E-03
48. Selenium	7782492	☐	☒	1	grab	6020A	1	1	7.90E-04	1	5.45E-04
49. Silver	7440224	☒	☐	1	grab	6020A	0.5	0	0	0	0
50. Zinc	7440666	☐	☒	1	grab	6020A	5.0	19.6	1.55E-02	19.6	1.07E-02
51. Iron	7439896	☐	☒	1	grab	60108	50	15000	11.9	15000	8.18
Other (describe):		☐	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☒ N ☐	If yes, which metals? Arsenic, Lead and Iron
Step 2: For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Arsenic DF: 10.1 Metal: Lead DF: 10.1 Metal: Iron DF: 10.1 Metal: Etc. DF:	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: Iron

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 influent waters will be treated via settlement (frac. tanks), filtration (bag filters) and adsorption (GAC filter). see attached drawing for description and schematic of proposed treatment system						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):	metals removal /ion exchange flocculation/settling		

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

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

stormclear flocculant

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

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: water will be discharged to on-site storm drain structures which subsequently discharge to the adjacent Blackstone River					
c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: 1. For multiple discharges, number the discharges sequentially. 2. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.					
d) Provide the state water quality classification of the receiving water B					
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 2.94 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)? priority organics, metals, nutrients, flow alteration, pathogens, taste/odor/color, SS, turbidity Is there a final TMDL? Y ☐ N ☒ If yes, for which pollutant(s)? draft TMDL for pathogens/bacteria					

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

- a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?
A ☒ B ☐ C ☐ D ☐ E ☐ F ☐
- b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ☐ N ☐ Underway ☐
- c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ☐ N ☐
- d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.
- e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?
1 ☐ 2 ☐ 3 ☒
- f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

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

see attached letter and documents supporting this NOI

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:

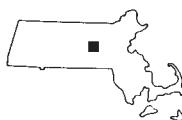
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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:	Worcester Crossing
Operator signature:	
Printed Name & Title:	William P. Forsythe, Superintendent
Date:	

**NOI Section 2(d) and 5(c) – Site Location and Discharge Location
Information**



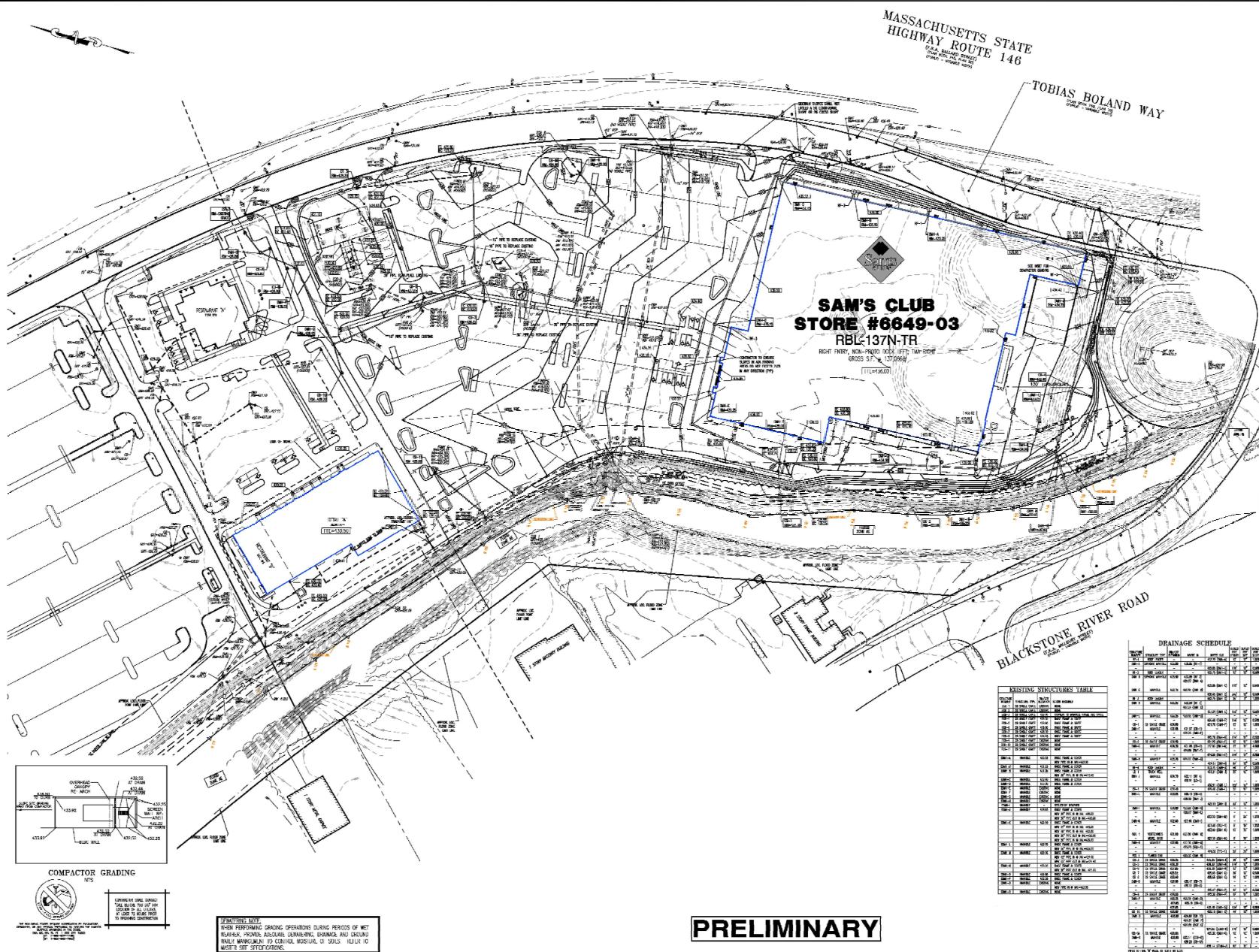
One Grant Street
Framingham, MA 01701-9005
508.903.2000
www.tetratechrizzo.com



25 Tobias Boland Way
(F.K.A 40-80 Ballard Street)
Worcester, Massachusetts

Project Locus Map

Figure 1



DRAINAGE SCHEDULE

NO.	TYPE	SIZE	INVERT	OUTLET	LENGTH	AREA	PERCENT	NOTE
1	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
2	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
3	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
4	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
5	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
6	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
7	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
8	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
9	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
10	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
11	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
12	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
13	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
14	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
15	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
16	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
17	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
18	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
19	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
20	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
21	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
22	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
23	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
24	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
25	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
26	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
27	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
28	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
29	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
30	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
31	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
32	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
33	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
34	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
35	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
36	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
37	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
38	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
39	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
40	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
41	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
42	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
43	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
44	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
45	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
46	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
47	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
48	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
49	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
50	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
51	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
52	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
53	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
54	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
55	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
56	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
57	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
58	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
59	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
60	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
61	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
62	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
63	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
64	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
65	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
66	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
67	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
68	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
69	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
70	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
71	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
72	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
73	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
74	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
75	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
76	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
77	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
78	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
79	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
80	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
81	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
82	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
83	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
84	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
85	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
86	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
87	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
88	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
89	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
90	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
91	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
92	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
93	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
94	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
95	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
96	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
97	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
98	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
99	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP
100	18" DIA. RCP	18"	425.00	425.00	10.00	10.00	100%	18" DIA. RCP

TETRA TECH NIZZO

One Grant Street
Framingham, MA 01701-4005
508.905.2200
www.tetratech.com

Project Title:
**Worcester Crossing
25 Tobias Boland Way
Worcester, Massachusetts**

Sheet Title:
**Phase C
Site Development Plan**

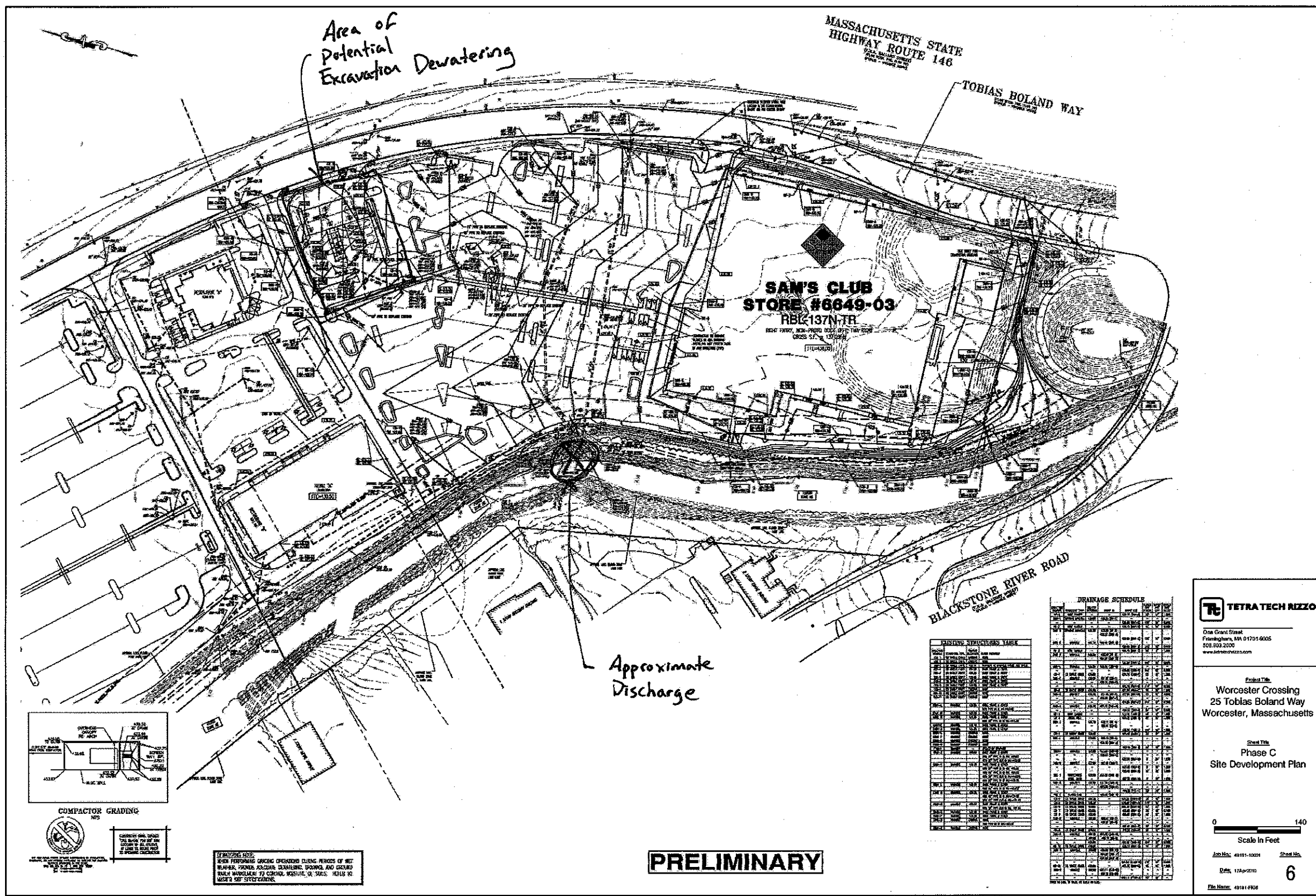
Scale In Feet
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Date: 17Apr2010

File Name: 48191-F03

6

P:\48191\127-48191-10001\CAD\SheetFiles\48191-FIC6.dwg 4/27/2010 1:55:31 PM



TETRA TECH RIZZO

One Grant Street
Framingham, MA 01701-6005
508.883.2000
www.tetratechrisso.com

Project Title
Worcester Crossing
25 Tobias Boland Way
Worcester, Massachusetts

Sheet Title
Phase C
Site Development Plan

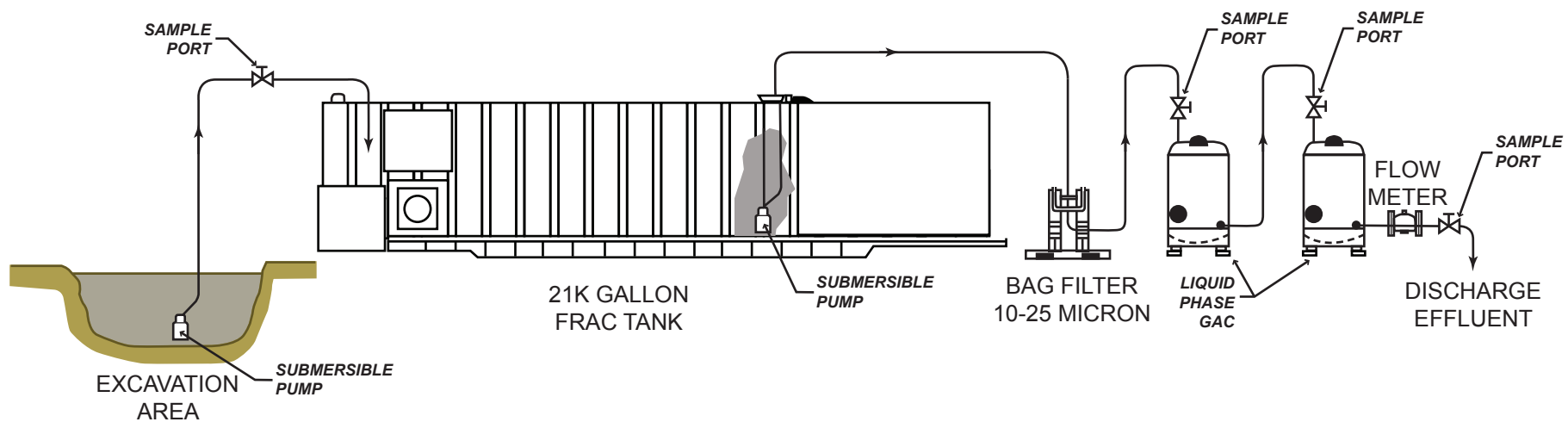
Scale In Feet
0 140

Job No: 49151-10001 Sheet No: 6

Date: 1/26/2010

File Name: 49151-FIC6

NOI Section 2(d) and 4(a) – Flow Schematic of Treatment Facility



TETRATECH

One Grant Street
Framingham, MA 01701-9005
508.903.2000
www.tetratechrizzo.com

Treatment System
Schematic

NOI Section 3(a) Contaminant Information

NOI Section 3(a) - Contaminant Information
Construction Dewatering
25 Tobias Boland Way
Worcester, MA 01607
RTN 2-0187

<u>Treatment System Info</u>	(GPM)	(Ft ³ /S)	(L/Day)
Max Flow Rate	145	0.32	790,394
Average Flow Rate	100	0.22	545,099

Parameter	Maximum		Average	
	Concentration (ug/L)	Mass (kg)	Concentration (ug/L)	Mass (kg)
pH (standard units)		NA		NA
TSS	22,000	1.74E+01	22,000	1.20E+01
TRC ²	0	0.00E+00	0	0.00E+00
TPH	0	0.00E+00	0	0.00E+00
Cyanide ²	0	0.00E+00	0	0.00E+00
Total BTEX	0	0.00E+00	0	0.00E+00
Benzene	0	0.00E+00	0	0.00E+00
Toluene	0	0.00E+00	0	0.00E+00
Ethylbenzene	0	0.00E+00	0	0.00E+00
Xylene	0	0.00E+00	0	0.00E+00
Ethylene Dibromide (1,2 dibromomethane)	0	0.00E+00	0	0.00E+00
MtBE	76	6.01E-02	76	4.14E-02
TBA	0	0.00E+00	0	0.00E+00
TAME	7.6	6.01E-03	7.6	4.14E-03
Naphthalene	0	0.00E+00	0	0.00E+00
Carbon Tetrachloride	0	0.00E+00	0	0.00E+00
Total Dichlorobenzene	0	0.00E+00	0	0.00E+00
p-DCB (1,4)	0	0.00E+00	0	0.00E+00
o-DCB (1,2)	0	0.00E+00	0	0.00E+00
m-DCB (1,3)	0	0.00E+00	0	0.00E+00
1,1 DCA	0	0.00E+00	0	0.00E+00
1,2 DCA	0	0.00E+00	0	0.00E+00
1,1 DCE	0	0.00E+00	0	0.00E+00
cis-1,2 DCE	0	0.00E+00	0	0.00E+00
Methylene Chloride	0	0.00E+00	0	0.00E+00
PCE (tetrachloroethylene)	0	0.00E+00	0	0.00E+00
1,1,1 TCA	0	0.00E+00	0	0.00E+00
1,1,2 TCA	0	0.00E+00	0	0.00E+00
TCE (trichloroethylene)	0	0.00E+00	0	0.00E+00
Vinyl Chloride	0	0.00E+00	0	0.00E+00
Acetone	0	0.00E+00	0	0.00E+00
1,4 Dioxane	0	0.00E+00	0	0.00E+00
Total Phenols	0	0.00E+00	0	0.00E+00
PCP	0	0.00E+00	0	0.00E+00
Total Phthalates ²	24	1.90E-02	24	1.31E-02
Bis(2-ethylhexyl)Phthalate	24	1.90E-02	24	1.31E-02
Total Group 1 PAH's	0	0.00E+00	0	0.00E+00
Benzo(a) Anthracene ²	0	0.00E+00	0	0.00E+00
Benzo(a) Pyrene ²	0	0.00E+00	0	0.00E+00
Benzo(b) Fluoreanthene ²	0	0.00E+00	0	0.00E+00
Benzo(k) Fluoreanthene ²	0	0.00E+00	0	0.00E+00
Chrysene ²	0	0.00E+00	0	0.00E+00
Dibenzo(a,h)anthracene ²	0	0.00E+00	0	0.00E+00
Indeno(1,2,3-cd)Pyrene ²	0	0.00E+00	0	0.00E+00

NOI Section 3(a) - Contaminant Information
Construction Dewatering
25 Tobias Boland Way
Worcester, MA 01607
RTN 2-0187

<u>Treatment System Info</u>	(GPM)	(Ft ³ /S)	(L/Day)
Max Flow Rate	145	0.32	790,394
Average Flow Rate	100	0.22	545,099

Parameter	Maximum		Average	
	Concentration (ug/L)	Mass (kg)	Concentration (ug/L)	Mass (kg)
Total Group II PAHs	0	0.00E+00	0	0.00E+00
Acenaphthene	0	0.00E+00	0	0.00E+00
Acenaphthylene	0	0.00E+00	0	0.00E+00
Anthracene	0	0.00E+00	0	0.00E+00
Benzo(ghi)Perylene	0	0.00E+00	0	0.00E+00
Fluoranthene	0	0.00E+00	0	0.00E+00
Fluorene	0	0.00E+00	0	0.00E+00
Naphthalene	0	0.00E+00	0	0.00E+00
Phenanthrene	0	0.00E+00	0	0.00E+00
Pyrene	0	0.00E+00	0	0.00E+00
Total PCBs ²	0	0.00E+00	0	0.00E+00
Total Metals		0.00E+00		0.00E+00
Antimony	0	0.00E+00	0	0.00E+00
Arsenic	19.6	1.55E-02	19.6	1.07E-02
Cadmium ²	0	0.00E+00	0	0.00E+00
Chromium, total	3.4	2.69E-03	3.4	1.85E-03
Chromium VI	0	0.00E+00	0	0.00E+00
Copper	4.2	3.32E-03	4.2	2.29E-03
Lead ²	2.9	2.29E-03	2.9	1.58E-03
Mercury	0	0.00E+00	0	0.00E+00
Nickel	5.6	4.43E-03	5.6	3.05E-03
Selenium	1	7.90E-04	1	5.45E-04
Silver ²	0	0.00E+00	0	0.00E+00
Zinc	19.6	1.55E-02	19.6	1.07E-02
Iron	15,000	1.19E+01	15,000	8.18E+00
Optional Compounds		0.00E+00		0.00E+00

Notes:

1 - pH may be monitored in field in accordance with EPA Method 150.1

2 - Laboratory must meet minimum level from Appendix VI to confluence compound is "believed absent"

5 - mass is calculated as: ug/L x (L/Day) x mg/1000 ug x g/1000 mg x kg/1000 g

6 - Compounds not detected below effluent limit or minimum level assigned value of 0.0 ug/L



ANALYTICAL REPORT

Lab Number:	L1016384
Client:	Tetra Tech Rizzo 1 Grant Street Framingham, MA 01701-9005
ATTN:	Bill Phelps
Phone:	(508) 903-2389
Project Name:	MADISON
Project Number:	127-48191-10002
Report Date:	11/02/10

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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016384-01	RGP-1	WORCESTER, MA	10/19/10 10:20
L1016384-02	TRIP BLANK	WORCESTER, MA	10/19/10 00:00

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

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.

Report Submission

This report replaces the report issued October 27, 2010. The Volatile Organics sub-list has been amended to include tert-Butyl Alcohol.

MCP Related Narratives

Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG438630-2 LCSD recovery, associated with L1016384-01, is above the acceptance criteria for Bromomethane (136%); however, it has been identified as a "difficult" analyte and is within the 40-160% acceptance limits. The results of the associated sample are reported; however, all positive detects are

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Case Narrative (continued)

considered to have a potentially high bias for this compound.

The initial calibration, associated with L1016384-01, did not meet the method required minimum response factor for 4-Methyl-2-pentanone and 1,4-Dioxane and utilized a quadratic fit for Chloromethane, Chloroethane, 1,1-Dichloroethene, and Acetone .

The continuing calibration standard, associated with L1016384-01, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Semivolatile Organics

In reference to question H:

The WG438831-2/-3 LCS/LCSD recoveries, associated with L1016384-01, is below the individual acceptance criteria for 4-Nitrophenol (29%/24%), but within the overall method allowances. The results of the associated sample are reported; however, all results are considered to have a potentially low bias for this compound.

Semivolatile Organics

In reference to question H:

The WG438832-2 LCS recovery, associated with L1016384-01, was above the acceptance criteria for 2-Chloronaphthalene (145%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 11/02/10

ORGANICS

VOLATILES

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 10/25/10 16:46
Analyst: SH

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified
Extraction Date: 10/25/10 13:00

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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 10/21/10 12:08
Analyst: MM

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	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	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	76		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	10	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	7.6		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1
tert-Butyl Alcohol	ND		ug/l	30	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	120		70-130

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-02
 Client ID: TRIP BLANK
 Sample Location: WORCESTER, MA
 Matrix: Water
 Analytical Method: 14,504.1
 Analytical Date: 10/25/10 16:59
 Analyst: SH

Date Collected: 10/19/10 00:00
 Date Received: 10/19/10
 Field Prep: Not Specified
 Extraction Date: 10/25/10 13:00

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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260B
Analytical Date: 10/21/10 08:22
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG438630-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
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	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260B
Analytical Date: 10/21/10 08:22
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG438630-3					
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	10	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260B
Analytical Date: 10/21/10 08:22
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG438630-3					
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--
tert-Butyl Alcohol	ND		ug/l	30	--

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	122		70-130

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 10/25/10 14:29
Analyst: SH

Extraction Date: 10/25/10 13:00

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG439197-1					
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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438630-1 WG438630-2								
Methylene chloride	104		102		70-130	2		20
1,1-Dichloroethane	93		95		70-130	2		20
Chloroform	97		97		70-130	0		20
Carbon tetrachloride	104		105		70-130	1		20
1,2-Dichloropropane	94		91		70-130	3		20
Dibromochloromethane	92		88		70-130	4		20
1,1,2-Trichloroethane	84		78		70-130	7		20
Tetrachloroethene	90		93		70-130	3		20
Chlorobenzene	87		85		70-130	2		20
Trichlorofluoromethane	120		123		70-130	2		20
1,2-Dichloroethane	106		104		70-130	2		20
1,1,1-Trichloroethane	106		104		70-130	2		20
Bromodichloromethane	100		102		70-130	2		20
trans-1,3-Dichloropropene	83		85		70-130	2		20
cis-1,3-Dichloropropene	91		91		70-130	0		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	98		99		70-130	1		20
1,1,2,2-Tetrachloroethane	89		87		70-130	2		20
Benzene	95		95		70-130	0		20
Toluene	85		85		70-130	0		20
Ethylbenzene	90		90		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438630-1 WG438630-2								
Chloromethane	96		98		70-130	2		20
Bromomethane	123		136	Q	70-130	10		20
Vinyl chloride	110		115		70-130	4		20
Chloroethane	103		102		70-130	1		20
1,1-Dichloroethene	120		125		70-130	4		20
trans-1,2-Dichloroethene	94		95		70-130	1		20
Trichloroethene	99		97		70-130	2		20
1,2-Dichlorobenzene	91		91		70-130	0		20
1,3-Dichlorobenzene	92		93		70-130	1		20
1,4-Dichlorobenzene	89		90		70-130	1		20
Methyl tert butyl ether	89		91		70-130	2		20
p/m-Xylene	92		95		70-130	3		20
o-Xylene	95		94		70-130	1		20
cis-1,2-Dichloroethene	99		99		70-130	0		20
Dibromomethane	96		95		70-130	1		20
1,2,3-Trichloropropane	88		89		70-130	1		20
Styrene	94		93		70-130	1		20
Dichlorodifluoromethane	79		80		70-130	1		20
Acetone	115		110		70-130	4		20
Carbon disulfide	92		94		70-130	2		20
2-Butanone	104		94		70-130	10		20

Lab Control Sample Analysis Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438630-1 WG438630-2								
4-Methyl-2-pentanone	100		99		70-130	1		20
2-Hexanone	87		82		70-130	6		20
Bromochloromethane	109		106		70-130	3		20
Tetrahydrofuran	92		81		70-130	13		20
2,2-Dichloropropane	105		104		70-130	1		20
1,2-Dibromoethane	90		89		70-130	1		20
1,3-Dichloropropane	86		85		70-130	1		20
1,1,1,2-Tetrachloroethane	102		99		70-130	3		20
Bromobenzene	93		95		70-130	2		20
n-Butylbenzene	87		90		70-130	3		20
sec-Butylbenzene	86		90		70-130	5		20
tert-Butylbenzene	86		90		70-130	5		20
o-Chlorotoluene	87		88		70-130	1		20
p-Chlorotoluene	87		90		70-130	3		20
1,2-Dibromo-3-chloropropane	102		97		70-130	5		20
Hexachlorobutadiene	93		96		70-130	3		20
Isopropylbenzene	91		92		70-130	1		20
p-Isopropyltoluene	90		93		70-130	3		20
Naphthalene	82		87		70-130	6		20
n-Propylbenzene	86		90		70-130	5		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20

Lab Control Sample Analysis Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438630-1 WG438630-2								
1,2,4-Trichlorobenzene	93		100		70-130	7		20
1,3,5-Trimethylbenzene	101		104		70-130	3		20
1,2,4-Trimethylbenzene	89		93		70-130	4		20
Ethyl ether	114		117		70-130	3		20
Isopropyl Ether	82		82		70-130	0		20
Ethyl-Tert-Butyl-Ether	90		90		70-130	0		20
Tertiary-Amyl Methyl Ether	98		97		70-130	1		20
1,4-Dioxane	111		106		70-130	5		20
tert-Butyl Alcohol	86		84		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		99		70-130
Toluene-d8	94		92		70-130
4-Bromofluorobenzene	86		88		70-130
Dibromofluoromethane	108		107		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG439197-2								
1,2-Dibromoethane	112		-		70-130	-		20
1,2-Dibromo-3-chloropropane	111		-		70-130	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG439197-3 QC Sample: L1016422-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.246	0.319	130		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.246	0.310	126		-	-		70-130	-		20

SEMIVOLATILES

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water
Analytical Method: 97,8270C
Analytical Date: 10/27/10 00:37
Analyst: JB

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
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	10	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	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
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	5.0	--	1
Bis(2-Ethylhexyl)phthalate	24		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
Dibenzofuran	ND		ug/l	5.0	--	1
Acetophenone	ND		ug/l	10	--	1
2,4,6-Trichlorophenol	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	5.0	--	1
2-Nitrophenol	ND		ug/l	20	--	1
4-Nitrophenol	ND		ug/l	10	--	1

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
2,4-Dinitrophenol	ND		ug/l	30	--	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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		15-110
Phenol-d6	22		15-110
Nitrobenzene-d5	55		30-130
2-Fluorobiphenyl	60		30-130
2,4,6-Tribromophenol	24		15-110
4-Terphenyl-d14	65		30-130

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water
Analytical Method: 97,8270C-SIM
Analytical Date: 10/25/10 19:07
Analyst: JC

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics by 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
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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Semivolatile Organics by SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		15-110
Phenol-d6	21		15-110
Nitrobenzene-d5	61		30-130
2-Fluorobiphenyl	49		30-130
2,4,6-Tribromophenol	53		15-110
4-Terphenyl-d14	60		30-130

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270C
Analytical Date: 10/26/10 14:12
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG438831-1					
Acenaphthene	ND		ug/l	5.0	--
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	5.0	--
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	10	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	5.0	--
Fluoranthene	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	--
Hexachloroethane	ND		ug/l	5.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	5.0	--
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	--
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	--

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270C
Analytical Date: 10/26/10 14:12
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG438831-1					
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	5.0	--
Pyrene	ND		ug/l	5.0	--
Aniline	ND		ug/l	20	--
4-Chloroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	5.0	--
2-Methylnaphthalene	ND		ug/l	5.0	--
Acetophenone	ND		ug/l	10	--
2,4,6-Trichlorophenol	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	5.0	--
2-Nitrophenol	ND		ug/l	20	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	30	--
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	--

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270C
Analytical Date: 10/26/10 14:12
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL
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MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG438831-1

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		15-110
Phenol-d6	25		15-110
Nitrobenzene-d5	68		30-130
2-Fluorobiphenyl	64		30-130
2,4,6-Tribromophenol	51		15-110
4-Terphenyl-d14	81		30-130

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270C-SIM
Analytical Date: 10/25/10 16:12
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG438832-1					
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	--
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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270C-SIM
Analytical Date: 10/25/10 16:12
Analyst: JC

Extraction Method: EPA 3510C
Extraction Date: 10/22/10 09:19

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG438832-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		15-110
Phenol-d6	28		15-110
Nitrobenzene-d5	86		30-130
2-Fluorobiphenyl	68		30-130
2,4,6-Tribromophenol	69		15-110
4-Terphenyl-d14	96		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438831-2 WG438831-3								
Acenaphthene	74		76		40-140	3		20
1,2,4-Trichlorobenzene	65		67		40-140	3		20
Hexachlorobenzene	74		70		40-140	6		20
Bis(2-chloroethyl)ether	82		88		40-140	7		20
2-Chloronaphthalene	87		85		40-140	2		20
1,2-Dichlorobenzene	77		84		40-140	9		20
1,3-Dichlorobenzene	77		76		40-140	1		20
1,4-Dichlorobenzene	80		78		40-140	3		20
3,3'-Dichlorobenzidine	60		58		40-140	3		20
2,4-Dinitrotoluene	84		85		40-140	1		20
2,6-Dinitrotoluene	88		78		40-140	12		20
Azobenzene	91		81		40-140	12		20
Fluoranthene	92		87		40-140	6		20
4-Bromophenyl phenyl ether	77		74		40-140	4		20
Bis(2-chloroisopropyl)ether	82		83		40-140	1		20
Bis(2-chloroethoxy)methane	78		70		40-140	11		20
Hexachlorobutadiene	76		72		40-140	5		20
Hexachloroethane	83		78		40-140	6		20
Isophorone	81		81		40-140	0		20
Naphthalene	80		82		40-140	2		20
Nitrobenzene	84		88		40-140	5		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438831-2 WG438831-3								
Bis(2-Ethylhexyl)phthalate	93		89		40-140	4		20
Butyl benzyl phthalate	92		92		40-140	0		20
Di-n-butylphthalate	99		96		40-140	3		20
Di-n-octylphthalate	91		96		40-140	5		20
Diethyl phthalate	83		81		40-140	2		20
Dimethyl phthalate	84		82		40-140	2		20
Benzo(a)anthracene	84		82		40-140	2		20
Benzo(a)pyrene	76		75		40-140	1		20
Benzo(b)fluoranthene	96		93		40-140	3		20
Benzo(k)fluoranthene	84		83		40-140	1		20
Chrysene	79		76		40-140	4		20
Acenaphthylene	87		82		40-140	6		20
Anthracene	92		88		40-140	4		20
Benzo(ghi)perylene	82		77		40-140	6		20
Fluorene	93		78		40-140	18		20
Phenanthrene	84		80		40-140	5		20
Dibenzo(a,h)anthracene	86		84		40-140	2		20
Indeno(1,2,3-cd)Pyrene	85		83		40-140	2		20
Pyrene	87		88		40-140	1		20
Aniline	58		55		40-140	5		20
4-Chloroaniline	73		78		40-140	7		20

Lab Control Sample Analysis Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438831-2 WG438831-3								
Dibenzofuran	78		77		40-140	1		20
2-Methylnaphthalene	80		76		40-140	5		20
Acetophenone	88		87		40-140	1		20
2,4,6-Trichlorophenol	85		77		30-130	10		20
2-Chlorophenol	83		84		30-130	1		20
2,4-Dichlorophenol	91		86		30-130	6		20
2,4-Dimethylphenol	66		76		30-130	14		20
2-Nitrophenol	86		85		30-130	1		20
4-Nitrophenol	29	Q	24	Q	30-130	19		20
2,4-Dinitrophenol	72		77		30-130	7		20
Pentachlorophenol	58		63		30-130	8		20
Phenol	33		37		30-130	11		20
2-Methylphenol	65		64		30-130	2		20
3-Methylphenol/4-Methylphenol	62		65		30-130	5		20
2,4,5-Trichlorophenol	82		84		30-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG438831-2 WG438831-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		51		15-110
Phenol-d6	29		33		15-110
Nitrobenzene-d5	80		85		30-130
2-Fluorobiphenyl	79		71		30-130
2,4,6-Tribromophenol	72		73		15-110
4-Terphenyl-d14	74		72		30-130

MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG438832-2 WG438832-3

Acenaphthene	70		64		40-140	9	20
2-Chloronaphthalene	145	Q	127		40-140	13	20
Fluoranthene	97		92		40-140	5	20
Hexachlorobutadiene	61		50		40-140	20	20
Naphthalene	63		54		40-140	15	20
Benzo(a)anthracene	84		87		40-140	4	20
Benzo(a)pyrene	65		66		40-140	2	20
Benzo(b)fluoranthene	100		103		40-140	3	20
Benzo(k)fluoranthene	88		92		40-140	4	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG438832-2 WG438832-3								
Chrysene	74		74		40-140	0		20
Acenaphthylene	75		75		40-140	0		20
Anthracene	75		72		40-140	4		20
Benzo(ghi)perylene	50		55		40-140	10		20
Fluorene	59		56		40-140	5		20
Phenanthrene	98		85		40-140	14		20
Dibenzo(a,h)anthracene	57		60		40-140	5		20
Indeno(1,2,3-cd)Pyrene	53		58		40-140	9		20
Pyrene	92		89		40-140	3		20
2-Methylnaphthalene	56		52		40-140	7		20
Pentachlorophenol	59		57		30-130	3		20
Hexachlorobenzene	95		83		40-140	13		20
Hexachloroethane	61		53		40-140	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	27		25		15-110
Phenol-d6	17		16		15-110
Nitrobenzene-d5	66		56		30-130
2-Fluorobiphenyl	55		48		30-130
2,4,6-Tribromophenol	53		49		15-110
4-Terphenyl-d14	93		89		30-130

PCBS

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 10/25/10 09:49
Analyst: KB

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/23/10 00:55
Cleanup Method1: EPA 3665A
Cleanup Date1: 10/23/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 10/23/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - 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
Aroclor 1262	ND		ug/l	0.250	--	1
Aroclor 1268	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
Analytical Date: 10/25/10 10:14
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 10/23/10 00:55
Cleanup Method1: EPA 3665A
Cleanup Date1: 10/23/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 10/23/10

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG439030-1					
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	--
Aroclor 1262	ND		ug/l	0.250	--
Aroclor 1268	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	136		30-150	A
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	132		30-150	B

Lab Control Sample Analysis**Batch Quality Control**

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG439030-2 WG439030-3								
Aroclor 1016	81		81		40-140	1		20
Aroclor 1260	95		109		40-140	13		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		69		30-150	A
Decachlorobiphenyl	137		138		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		70		30-150	B
Decachlorobiphenyl	131		136		30-150	B

METALS

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Arsenic, Total	0.0196		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Chromium, Total	0.0034		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Copper, Total	0.0042		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Iron, Total	15		mg/l	0.05	--	1	10/20/10 11:00	10/26/10 19:15	EPA 3005A	97,6010B	MG
Lead, Total	0.0029		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Mercury, Total	ND		mg/l	0.0002	--	1	10/25/10 11:50	10/25/10 16:19	EPA 7470A	97,7470A	EZ
Nickel, Total	0.0056		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Selenium, Total	0.001		mg/l	0.001	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Silver, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM
Zinc, Total	0.0196		mg/l	0.0050	--	1	10/20/10 11:00	10/21/10 22:41	EPA 3005A	97,6020A	BM



Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG438410-1										
Antimony, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Arsenic, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Chromium, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Copper, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Lead, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Nickel, Total	ND		mg/l	0.0005	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Selenium, Total	ND		mg/l	0.001	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Silver, Total	ND		mg/l	0.0004	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM
Zinc, Total	ND		mg/l	0.0050	--	1	10/20/10 11:00	10/21/10 18:10	97,6020A	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG438411-1										
Iron, Total	ND		mg/l	0.05	--	1	10/20/10 11:00	10/26/10 19:02	97,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG439206-1										
Mercury, Total	ND		mg/l	0.0002	--	1	10/25/10 11:50	10/25/10 16:10	97,7470A	EZ

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG438410-2 WG438410-3								
Antimony, Total	92		96		80-120	4		20
Arsenic, Total	96		97		80-120	1		20
Cadmium, Total	102		104		80-120	2		20
Chromium, Total	92		91		80-120	1		20
Copper, Total	99		99		80-120	0		20
Lead, Total	98		99		80-120	1		20
Nickel, Total	98		97		80-120	1		20
Selenium, Total	100		103		80-120	3		20
Silver, Total	92		93		80-120	1		20
Zinc, Total	99		100		80-120	1		20
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG438411-2 WG438411-3								
Iron, Total	100		100		80-120	0		20
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG439206-2 WG439206-3								
Mercury, Total	105		108		80-120	3		20

INORGANICS & MISCELLANEOUS

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

SAMPLE RESULTS

Lab ID: L1016384-01
Client ID: RGP-1
Sample Location: WORCESTER, MA
Matrix: Water

Date Collected: 10/19/10 10:20
Date Received: 10/19/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	10/25/10 11:30	10/26/10 11:06	97,9014	JO
Chromium, Hexavalent	ND		mg/l	0.01	--	1	10/20/10 02:00	10/20/10 02:00	97,7196A	DD
General Chemistry - Westborough Lab										
Solids, Total Suspended	22		mg/l	5.0	NA	1	-	10/20/10 12:00	30,2540D	ST
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/19/10 20:00	30,4500CL-D	JW
TPH	ND		mg/l	4.40	--	1.1	10/21/10 18:00	10/22/10 13:30	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	--	1	-	10/20/10 18:55	1,9065	TP



Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

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: WG438275-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/19/10 20:00	30,4500CL-D	JW
MCP General Chemistry - Westborough Lab for sample(s): 01 Batch: WG438307-3										
Chromium, Hexavalent	ND		mg/l	0.01	--	1	10/20/10 02:00	10/20/10 02:00	97,7196A	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG438347-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	10/20/10 12:00	30,2540D	ST
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG438419-1										
Phenolics, Total	ND		mg/l	0.03	--	1	-	10/20/10 18:51	1,9065	TP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG438741-2										
TPH	ND		mg/l	4.00	--	1	10/21/10 18:00	10/22/10 13:30	74,1664A	JO
MCP General Chemistry - Westborough Lab for sample(s): 01 Batch: WG439167-3										
Cyanide, Total	ND		mg/l	0.005	--	1	10/25/10 11:30	10/26/10 11:03	97,9014	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG438275-2								
Chlorine, Total Residual	105		-		90-110	-		
MCP General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG438307-1 WG438307-2								
Chromium, Hexavalent	98		99		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG438419-2								
Phenolics, Total	104		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG438741-1								
TPH	85		-		64-132	-		34
MCP General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG439167-1 WG439167-2								
Cyanide, Total	81		89		80-120	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438307-4 QC Sample: L1016384-01 Client ID: RGP-1												
Chromium, Hexavalent	ND	0.1	0.10	97		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438419-3 QC Sample: L1015315-68 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.82	102		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438741-3 QC Sample: L1016381-02 Client ID: MS Sample												
TPH	ND	21.3	17.4	82		-	-		64-132	-		34

Lab Duplicate Analysis Batch Quality Control

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438275-3 QC Sample: L1016384-01 Client ID: RGP-1						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
MCP General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438307-5 QC Sample: L1016384-01 Client ID: RGP-1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438347-2 QC Sample: L1016242-01 Client ID: DUP Sample						
Solids, Total Suspended	96	94	mg/l	2		32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438419-4 QC Sample: L1015315-68 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG438741-4 QC Sample: L1016381-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

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(*)
L1016384-01A	Vial Na2S2O3 preserved	A	N/A	2.3	Y	Absent	504(14)
L1016384-01B	Vial Na2S2O3 preserved	A	N/A	2.3	Y	Absent	504(14)
L1016384-01C	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1016384-01D	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1016384-01E	Amber 1000ml unpreserved	A	6	2.3	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1016384-01F	Amber 1000ml unpreserved	A	6	2.3	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1016384-01G	Plastic 500ml HNO3 preserved	A	<2	2.3	Y	Absent	MCP-FE-6010T-10(180),MCP-CR-6020T-10(180),MCP-7470T-10(28),MCP-CU-6020T-10(180),MCP-ZN-6020T-10(180),MCP-AS-6020T-10(180),MCP-NI-6020T-10(180),MCP-AG-6020T-10(180),MCP-CD-6020T-10(180),MCP-SE-6020T-10(180),MCP-PB-6020T-10(180),MCP-SB-6020T-10(180)
L1016384-01H	Plastic 250ml unpreserved	A	6	2.3	Y	Absent	MCP-HEXCR7196-10(1)
L1016384-01I	Amber 1000ml Na2S2O3	A	6	2.3	Y	Absent	MCP-8082-10(365)
L1016384-01J	Amber 1000ml Na2S2O3	A	6	2.3	Y	Absent	MCP-8082-10(365)
L1016384-01K	Plastic 250ml NaOH preserved	A	>12	2.3	Y	Absent	MCP-TCN9014-10(14)
L1016384-01L	Amber 1000ml HCl preserved	A	<2	2.3	Y	Absent	TPH-1664(28)
L1016384-01M	Amber 1000ml HCl preserved	A	<2	2.3	Y	Absent	TPH-1664(28)
L1016384-01N	Amber 1000ml H2SO4 preserved	A	<2	2.3	Y	Absent	TPHENOL-9065(28)
L1016384-01O	Plastic 250ml unpreserved	A	6	2.3	Y	Absent	TRC-4500(1)
L1016384-01P	Plastic 1000ml unpreserved	A	6	2.3	Y	Absent	TSS-2540(7)
L1016384-02A	Vial Na2S2O3 preserved	A	N/A	2.3	Y	Absent	504(14)
L1016384-02B	Vial Na2S2O3 preserved	A	N/A	2.3	Y	Absent	504(14)

*Values in parentheses indicate holding time in days

Project Name: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

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: MADISON
Project Number: 127-48191-10002

Lab Number: L1016384
Report Date: 11/02/10

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 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.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

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.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1016384

Instrument ID: Jack.i Calibration Date: 21-OCT-2010 Time: 06:45

Lab File ID: 1021A02.D Init. Calib. Date(s): 05-OCT-2 05-OCT-2

Sample No: 8260 CCAL Init. Calib. Times : 08:04 11:50

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.53632	.42288	.1	21	20	F
chloromethane	100	96.459	.1	4	20	
vinyl chloride	.54172	.59401	.1	-10	20	
bromomethane	.37902	.46743	.1	-23	20	F
chloroethane	100	103	.1	-3	20	
trichlorofluoromethane	.85518	1.029	.1	-20	20	F
ethyl ether	.17755	.20236	.05	-14	20	
1,1,-dichloroethene	100	120	.1	-20	20	
carbon disulfide	1.1497	1.0629	.05	8	20	
methylene chloride	.64173	.66912	.05	-4	20	
acetone	100	115	.1	-15	20	
trans-1,2-dichloroethene	.7052	.66434	.1	6	20	
methyl tert butyl ether	.98412	.87705	.1	11	20	
Ethyl-Tert-Butyl-Ether	1.1098	.996	.05	10	20	
Diisopropyl Ether	1.4077	1.1491	.05	18	20	
1,1-dichloroethane	1.1628	1.0823	.2	7	20	
cis-1,2-dichloroethene	.73624	.72956	.1	1	20	
2,2-dichloropropane	.8822	.92555	.05	-5	20	
bromochloromethane	.31835	.34765	.05	-9	20	
chloroform	1.2066	1.1732	.2	3	20	
carbontetrachloride	.87612	.91189	.1	-4	20	
tetrahydrofuran	.09369	.08617	.05	8	20	
1,1,1-trichloroethane	.97303	1.0317	.1	-6	20	
Tertiary-Amyl Methyl Ether	.91931	.89842	.05	2	20	
1,1-dichloropropene	.87214	.80994	.05	7	20	
2-butanone	.10225	.10609	.1	-4	20	
benzene	2.5796	2.4526	.5	5	20	
1,2-dichloroethane	.61374	.65405	.1	-7	20	
trichloroethene	.68086	.67523	.2	1	20	
dibromomethane	.33762	.3259	.05	3	20	
1,2-dichloropropane	.5829	.5502	.1	6	20	
bromodichloromethane	.72679	.72877	.2	0	20	
1,4-dioxane	.00194	.00216	.05	-11	20	F
cis-1,3-dichloropropene	.81389	.74112	.2	9	20	
toluene	2.0947	1.7725	.4	15	20	
tetrachloroethene	1.0509	.94179	.2	10	20	
4-methyl-2-pentanone	.08403	.0837	.1	0	20	F
trans-1,3-dichloropropene	.77191	.63968	.1	17	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1016384

Instrument ID: Jack.i

Calibration Date: 21-OCT-2010 Time: 06:45

Lab File ID: 1021A02.D

Init. Calib. Date(s): 05-OCT-2 05-OCT-2

Sample No: 8260 CCAL

Init. Calib. Times : 08:04

11:50

Compound	RRF	RRF	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,1,2-trichloroethane	.4174	.34904	.1	16	20
chlorodibromomethane	.61278	.56102	.1	8	20
1,3-dichloropropane	.838	.72144	.05	14	20
1,2-dibromoethane	.4927	.4411	.1	10	20
2-hexanone	.17157	.14937	.1	13	20
chlorobenzene	2.2999	1.9967	.5	13	20
ethyl benzene	3.8645	3.4811	.1	10	20
1,1,1,2-tetrachloroethane	.65284	.66434	.05	-2	20
p/m xylene	1.5739	1.4539	.1	8	20
o xylene	1.4664	1.3916	.3	5	20
styrene	2.4058	2.2732	.3	6	20
bromoforn	.54059	.52887	.1	2	20
isopropylbenzene	3.8767	3.5264	.1	9	20
bromobenzene	1.5603	1.4521	.05	7	20
n-propylbenzene	6.8713	5.9041	.05	14	20
1,1,2,2,-tetrachloroethane	.78826	.69987	.3	11	20
2-chlorotoluene	4.6231	4.0348	.05	13	20
1,2,3-trichloropropane	.64064	.56365	.05	12	20
1,3,5-trimethylbenzene	4.8172	4.8666	.05	-1	20
4-chorotoluene	4.1862	3.6301	.05	13	20
tert-butylbenzene	4.2081	3.6333	.05	14	20
1,2,4-trimethylbenzene	4.8376	4.3150	.05	11	20
sec-butylbenzene	5.9625	5.1079	.05	14	20
p-isopropyltoluene	4.9269	4.4219	.05	10	20
1,3-dichlorobenzene	3.0954	2.8597	.6	8	20
1,4-dichlorobenzene	3.2173	2.8740	.5	11	20
n-butylbenzene	4.0098	3.4992	.05	13	20
1,2-dichlorobenzene	2.8389	2.5914	.4	9	20
1,2-dibromo-3-chloropropane	.1168	.11972	.05	-3	20
hexachlorobutadiene	.7541	.70095	.05	7	20
1,2,4-trichlorobenzene	1.6472	1.5334	.2	7	20
naphthalene	2.6299	2.1584	.05	18	20
1,2,3-trichlorobenzene	1.3219	1.2887	.05	3	20
=====	=====	=====	=====	=====	=====
dibromofluoromethane	.27846	.30181	.05	-8	20
1,2-dichloroethane-d4	.24541	.24722	.05	-1	20
toluene-d8	1.2461	1.1679	.05	6	20
4-bromofluorobenzene	.77738	.67212	.05	14	20

FORM VII MCP-8260-10

NOI Section 3(b) Calculation of Dilution Factor

NOI Section 3 (b) - Calculation of Dilution Factor
Construction Dewatering
25 Tobias Boland Way
Worcester, MA 01607
RTN 2-0187

<u>Data Input</u>	<u>Value</u>	<u>Description</u>
Qd	0.32	Maximum flow rate of the discharge (ft ³ /s)
Qs	2.94	Receiving water 7Q10 flow (ft ³ /s), obtained from USGS Streamstats

Calculation

$$\text{DF} = (\text{Qd} + \text{Qs}) / \text{Qd}$$

$$\text{DF} = 10.1$$

Notes:

Qs obtained from USGS Streamstats report attached to this report



Streamstats Ungaged Site Report

Date: Wed Oct 20 2010 10:00:04 Mountain Daylight Time

Site Location: Massachusetts

NAD27 Latitude: 42.2319 (42 13 55)

NAD27 Longitude: -71.7919 (-71 47 31)

NAD83 Latitude: 42.2320 (42 13 55)

NAD83 Longitude: -71.7914 (-71 47 29)

ReachCode: 01090003000318

Measure: 83.53

Drainage Area: 63.1 mi2

Low Flows Basin Characteristics			
100 % Statewide Low Flow (63.1 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	63.1	1.61	149
Mean Basin Slope from 250K DEM (percent)	4.39	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.0828	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Probability of Perennial Flow Basin Characteristics			
100 % Perennial Flow Probability (63.1 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	63.1 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	18.75	0	100
Percent Forest (percent)	37.90	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

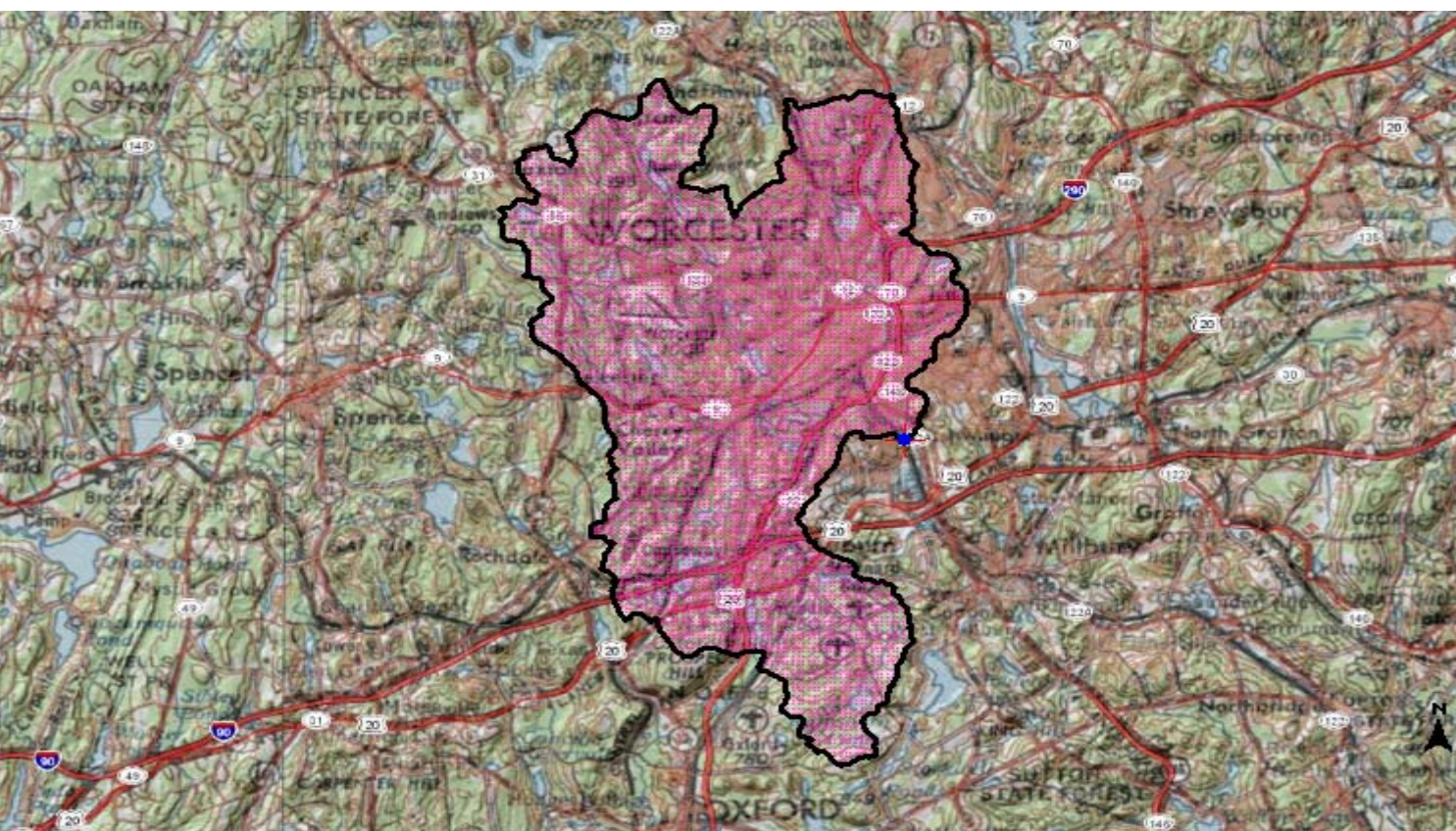
Low Flows Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	65.5	18		34.9	122
D60	48.1	20		24.8	92.6
D70	27.9	24		10.3	74.8
D75	21.5	26		7.86	58
D80	16.8	28		5.99	46.3
D85	13.2	32		4.65	36.6
D90	9.74	37		3.24	28.7

D95	6.39	46		1.94	20.4
D98	4.01	60		1.05	14.4
D99	3.17	65		0.8	11.9
M7D2Y	6.51	50		1.87	21.8
AUGD50	13.4	33		4.7	37.6
M7D10Y	2.94	71		0.69	11.6

The equation for estimating the probability of perennial flow is applicable for most areas of Massachusetts except eastern Buzzards Bay, Cape Cod, and the Island regions. The estimate obtained from the equation assumes natural flow conditions at the site. The equation also is best used for sites with drainage areas between 0.01 to 1.99 mi2, as errors beyond for basins beyond these bounds are unknown.

Probability of Perennial Flow Statistics		
Statistic	Value	Standard Error (percent)
PROBPEREN	1	

StreamStats Print Page



4 2 0 4 Miles

10/20/2010 10:01:42 AM

NOI Section 4(d) – MSDS for Chemical Additives

Material Safety Data Sheet
*StormKlear: Gel-Floc***SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer's Name: HaloSource, Inc.
Corporate Address: 1631 220th St. SE, Suite 100, Bothell, WA 98021
Manufacturer's Telephone: (425) 881-6464 (Monday-Friday, 8AM-5PM PDT)
Emergency Telephone: 800-424-9300 Chemtrec (24 Hours)
Material/Trade/Product Name: StormKlear: Gel-Floc
Synonyms: Chitosan Lactate
Chemical Name: Chitosan, 2-hydroxypropanoate (salt)
Chemical Formula: Not available
CAS No.: 66267-50-3
Product Use: Flocculates soil contamination in storm water.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	HAZARDOUS INGREDIENT (S)	%	OSHA HAZARDOUS ?
598-82-3	Lactic Acid	30-50	YES
Trade Secret	Trade Secret	5-15	YES
	All other components are non-hazardous.	50-65	NO

NOTE: See Section 8 for permissible exposure limits.

SECTION 3: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

A fine, off-white powder with no odor.

This material/product may cause eye or skin irritation.

POTENTIAL HEALTH EFFECTS

EYE: May cause mechanical irritation. Will tend to form film on the surface of the eye causing blurred vision.

SKIN: Possible skin irritation or rash.

INHALATION: May aggravate pre-existing respiratory conditions or allergies. It may accumulate on linings of the nose and lungs resulting in dryness & coughing.

INGESTION: While it is not likely to be hazardous by ingestion, it may start dissolving and form a film on mucous membranes.

CHRONIC EXPOSURE/CARCINOGENICITY: Not known.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: May cause mechanical irritation. Will tend to form film on the surface of the eye causing blurred vision. Skin irritation. It may accumulate on linings of the nose and lungs resulting in dryness & coughing. May start dissolving and form a film on mucous membranes.

AGGRAVATION OF PRE-EXISTING CONDITIONS: May aggravate pre-existing respiratory conditions or allergies.

POTENTIAL ENVIRONMENTAL EFFECTS: Avoid water if material is spilled; water will dissolve chitosan lactate forming a thick viscous solution or gelatinous mass.

SECTION 4: FIRST AID MEASURES

FIRST AID PROCEDURES

EYE CONTACT: Remove contact lenses (when applicable) and flush eyes with water for 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

INHALATION: If exposed to excessive levels of dust, remove to fresh air and get medical attention if cough or other symptoms develop.

INGESTION: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. If available give several glasses of milk. Call a physician or poison control center immediately.

NOTE TO PHYSICIANS: None.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Not available

UPPER FLAMMABLE LIMIT: Not available

FLAMMABILITY CLASS (OSHA): Not applicable

AUTOIGNITION TEMPERATURE: Not available

LOWER FLAMMABLE LIMIT: Not available

FLAME PROPAGATION/BURNING RATE: Not available

UNIQUE FIRE PROPERTIES: Keep away from oxidizing agents and avoid open flames. Product may ignite at temperatures in excess of 400°F. Depending on moisture content and particle size, airborne dust of Chitosan lactate might explode in the presence of an ignition source. It is comparable to flour and wood dust.

HAZARDOUS COMBUSTION PRODUCTS: None known

EXTINGUISHING MEDIA: Water spray, CO₂ (carbon dioxide), foam or dry chemical.

PROTECTION OF FIREFIGHTERS: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Water may be used to keep fire-exposed containers cool until fire is out.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

ENVIRONMENTAL PRECAUTIONS: AVOID WATER; water will dissolve chitosan lactate forming a thick viscous solution or gelatinous mass.

METHODS FOR CLEANING UP: The material may be vacuumed or collected for recovery or disposal.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING RECOMMENDATIONS

VENTILATION: Use with adequate ventilation.

FIRE PREVENTION: No special requirements.

SPECIAL HANDLING REQUIREMENTS: None.

SAFE STORAGE RECOMMENDATIONS

CONTAINMENT: Keep container closed when not in use.

STORAGE ROOM RECOMMENDATIONS: Store in cool, dry areas and away from incompatible substances.

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

STORAGE CONDITIONS: Store in cool, dry areas and away from incompatible substances.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No special ventilation is required. None required under normal conditions of use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION: For operations where eye contact can occur, wear safety glasses.

SKIN PROTECTION: For operations where skin contact can occur, wear impervious rubber or neoprene apron.

HAND PROTECTION: For operations where hand contact can occur, wear impervious rubber or neoprene gloves.

RESPIRATORY PROTECTION: If dust is generated, a dust mask may be needed. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

GOOD HYGIENE/WORK PRACTICES: Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

EXPOSURE GUIDELINES

PERMISSIBLE EXPOSURE LIMITS						
INGREDIENT CAS NO.	OSHA		WISHA		ACGIH (TLV)	
	TWA	STEL	TWA	STEL	TWA	STEL
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**COLOR:** Off-white.**PHYSICAL FORM:** Fine powder.**pH:** Not available**VAPOR DENSITY:** Not available**MELTING POINT:** Not available**SOLUBILITY IN WATER:** Soluble**SHAPE:** Fine powder.**ODOR:** None**VAPOR PRESSURE:** Not available**BOILING POINT:** Not available**FREEZING POINT:** Not available**SPECIFIC GRAVITY OR DENSITY:** Not available

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

SECTION 10: STABILITY AND REACTIVITY**CHEMICAL STABILITY:** Stable.**CONDITIONS TO AVOID:** None known.**MATERIALS TO AVOID (INCOMPATIBILITY):** Strong oxidizing agents.**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.**HAZARDOUS POLYMERIZATION:** Not known.**SECTION 11: TOXICOLOGICAL INFORMATION****ORAL LD₅₀ (mice):** >10g/kg**DERMAL LD₅₀ (rabbit):** Not available.**SKIN IRRITATION:** Not available.**EYE IRRITATION:** Not available.**SKIN SENSITIZATION:** Not available.**ADDITIONAL INFORMATION:** Not available.**SECTION 12: ECOLOGICAL INFORMATION****ECOTOXICITY (in water):**Acute Toxicity

- Daphnia: LC50 – 135 mg/L

- Daphnia: LC25 – Not Calculable
- Fathead Minnows: LC50 – 22.8 mg/L
- Fathead Minnows: LC25 – 16.9 mg/L
- Rainbow Trout: LC50 – 6.4 mg/L
- Rainbow Trout: LC25 – 4.4 mg/L

Chronic Toxicity

- Rainbow Trout: LC50 (survival) – 5.3 mg/L, 7 days
- Rainbow Trout: LC25 (survival) – 4.8 mg/L, 7 days
- Rainbow Trout: EC25 (biomass) – 3.5 mg/L, 7 days
- Fathead Minnows: LC50 (survival) – 25.4 mg/L, 7 days
- Fathead Minnows: LC25 (survival) – Not Calculable
- Fathead Minnows: EC25 (biomass) – 13.9 mg/L, 7 days

MOBILITY: Not available.

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

ADDITIONAL INFORMATION: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

SECTION 14: TRANSPORT INFORMATION**U.S. DEPARTMENT OF TRANSPORTATION (DOT):**

Proper Shipping Name:	Not Regulated
Hazard Class:	Not Regulated
Identification Number (UN Number):	Not Regulated
Packing Group (PG):	Not Regulated

SECTION 15: REGULATORY INFORMATION

TSCA STATUS: Listed

CERCLA REPORTABLE QUANTITY (RQ):

CHEMICAL NAME	RQ
Not applicable	Not applicable

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

SARA TITLE III SECTION 311/312 HAZARD CATEGORIES: Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE OF PRESSURE
YES	NO	NO	NO	NO

SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

CALIFORNIA PROPOSITION 65: The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

SECTION 16: OTHER INFORMATION**REVISION INFORMATION:**

MSDS sections(s) changed since last revision of document:

- Section 12, new Ecotoxicity data was updated.

DISCLAIMER:

**

The above information is based upon information HaloSource, Inc. believes to be reliable and is supplied for informational purposes only. HaloSource, Inc. disclaims any liability for damage which results from the use of the above information and nothing contained therein shall constitute a guarantee, warranty (including fitness for a particular purpose) or representation with respect to the accuracy or completeness of the data, the product described or their use for any specific purpose even if that purpose is known to HaloSource, Inc. The final determination of the suitability of the information, the manner of use of the information or product and potential infringement is the sole responsibility of the user.

**

MSDS PREPARED BY: Jeremy Heath, EH&S Specialist

NOI Section 6(a) – Endangered Species Act Information



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087



September 20, 2006

Reference:	Project	Location
	NPDES general permit, retail construction	Providence, RI
	NPDES general permit, construction	Brockton, MA
	NPDES general permit, construction	Worcester, MA

Richard Drurey
Andrew Platt
Bohler Engineering, P.C.
352 Turnpike Road
Southborough, MA 01772

Dear Messrs. Drurey and Platt:

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.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Michael J. Amaral

Michael J. Amaral
Endangered Species Specialist
New England Field Office

NOI Section 6(e) National Historic Preservation Act Information



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

February 8, 2007

Andrew Platt, P.E.
Bohler Engineering, P.C.
352 Turnpike Road
Southborough, MA 01772

RE: Proposed Retail Development, Route 146/Tobias Boland Way, Worcester, MA;
MHC# RC.40601

Dear Mr. Platt:

The Massachusetts Historical Commission is in receipt of the photographs of the site you sent. Based on this information, the MHC has concluded that the project site is within the Blackstone Canal Historic District and listed in the State and National Registers of Historic Places. A significant portion of the historic canal is buried within the project site. Additionally, the proposed project site is adjacent to the Quinsigamond Village, an area of historic buildings which, in the opinion of MHC staff, meets the criteria for listing in the National Register of Historic Places (36 CFR 60). The Quinsigamond Village area is included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth.

However, at this time, the MHC is unable to determine what effects the proposed project will have on historic properties without further information. In your cover letter, you indicate that the project needs a NPDES general permit. However, the Project Notification Form you submitted is incomplete. You must complete the section of the PNF pertaining to state or federal funding licensing or permitting. Please provide the MHC with a list of all of the federal or state funding, licenses, or permits that are required for this project.

Please also indicate whether or not, due to the project site's proximity to Route 146 and 122A, the project will require a Massachusetts Highway Department access permit.

In prior correspondence, MHC inquired as to whether or not you intend to file an Environmental Notification Form in compliance with the Massachusetts Environmental Policy Act (MEPA). Will the project trigger any MEPA thresholds, such as traffic, new

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www.sec.state.ma.us/mhc

impervious surfaces, or sewerage? Please be advised that under the MHC's regulations at 950 CMR 71, if a project meets MEPA filing thresholds other than for demolition of an inventoried or State Register property, then MHC coordinates MHC review with MEPA review.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Section 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00). Please do not hesitate to contact Ann Lattinville of my staff, should you have any questions.

Sincerely,



Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: Deerin Babb-Brott, MEPA Unit
Peter Schneider, Worcester Historical Commission
Deborah Packard, Preservation Worcester
Joanna Doherty, BRVNHCC
Steve Roper, MHD
MHD, District 3
DEP, CERO
EPA, NPDES Program

CITY OF WORCESTER, MASSACHUSETTS

Dr. Peter B. Schneider
Chair

Dr. Thomas A. Johnson
Vice-Chair



Thomas Conroy
Clerk

Worcester Historical Commission
44 Front Street, Suite 510
Worcester, MA 01608
(508) 799-1400/ (508) 799-1393 Fax

HISTORIC BUILDING DEMOLITION DETERMINATION

Pursuant to Chapter 9, Section 13 of the revised City Ordinances of 1996, the Worcester Historical Commission met on **February 8, 2007** at a duly posted and noticed hearing to consider the request for a Building Demolition Delay Determination submitted by **Madison Worcester Holdings, LLC** owner and petitioner of the historic property at **25 Tobias Boland Way**. The petitioner seeks to do the Following:

- 1) Demolish all structures on site.

Upon reviewing the petition submitted, and the evidence provided, the Worcester Historical Commission found that the proposed demolition would not be detrimental to the architectural or historical resources of the City of Worcester. Therefore, on motion duly made and seconded, it was voted 5-0 by Commission members Peter Schneider, Thomas Conroy, Michael Theerman, James Constantine, and James Crowley to grant the Building Demolition Delay Waiver.

AUTHORIZING WORCESTER HISTORICAL COMMISSION MEMBER

Peter Schneider

Date: 2/14/07

Comments: