TETRA TECH RIZZO

July 19, 2007

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

Re: Notice of Intent
NPDES Remediation General Permit
Utility Related Abatement Measure
250 Elm Street
Dedham, MA

Dear Sir or Madam:

On behalf of our client, FF Development, LP, Tetra Tech Rizzo, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP), Massachusetts General Permit (MAG910000). This NOI was prepared in accordance with the general requirements of the NPDES RGP under Federal Register, Volume 70, No. 147 and related guidance documentation provided by the U.S. Environmental Protection Agency (EPA).

Site Information

This NOI has been prepared to facilitate the management of construction-related dewatering operations (Standard Industrial Code (SIC) 1541 for General Construction) that will be undertaken at the property located at 250 Elm Street in Dedham, Massachusetts (the Site). The Site location is shown on a United States Geological Survey (USGS) Site Locus Plan included as Figure 1. Construction activities are being conducted at the Site as part of installation of municipal (Town of Dedham) sanitary sewer lines. A portion of the sewer line installation will require dewatering to maintain the water levels within excavations to facilitate installation a sewer force main and gravity line.

The Site is identified as a "Disposal Site" as defined by Massachusetts General Law Chapter 21E (MGL c. 21E) and the Massachusetts Contingency Plan, 310 Code of Massachusetts Regulations (CMR) 40.0000. The Massachusetts Department of

One Grant Street
Framingham, MA 01701
Tel 508.903.2000 Fax 508.903.2001

Environmental Protection (DEP) has assigned Release Tracking Number (RTN) 3-1196 due to the detection of elevated concentrations of metals and volatile organic compounds (VOCs) at the Site. The RTN 3-1196 Disposal Site is associated with the former use of the Site by Hersey Products, Inc. as a foundry and manufacturing facility. The utility-related construction work and dewatering operations are being undertaken under a MCP Utility Related Abatement Measure (URAM) in compliance with the MCP to facilitate the management of contaminated groundwater.

Discharge Information

This NPDES RGP will cover discharges from temporary utility-related construction dewatering activities that are expected to be conducted between July 2007 and September 2007. These discharges will include recovered water that may accumulate at the base of excavated areas at the Site. The recovered water shall be collected using wrapped collection structures (well points or sumps) to minimize the amount of solids in the influent water. The discharges are expected to be intermittent, with maximum flows during initial dewatering of the standing water and diminishing flows to maintain the dewatered state during construction. It is expected that construction dewatering will be conducted at spot locations throughout the Site at utility installation locations. Since a release of oil and/or hazardous materials has previously been detected in Site groundwater (RTN 3-1196), the recovered water will be pumped for subsequent treatment as described below.

The treated water will be discharged via a gravity discharge line to one or more of the Town of Dedham storm water drop inlets at the Site. A drawing showing the on-site storm water drop inlets and the nearby outfall to the receiving surface water body is attached to this NOI. The storm water drop inlets are part of a Municipal Separate Storm Sewer System (MS4) operated by the Town of Dedham and is subject to the local requirements of the town. Written approval to discharge to the Dedham MS4 collection system has provided by the Town of Dedham Department of Public Works (DPW) to FF Development, LP. Records of the local permitting, monitoring or other information regarding compliance with the Dedham local requirements will be maintained by the permittee and available for review upon request.

Contaminant Information

Three water samples were collected at the Site during initial URAM dewatering activities conducted under the MCP on June 19, 2007, with the on-site recharge of treated water. These water samples were collected from the influent, midpoint and effluent of a treatment system that consisted of several fractionation tanks in series, a bag filter unit and two granular activated carbon filters in series which discharged to the ground surface

at the Site. These samples were submitted to a Massachusetts certified laboratory (Spectrum Analytical, Inc. of Agawam, Massachusetts) and analyzed for VOCs and lead based on the known contaminates listed under RTN 3-1196.

One representative water sample was collected at the Site from the proposed influent to the dewatering and treatment system on June 29, 2007. The water sample was collected from the influent to the existing fractionization tanks currently staged at the Site while approval to discharge is obtained under the NPDES RGP. The water sample was submitted for analysis at a Massachusetts certified laboratory (Alpha Woods Hole Labs of Westborough, Massachusetts) for the analytical parameters required under the NPDES RGP.

A second representative water sample was collected at the Site from the proposed influent to the dewatering and treatment system on July 12, 2007. This sample was collected to supplement the June 29, 2007 sample and achieve lower detection limits for ethylene dibromide (EDB) which was reported as "not detected" in the VOCs by 8260 analysis, at a detection limit which exceeded the EPA Minimum Level for the RGP. The supplemental water sample was also analyzed at Alpha Woods Hole Labs.

The laboratory analytical data are summarized in Part 3(b) of the attached NOI form and the laboratory certificates of analysis are attached to this submittal. Any compounds detected above the laboratory analytical method reporting limits are considered "Believed Present" in the influent. For compounds that were not detected above the laboratory analytical method reporting limit, and where the reporting limit concentration is below the Minimum Level under Appendix VI of the NPDES RGP, the compounds are considered "Believed Absent" in the influent. For some compounds the laboratory reporting limit(s) could not meet the Minimum Level listed in Appendix VI but are below the Effluent Limitation under Appendix III of the NPDES RGP. These compounds are also considered "Believed Absent" and the laboratory reporting limits are shown in the attached NOI form (i.e. <1.0 µg/l). A narrative report of the laboratory analysis was provided by the laboratory providing information regarding the elevated laboratory reporting limits. This narrative is included with the laboratory certificates of analysis which is included as an attachment to this submittal.

Treatment System Information

The water removed from the excavations will require treatment and may be treated using readily available technologies such as sedimentation (settling in a tank or series of tanks), filtration (sand and/or bag filters), and adsorption (granular activated carbon) to achieve the target effluent concentrations prior to discharge.

The proposed treatment system will consist of a minimum of two 21,000 gallon fractionation (frac) tanks connected in series to allow adequate retention time for solids to settle and separate (discrete particle settling). Additional frac tanks may be staged at the Site to provide temporary storage of the water prior to treatment and discharge. If the residence time within the frac tanks is not sufficient to allow for adequate settlement of solids prior to downstream treatment units, weirs or additional treatment including the addition of filtration units (sand filters, bag filters and/or cartridge filters) may be used to remove or drop-out suspended solids. Water pumped from the midpoint or top of the final frac tank will be directed through a minimum of two bag filter units equipped with 25-micron bag filters connected in parallel (duplex bag filter unit). A contingency is included for the addition of additional duplex filter units equipped with a smaller aperture size connected downstream from the 25-micron duplex bag filter unit(s) should solids be detected at levels that may expend the downgradient filters (carbon filters) or cause and/or result in an exceedance of the target effluent concentrations. In addition, an equivalent set of sand filters and/or larger bag filters (50 micron), capable of removing the targeted sized particles, may be installed upgradient of the 25 micron bag filters to minimize loading of large particles to the smaller size filters. Following solids removal the water will be pumped through granular activated carbon (GAC) filter units consisting of 3,000 pound liquid phase GAC filters connected in series (duplex GAC unit). Treatment of flows up to approximately 70 gpm requires treatment using one set of two GAC filter units (total of 6,000 lbs GAC) connected in series. Treatment of higher flows will require the installation of duplicate treatment system components in parallel to provide adequate residence time for adsorption of VOCs onto the GAC media. The treatment system will have sample ports to collect water samples from the system influent, system midpoint and system effluent. A flow meter (totalizer and instantaneous flow meter) will be installed at the effluent of the treatment system. A schematic of the base treatment system train (70 gpm system) is included as an attachment to this NOI.

The inflow rate of water recovered from the utility excavation(s) is expected to be variable, with flows expected to exceed 200 gallons per minute (gpm) during initial dewatering of the standing water within the excavations, and lower flows anticipated to maintain the dewatered state during construction activities. The various inflows are expected to result in an average discharge flow rate to the MS4 collection system of 70 gpm or 0.16 cubic feet per second (ft^3/s) that could be conducted over a 24-hour period. This equates to an average discharge flow rate to the Dedham MS4 collection system of 0.10 million gallons per day (MGD). A maximum flow rate has been established based on space limitations at the Site to accommodate the requisite treatment system components. The maximum design flow rate is 200 gpm (0.45 ft^3/s) or 0.29 MGD. The proposed maximum flow rate is a design flow rate for a treatment system comprising 6 frac tanks, 3 duplex filtration units, and 3 duplex GAC units.

Receiving Surface Water Information

Effluent from the treatment system will be directed to the Dedham MS4 collection system, for subsequent discharge to an outfall that drains to wetlands surrounding Little Wigwam Pond and Wigwam Pond. Proximate to the location of the discharge, the wetlands are classified as Class B surface water. The estimated seven-day ten-year low flow (7Q10) of the wetlands at the location of the discharge was evaluated using the USGS on-line StreamStats stream flow assessment application. The value for the 7Q10 estimated using StreamStatis is 0.14 ft^3/s. A copy of the report generated by StreamStats is appended to this submittal.

Information regarding Total Maximum Daily Load (TMDL) applicable to Wigwam Pond or Little Wigwam Pond was evaluated by a review of the listings published in the on-line EPA database. There are no TMDLs reported to EPA by the state for the receiving surface water.

Consultation with State/Federal Services

The listed Areas of Critical Environmental Concern in Massachusetts, and the Endangered Species list provided in Appendix I and Appendix II of the NPDES RGP, were reviewed to determine whether listed endangered or threatened species or critical habitats are present at the Site or in the vicinity of the discharge. The results were compared with the requirements identified in Appendix VII of the NPDES RGP. The results of this review indicate that although an Area of Critical Environmental Concern is located in the Town of Dedham, it is not located at the Site or in the path of the discharge to the Dedham MS4 collection system. In addition, two Endangered Species (Kemp's Turtle and the Ridley Sea Turtle) and one Threatened Specie (Loggerhead Sea Turtle) were identified in Norfolk County, Massachusetts. However, these species are not listed in Appendix VII as a concern to facilities covered under the NPDES RGP, and are not located at the Site or in the path of the discharge to the Dedham MS4 collection system. Pursuant to Appendix VII of the NPDES RGP, this facility meets the permit eligibility criteria under Criteria A for coverage under the NPDES RGP since no Endangered or Threatened or Areas of Critical Environmental Concern are located in proximity to the point where the proposed discharge reaches the receiving surface water body, and consultation with federal and/or state officials is not necessary at this time.

The listed National Historic Places in proximity to the discharge were reviewed using the electronic data base provided by the U.S. National Parks Service (NPS) website. Although there are five properties listed by the NPS in the Town of Dedham, none are located in the path of the discharge or in an area that will be impacted by the utility construction activities at the Site. The discharge of treated water to the wetland areas of

Wigwam Pond will be directed through the existing subsurface Dedham MS4 collection system and will not cause damage, deterioration, alteration or destruction of any historic property listed by the NPS or eligible for listing. The Town of Dedham has authorized discharge described herein to their MS4 collection system that discharges to the outfall to the wetland area and it is therefore implied that the additional flows from the discharge can be managed by the MS4 system and will not adversely impact any historic properties. Pursuant to Appendix VII of the NPDES RGP, this facility meets the permit eligibility criteria for coverage under the NPDES RGP and consultation with federal and/or state officials is not necessary at this time.

Request for Coverage Under NPDES RGP

In consideration of the particulars 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. On behalf of our client FF Development, LP, Tetra Tech Rizzo, Inc. hereby requests coverage under the NPDES RGP for the discharge of recovered water during construction activities to the surface waters of the wetlands surrounding Wigwam Pond.

The attached NOI form provides the requisite information pertaining to this NOI and the appropriate signature of the facility Operator/Owner (FF Development, LP). In accordance with Part 1 B of the NPDES RGP, the Owner and General Contractor are both considered "Operators" of the subject facility. For this project, FF Development, LP is the Owner and has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications. FF Development will direct their contractor, Middlesex Construction Company, and as a contractor to FF Development, LP, is responsible for the implementation and day-to-day operational control of activities that are necessary to ensure compliance with the NPDES RGP, including proper operation, inspection, monitoring and reporting. The Owner/Operator shall be responsible for any enforcement action taken or imposed by federal, state or local agencies.

Pending authorization from the EPA, discharge of treated water is scheduled for July 2007 and may be conducted through September 2008.

Questions or correspondence regarding the subject discharge should be directed through Mr. Sean Regan, Project Manager for FF Development, LP who may be contacted at (508) 271-9950 extension 21. Please contact the undersigned at (508) 903-2000 if you have any questions regarding this NOI.

TETRA TECH RIZZO

Very truly yours,

FOR Ian S. Cannan
Project Scientist

Raymond C. Johnson, P.G., L.S.P.
Senior Vice President

CC: Massachusetts Department of Environmental Protection, Division of Watershed Management and Bureau of Waste Site Cleanup

Town of Dedham, Department of Public Works

P \9000\9695\URAM_RTN-3-1196\NPDES RGP\2007-06-28(NOI_NPDES RGP) DOC

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

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

<table>
<tr><td colspan="2">a) Name of facility/site:
Construction Dewatering - 250 Elm St.</td><td colspan="4">Facility/site address:</td></tr>
<tr><td>Location of facility/site:
longitude: 42.22 latitude: -70.8</td><td>Facility SIC code(s):
1541</td><td colspan="4">Street:
250 Elm Street</td></tr>
<tr><td colspan="2">b) Name of facility/site owner: FF Residential, LP</td><td colspan="4">Town: Dedham</td></tr>
<tr><td colspan="2">Email address of owner:
SRegan@ffres.com</td><td rowspan="2">State:
MA</td><td rowspan="2">Zip:
02026</td><td colspan="2" rowspan="2">County:
Norfolk</td></tr>
<tr><td colspan="2">Telephone no.of facility/site owner: (508) 271-9950</td></tr>
<tr><td colspan="2">Fax no. of facility/site owner: (508) 271-9951</td><td colspan="4" rowspan="2">Owner is (check one): 1. Federal ____ 2. State/Tribal ____
3. Private ✔ 4. other, if so, describe:</td></tr>
<tr><td colspan="2">Address of owner (if different from site):</td></tr>
<tr><td colspan="6">Street: 405 Cochituate Road</td></tr>
<tr><td>Town: Framingham</td><td>State: MA</td><td>Zip: 01701</td><td colspan="3">County: Middlesex</td></tr>
<tr><td rowspan="2">c) Legal name of operator:
FF Residential, LP</td><td colspan="5">Operator telephone no: (508) 271-9950</td></tr>
<tr><td colspan="2">Operator fax no.: (508) 271-9951</td><td colspan="3">Operator email:
SRegan@ffres.com</td></tr>
<tr><td colspan="6">Operator contact name and title: Sean Regan, Project Manager</td></tr>
</table>

Address of **operator** (if different from owner):	Street:		
Town:	State:	Zip:	County:

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No✔, if "yes," number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No✔, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes✔ No___
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes✔No__

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes✔ No___
If "yes," please list:
1. site identification # assigned by the state of NH or MA: RTN 3-1196
2. permit or license # assigned: Tier II Permit, Utility Related Abatement Measure
3. state agency contact information: name, location, and telephone number:
MA DEP, Northeast Regional Office (978) 694-3200

f) Is the site/facility covered by any other EPA permit, including:
1. multi-sector storm water general permit? Y___ N✔, if Y, number:
2. phase I or II construction storm water general permit? Y✔ N___,
if Y, number: MAR10C709
3. individual NPDES permit? Y___ N✔, if Y, number:
4. any other water quality related permit? Y___ N✔, if Y, number:

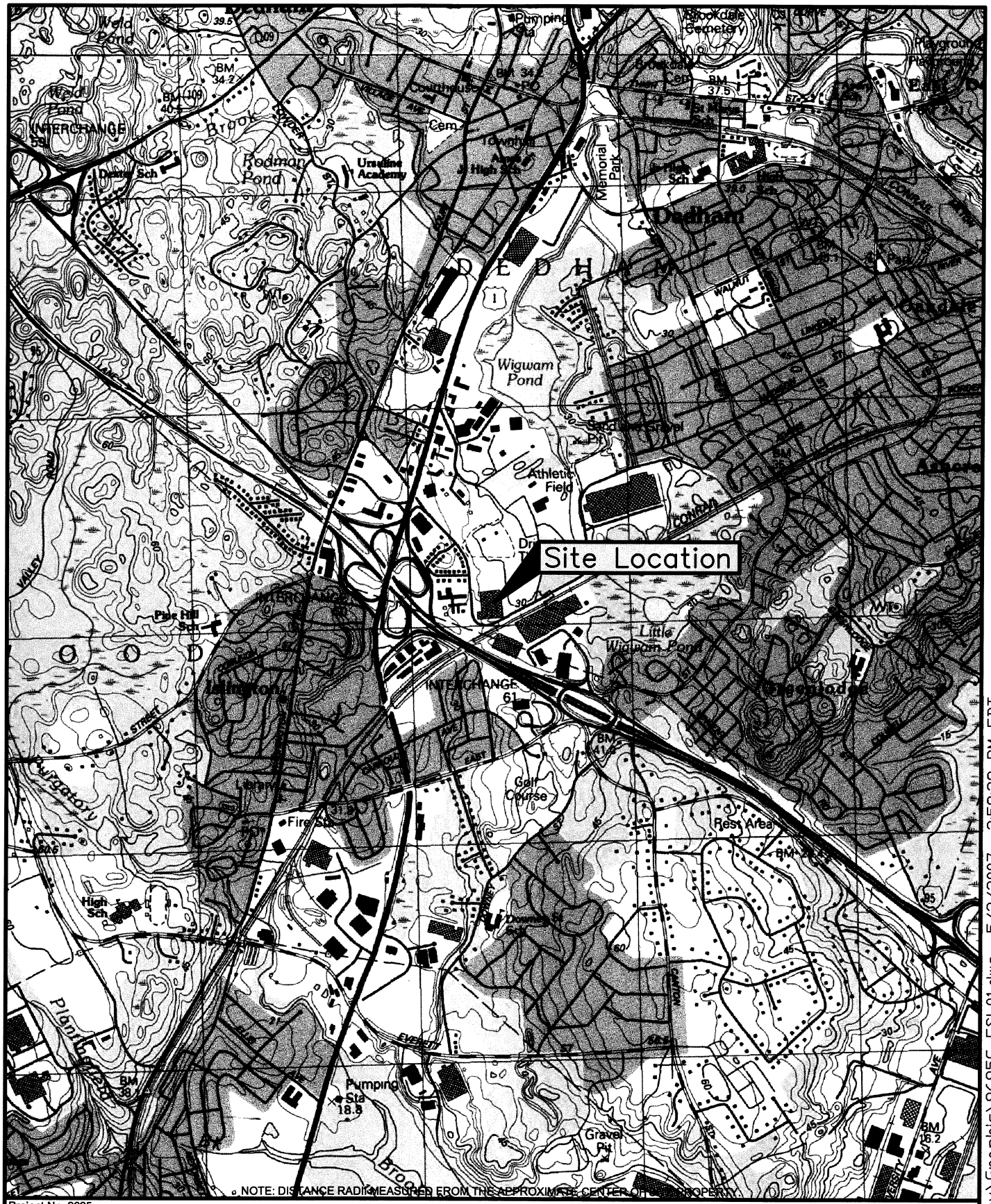
2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:
construction related dewatering at State listed MCP Disposal Site

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 0.45 Average flow 0.10 Is maximum flow a **design value**? Y✔ N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Maximum flow is based on treatment system including 6 frac tanks, duplex bag filters and 3 duplex GAC units in series

3) Latitude and longitude of each discharge within 100 feet: pt.1:long.-70.8 lat.42.23; pt.2: long._____ lat._____; pt.3: long._____ lat._____;
pt.4:long._____ lat._____; pt.5: long._____ lat._____; pt.6:long._____ lat._____; pt.7: long._____ lat._____; pt.8:long._____ lat._____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ✔ or seasonal ____ ? Is discharge ongoing Yes ____ No ✔ ?
c) Expected dates of discharge (mm/dd/yy): start 07/23/07 end 08/31/07	
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).	



Project No. 9695

0 2,000 Feet

TETRA TECH RIZZO

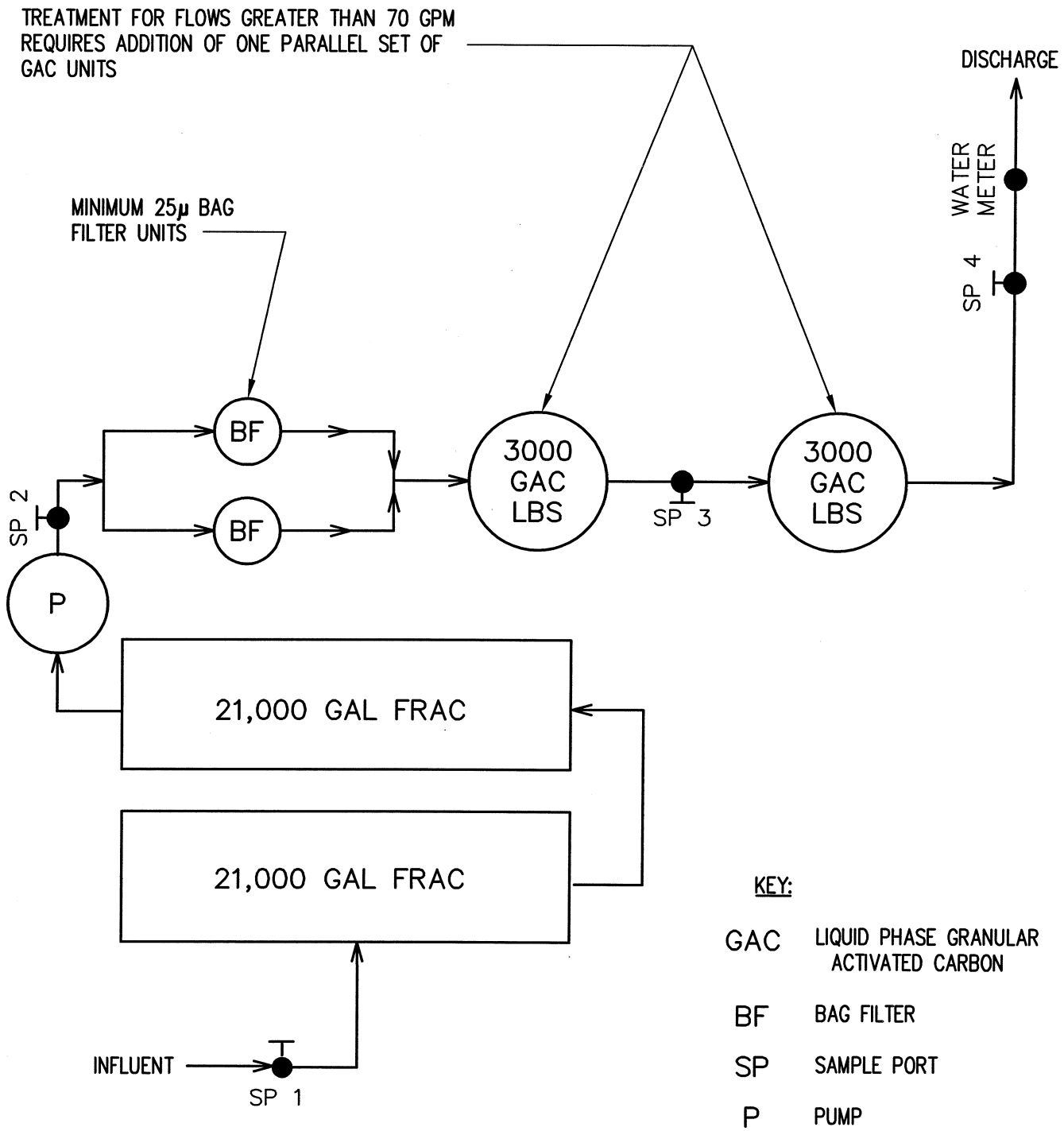
Information obtained from
USGS Map of Norwood, Massachusetts
Quadrangle dated 1982-1985
USGS Map of Newton, Massachusetts
Quadrangle dated 1987

250 Elm Street
Dedham, Massachusetts

Site Locus Plan

Figure 1

J:\Project\9695\Env\Graphic\9695G-ESL01.dwg 5/2/2007 3:58:28 PM EDT



J:\Project\9695\Env\Graphic\9695G-GW TREATMENT DIAGRAM_2

0 NTS Feet

Information obtained from

TETRA TECH RIZZO

Figure 4

Recovered Groundwater Treatment System Diagram

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

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

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

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	**Believe Absent**	**Believe Present**	**# of Samples (1 min-imum)**	**Type of Sample (e.g., grab)**	**Analytical Method Used (method #)**	**Minimum Level (ML) of Test Method**	**Maximum daily value**		**Avg. daily value**	
							concentration (ug/l)	**mass (kg)**	**concentration (ug/l)**	**mass (kg)**
1. Total Suspended Solids	☐	✔	1	grab	2540D	5 mg/l	36000	40	36000	14
2. Total Residual Chlorine	✔	☐	1	grab	4500	20 ug/l	0	0	0	0
3. Total Petroleum Hydrocarbons	✔	☐	1	grab	1664	5 mg/l	0	0	0	0
4. Cyanide	✔	☐	1	grab	4500	10 ug/l	0	0	0	0
5. Benzene	✔	☐	2	grab	8260	2 ug/l	0	0	0	0
6. Toluene	✔	☐	2	grab	8260	2 ug/l	0	0	0	0
7. Ethylbenzene	✔	☐	2	grab	8260	2 ug/l	0	0	0	0
8. (m,p,o) Xylenes	✔	☐	2	grab	8260	10 ug/l	0	0	0	0
9. Total BTEX[4]	✔	☐	2	grab	8260					

[4] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✔		1	grab	504.1	0.01ug/	<.019	NC	<.019	NC
11. Methyl-tert-Butyl Ether (MtBE)	✔		2	grab	8260	5 ug/l	0	0	0	0
12. tert-Butyl Alcohol (TBA)	✔		1	grab	8260	100ug/l	0	0	0	0
13. tert-Amyl Methyl Ether (TAME)	✔		1	grab	8260	0.5ugl	<4.0	NC	<4.0	NC
14. Naphthalene	✔		2	grab	8260	5 ug/l	0	0	0	0
15. Carbon Tetra-chloride	✔		2	grab	8260	2 ug/l	0	0	0	0
16. 1,4 Dichlorobenzene	✔		2	grab	8260	2 ug/l	<5	NC	0	0
17. 1,2 Dichlorobenzene	✔		2	grab	8260	2 ug/l	<5	NC	0	0
18. 1,3 Dichlorobenzene	✔		2	grab	8260	2 ug/l	<5	NC	0	0
19. 1,1 Dichloroethane		✔	2	grab	8260	1 ug/l	3.0	3.3E-6	3.0	1.1E-6
20. 1,2 Dichloroethane	✔		2	grab	8260	2 ug/l	0	0	0	0
21. 1,1 Dichloroethylene		✔	2	grab	8260	2 ug/l	4.6	5.1E-6	2.8	1.1E-6
22. cis-1,2 Dichloro-ethylene		✔	2	grab	8260	2 ug/l	5.9	6.5E-6	3.8	1.4E-6
23. Dichloromethane (Methylene Chloride)			2	grab	8260	2 ug/l	<10	NC	<10	NC
24. Tetrachloroethylene		✔	2	grab	8260	2 ug/l	2.6	2.9E-6	1.8	6.8E-7

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane		✔	2	grab	8260	2 ug/l	186	2.0E-4	133	5.0E-5
26. 1,1,2 Trichloroethane	✔		2	grab	8260	2 ug/l	0	0	0	0
27. Trichloroethylene		✔	2	grab	8260	2 ug/l	40.8	4.5E-5	27.5	1.0E-5
28. Vinyl Chloride	✔		2	grab	8260	2 ug/l	0	0	0	0
29. Acetone	✔		2	grab	8260	50 ug/l	0	0	0	0
30. 1,4 Dioxane	✔		1	grab	8260	50 ug/l	<500	NC	<500	NC
31. Total Phenols	✔		1	grab	8270	1 ug/l	<29	NC	<4.8	NC
32. Pentachlorophenol	✔		1	grab	8270M	5 ug/l	0	0	0	0
33. Total Phthalates [5] (Phthalate esthers)	✔		1	grab	8270	10 ug/l	0	0	0	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✔		1	grab	8270	5 ug/l	0	0	0	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		✔	1	grab	8270M					
a. Benzo(a) Anthracene		✔	1	grab	8270M	0.05ug/	0.29	3.2E-7	0.29	1.1E-7
b. Benzo(a) Pyrene		✔	1	grab	8270M	2 ug/l	0.27	3.0E-7	0.27	1.0E-7
c. Benzo(b)Fluoranthene		✔	1	grab	8270M	0.1ug/l	0.22	2.4E-7	0.22	8.3E-8
d. Benzo(k) Fluoranthene		✔	1	grab	8270M	2ug/l	0.38	4.2E-7	0.38	1.4E-7
e. Chrysene		✔	1	grab	8270M	5ug/l	0.25	2.7E-7	0.25	9.5E-8

[5] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene			1	grab	8270M	0.1ug/l	<0.19	NC	<0.19	NC
g. Indeno(1,2,3-cd) Pyrene			1	grab	8270M	0.15ug/	<0.19	NC	<0.19	NC
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✔	1	grab	8270M					
h. Acenaphthene	✔		1	grab	8270M	0.5ug/l	0	0	0	0
i. Acenaphthylene	✔		1	grab	8270M	0.2ug/l	0	0	0	0
j. Anthracene	✔		1	grab	8270M	2 ug/l	0	0	0	0
k. Benzo(ghi) Perylene			1	grab	8270M	0.1ug/l	<0.19	NC	<0.19	NC
l. Fluoranthene		✔	1	grab	8270M	0.5ug/l	0.54	5.9E-7	0.54	2.0E-7
m. Fluorene			1	grab	8270M	0.1ug/l	<0.19	NC	<0.19	NC
n. Naphthalene-	✔		1	grab	8270M	0.2ug/l	0	0	0	0
o. Phenanthrene		✔	1	grab	8270M	0.05ug/	0.20	2.2E-7	0.20	7.6E-8
p. Pyrene		✔	1	grab	8270M	0.05ug/	0.50	5.5E-7	0.50	1.9E-7
37. Total Polychlorinated Biphenyls (PCBs)	✔		1	grab	608	0.5ug/l	0	0	0	0
***3*8. Antimony**		✔	1	grab	6020	5 ug/l	1.4	1.5E-3	1.4	5.3E-4
39. Arsenic		✔	1	grab	6020	2 ug/l	10.3	1.1E-2	10.3	3.9E-3
40. Cadmium		✔	1	grab	6020	0.5ug/l	0.7	7.7E-4	0.7	2.6E-4
41. Chromium III		✔	1	grab	6020	5 ug/l	26.6	2.9E-2	26.6	1.0E-2
42. Chromium VI	✔		1	grab	3500	10 ug/l	0	0	0	0

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	**mass** (kg)	**concentration** (ug/l)	**mass** (kg)
43. Copper		✔	1	grab	6020	3 ug/l	187.5	2.1E-1	187.5	7.1E-2
44. Lead		✔	1	grab	6020	3 ug/l	244.6	2.7E-1	244.6	9.3E-2
45. Mercury	✔		1	grab	245.1	0.2ug/l	0	0	0	0
46. Nickel		✔	1	grab	6020	5 ug/l	27.3	3.0E-2	27.3	1.0E-2
47. Selenium		✔	1	grab	6020	5 ug/l	3	3.3E-3	3	1.1E-3
48. Silver	✔		1	grab	6020	2 ug/l	0	0	0	0
49. Zinc		✔	1	grab	6020	10 ug/l	203.6	2.2E-1	203.6	7.7E-2
50. Iron		✔	1	grab	200.7	none	32000	35	32000	12
Other (describe):										

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

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ✔ N	If yes, which metals? arsenic, cadmium, copper, lead, zinc and iron
Step 2: For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: arsenic, cadmium, copper, lead, zinc and iron DF: 1.3	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ✔ N If "Yes," list which metals: arsenic, cadmium, copper, lead, zinc and 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:

see attached NOI letter

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ✔	Air stripper ☐	Oil/water separator ☐	Equalization tanks ✔	Bag filter ✔	GAC filter ✔
	Chlorination ☐	Dechlorination ☐	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 70 Maximum flow rate of treatment system 200 Design flow rate of treatment system 200

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

none

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

a) Identify the discharge pathway:	Direct ☐	Within facility ☐	Storm drain ✔	River/brook ☐	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Discharge to Town of Dedham Storm Sewer Collection System with subsequent discharge to wetlands. See attached NOI for details

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.14 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes ☐ No ✔ If yes, for which pollutant(s)?

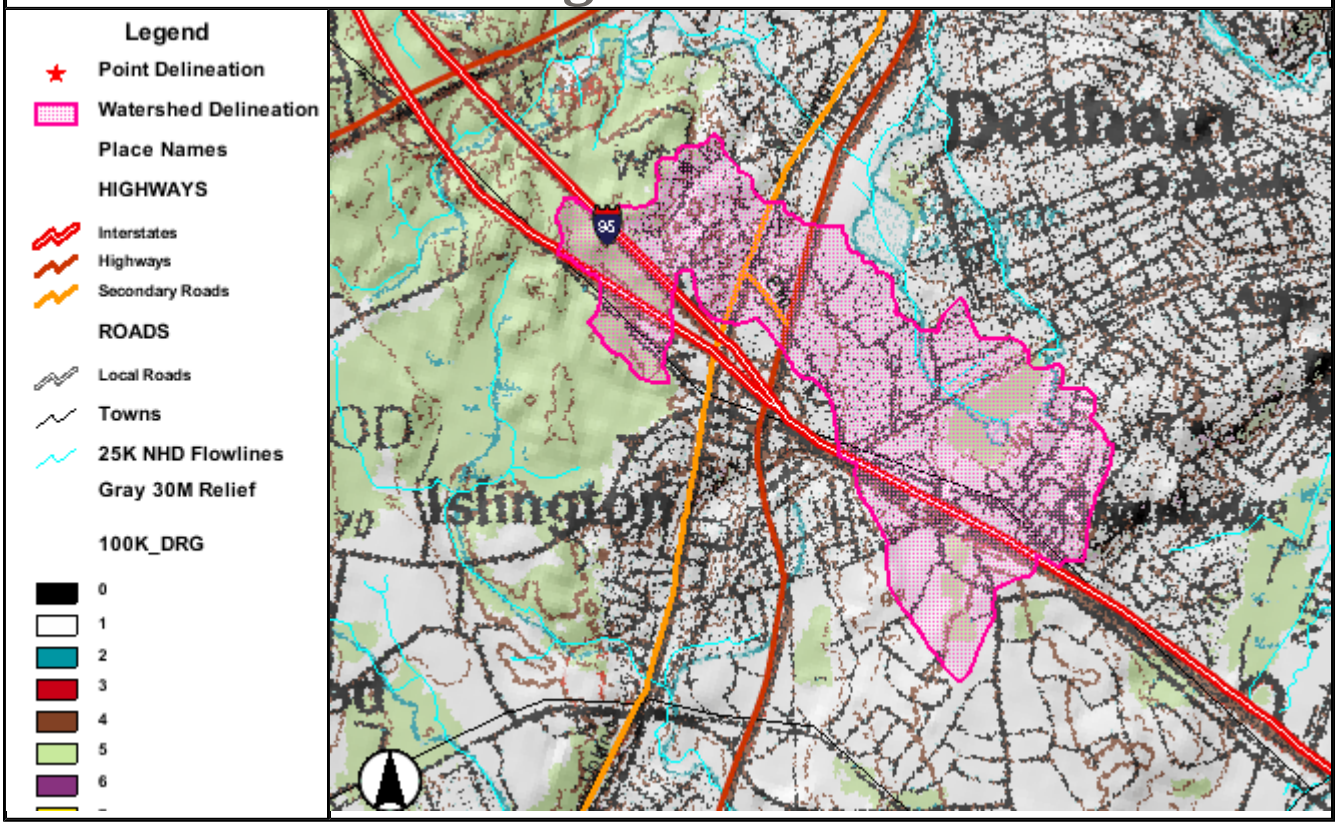
Is there a TMDL? Yes ☐ No ✔ If yes, for which pollutant(s)?

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

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☐ No ✔
Has any consultation with the federal services been completed ? ☐ No ✔ or is consultation underway? Yes ☐ No ✔
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (~~check~~ one):
a "no jeopardy" opinion? ☐ or written concurrence ☐ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes ☐ No ✔ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes ☐ No ✔

Receiving Surface Water



Streamflow Statistics Report

Date: Thu Jun 28 2007 09:39:16
Site Location: Massachusetts
Drainage Area: 1.21 mi2
Latitude (NAD83): 42.2319 (42 13 54)
Longitude (NAD83): -71.1719 (-71 10 18)

Low Flow Basin Characteristics

100% Statewide Low Flow (1.21 mi2)

Parameter	Value	Min	Max
Drainage Area (square miles)	1.21 (below min value 1.61)	1.61	149
Mean Basin Slope from 250K DEM (percent)	1.76	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.92	0	1.29
Massachusetts Region (dimensionless)	0	0	1

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

Streamflow Statistics

Statistic	Flow (ft^3/s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	1.16				
D60	0.93				
D70	0.75				
D75	0.63				
D80	0.7				
D85	0.53				
D90	0.52				
D95	0.28				
D98	0.19				
D99	0.13				
Low-Flow Statistics					
M7D2Y	0.25				
AUGD50	0.58				
M7D10Y	0.14				

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 NOI letter

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Tetra Tech Rizzo

Address: 1 Grant Street

Framingham, MA 01701-9005

Attn: Mr. Bill Phelps

Project Number: 1279696003-001

Site: FF-DEDHAM

Laboratory Job Number: L0709392

Date Received: 29-JUN-2007

Date Reported: 10-JUL-2007

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0709392-01	INF-062907	DEDHAM, MA

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

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0709392

Report Submission

This final report replaces the preliminary report issued July 9, 2007. The report has been amended to include the results for all requested analyses.

Sample Receipt

The samples were received at the laboratory below the required temperature range. The samples were transported to the laboratory in a cooler with ice but were not frozen upon receipt.

Semivolatile Organics

The LCS % spike recovery for 2,4-Dinitrotoluene are above the acceptance criteria for the method.

The LCS % spike recoveries for 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlororbenzene and Hexachloropropene are below the acceptance criteria for the method; the MS/MSD spike recoveries were acceptable.

The MS % recovery for 2,4-Dinitrotoluene is above the acceptance criteria for the method.

PCB

The WG285821-1 Blank % surrogate recovery for Decachlorobiphenyl is below the acceptance criteria. All samples are non-detect. No further action was taken.

TSS

L0709392-01 has an elevated detection limit due to the 2x dilution required for analysis of matrix.

Volatile Organics

L0709392-01 has elevated detection limits due to the 2x dilution required by the elevated concentrations of target compounds present in the sample.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0709392-01
INF-062907
Sample Matrix: WATER

Date Collected: 29-JUN-2007 07:40
Date Received : 29-JUN-2007
Date Reported : 10-JUL-2007

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 9-Amber,4-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Solids, Total Suspended	36	mg/l	10	30	2540D		0706 15:50	DW
Cyanide, Total	ND	mg/l	0.005	30	4500CN-CE	0702 18:10	0705 20:24	DD
Chlorine, Total Residual	ND	mg/l	0.02	30	4500CL-D		0630 00:15	LR
TPH	ND	mg/l	4.40	74	1664A	0702 10:30	0703 09:30	AT
Total Metals								
Antimony, Total	0.0014	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Arsenic, Total	0.0103	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Cadmium, Total	0.0007	mg/l	0.0002	1	6020	0705 17:00	0706 13:57	BM
Chromium, Total	0.0266	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Copper, Total	0.1875	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Iron, Total	32	mg/l	0.05	19	200.7	0705 17:00	0706 14:13	AI
Lead, Total	0.2446	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Mercury, Total	ND	mg/l	0.0002	3	245.1	0703 14:30	0705 12:43	DM
Nickel, Total	0.0273	mg/l	0.0005	1	6020	0705 17:00	0706 13:57	BM
Selenium, Total	0.003	mg/l	0.001	1	6020	0705 17:00	0706 13:57	BM
Silver, Total	ND	mg/l	0.0004	1	6020	0705 17:00	0706 13:57	BM
Zinc, Total	0.2036	mg/l	0.0050	1	6020	0705 17:00	0706 13:57	BM
Volatile Organics by GC/MS 8260				1	8260B		0710 13:40	PD
Methylene chloride	ND	ug/l	10.					
1,1-Dichloroethane	ND	ug/l	1.5					
Chloroform	ND	ug/l	1.5					
Carbon tetrachloride	ND	ug/l	1.0					
1,2-Dichloropropane	ND	ug/l	3.5					
Dibromochloromethane	ND	ug/l	1.0					
1,1,2-Trichloroethane	ND	ug/l	1.5					
Tetrachloroethene	1.0	ug/l	1.0					
Chlorobenzene	ND	ug/l	1.0					
Trichlorofluoromethane	ND	ug/l	5.0					
1,2-Dichloroethane	ND	ug/l	1.0					
1,1,1-Trichloroethane	81	ug/l	1.0					
Bromodichloromethane	ND	ug/l	1.0					
trans-1,3-Dichloropropene	ND	ug/l	1.0					
cis-1,3-Dichloropropene	ND	ug/l	1.0					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0709392-01
INF-062907

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1	8260B		0710 13:40	PD
1,1-Dichloropropene	ND	ug/l	5.0					
Bromoform	ND	ug/l	4.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
Benzene	ND	ug/l	1.0					
Toluene	ND	ug/l	1.5					
Ethylbenzene	ND	ug/l	1.0					
Chloromethane	ND	ug/l	5.0					
Bromomethane	ND	ug/l	2.0					
Vinyl chloride	ND	ug/l	2.0					
Chloroethane	ND	ug/l	2.0					
1,1-Dichloroethene	1.0	ug/l	1.0					
trans-1,2-Dichloroethene	ND	ug/l	1.5					
Trichloroethene	15	ug/l	1.0					
1,2-Dichlorobenzene	ND	ug/l	5.0					
1,3-Dichlorobenzene	ND	ug/l	5.0					
1,4-Dichlorobenzene	ND	ug/l	5.0					
Methyl tert butyl ether	ND	ug/l	2.0					
p/m-Xylene	ND	ug/l	2.0					
o-Xylene	ND	ug/l	2.0					
cis-1,2-Dichloroethene	1.7	ug/l	1.0					
Dibromomethane	ND	ug/l	10.					
1,4-Dichlorobutane	ND	ug/l	10.					
Iodomethane	ND	ug/l	10.					
1,2,3-Trichloropropane	ND	ug/l	10.					
Styrene	ND	ug/l	2.0					
Dichlorodifluoromethane	ND	ug/l	10.					
Acetone	ND	ug/l	10.					
Carbon disulfide	ND	ug/l	10.					
2-Butanone	ND	ug/l	10.					
Vinyl acetate	ND	ug/l	10.					
4-Methyl-2-pentanone	ND	ug/l	10.					
2-Hexanone	ND	ug/l	10.					
Ethyl methacrylate	ND	ug/l	10.					
Acrolein	ND	ug/l	25.					
Acrylonitrile	ND	ug/l	10.					
Bromochloromethane	ND	ug/l	5.0					
Tetrahydrofuran	ND	ug/l	20.					
2,2-Dichloropropane	ND	ug/l	5.0					
1,2-Dibromoethane	ND	ug/l	4.0					
1,3-Dichloropropane	ND	ug/l	5.0					
1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
Bromobenzene	ND	ug/l	5.0					
n-Butylbenzene	ND	ug/l	1.0					
sec-Butylbenzene	ND	ug/l	1.0					
tert-Butylbenzene	ND	ug/l	5.0					
o-Chlorotoluene	ND	ug/l	5.0					
p-Chlorotoluene	ND	ug/l	5.0					
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0					
Hexachlorobutadiene	ND	ug/l	1.2					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0709392-01
INF-062907

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by GC/MS 8260 cont'd				1	8260B		0710 13:40	PD
Isopropylbenzene	ND	ug/l	1.0					
p-Isopropyltoluene	ND	ug/l	1.0					
Naphthalene	ND	ug/l	5.0					
n-Propylbenzene	ND	ug/l	1.0					
1,2,3-Trichlorobenzene	ND	ug/l	5.0					
1,2,4-Trichlorobenzene	ND	ug/l	5.0					
1,3,5-Trimethylbenzene	ND	ug/l	5.0					
1,2,4-Trimethylbenzene	ND	ug/l	5.0					
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0					
Ethyl ether	ND	ug/l	5.0					
Tert-Butyl Alcohol	ND	ug/l	100					
Tertiary-Amyl Methyl Ether	ND	ug/l	4.0					
1,4-Dioxane	ND	ug/l	500					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	117	%	70-130					
Toluene-d8	99.0	%	70-130					
4-Bromofluorobenzene	104	%	70-130					
Dibromofluoromethane	110	%	70-130					
SVOC's by GC/MS 8270				1	8270C	0702 10:00	0703 19:58	RL
Acenaphthene	ND	ug/l	4.8					
Benzidine	ND	ug/l	48.					
1,2,4-Trichlorobenzene	ND	ug/l	4.8					
Hexachlorobenzene	ND	ug/l	4.8					
Bis(2-chloroethyl)ether	ND	ug/l	4.8					
1-Chloronaphthalene	ND	ug/l	4.8					
2-Chloronaphthalene	ND	ug/l	5.8					
1,2-Dichlorobenzene	ND	ug/l	4.8					
1,3-Dichlorobenzene	ND	ug/l	4.8					
1,4-Dichlorobenzene	ND	ug/l	4.8					
3,3'-Dichlorobenzidine	ND	ug/l	48.					
2,4-Dinitrotoluene	ND	ug/l	5.8					
2,6-Dinitrotoluene	ND	ug/l	4.8					
Azobenzene	ND	ug/l	4.8					
Fluoranthene	ND	ug/l	4.8					
4-Chlorophenyl phenyl ether	ND	ug/l	4.8					
4-Bromophenyl phenyl ether	ND	ug/l	4.8					
Bis(2-chloroisopropyl)ether	ND	ug/l	4.8					
Bis(2-chloroethoxy)methane	ND	ug/l	4.8					
Hexachlorobutadiene	ND	ug/l	9.6					
Hexachlorocyclopentadiene	ND	ug/l	29.					
Hexachloroethane	ND	ug/l	4.8					
Isophorone	ND	ug/l	4.8					
Naphthalene	ND	ug/l	4.8					
Nitrobenzene	ND	ug/l	4.8					
NDPA/DPA	ND	ug/l	14.					
n-Nitrosodi-n-propylamine	ND	ug/l	4.8					
Bis(2-ethylhexyl)phthalate	ND	ug/l	4.8					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0709392-01
INF-062907

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
SVOC's by GC/MS 8270 cont'd				1	8270C	0702 10:00	0703 19:58	RL
Butyl benzyl phthalate	ND	ug/l	4.8					
Di-n-butylphthalate	ND	ug/l	4.8					
Di-n-octylphthalate	ND	ug/l	4.8					
Diethyl phthalate	ND	ug/l	4.8					
Dimethyl phthalate	ND	ug/l	4.8					
Benzo(a)anthracene	ND	ug/l	4.8					
Benzo(a)pyrene	ND	ug/l	4.8					
Benzo(b)fluoranthene	ND	ug/l	4.8					
Benzo(k)fluoranthene	ND	ug/l	4.8					
Chrysene	ND	ug/l	4.8					
Acenaphthylene	ND	ug/l	4.8					
Anthracene	ND	ug/l	4.8					
Benzo(ghi)perylene	ND	ug/l	4.8					
Fluorene	ND	ug/l	4.8					
Phenanthrene	ND	ug/l	4.8					
Dibenzo(a,h)anthracene	ND	ug/l	4.8					
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.8					
Pyrene	ND	ug/l	4.8					
Benzo(e)pyrene	ND	ug/l	4.8					
Biphenyl	ND	ug/l	4.8					
Perylene	ND	ug/l	4.8					
Aniline	ND	ug/l	19.					
4-Chloroaniline	ND	ug/l	4.8					
1-Methylnaphthalene	ND	ug/l	4.8					
2-Nitroaniline	ND	ug/l	4.8					
3-Nitroaniline	ND	ug/l	4.8					
4-Nitroaniline	ND	ug/l	6.8					
Dibenzofuran	ND	ug/l	4.8					
a,a-Dimethylphenethylamine	ND	ug/l	48.					
Hexachloropropene	ND	ug/l	9.6					
Nitrosodi-n-butylamine	ND	ug/l	9.6					
2-Methylnaphthalene	ND	ug/l	4.8					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	19.					
Pentachlorobenzene	ND	ug/l	19.					
a-Naphthylamine	ND	ug/l	24.					
b-Naphthylamine	ND	ug/l	19.					
Phenacetin	ND	ug/l	9.6					
Dimethoate	ND	ug/l	19.					
4-Aminobiphenyl	ND	ug/l	9.6					
Pentachloronitrobenzene	ND	ug/l	9.6					
Isodrin	ND	ug/l	9.6					
p-Dimethylaminoazobenzene	ND	ug/l	9.6					
Chlorobenzilate	ND	ug/l	19.					
3-Methylcholanthrene	ND	ug/l	19.					
Ethyl Methanesulfonate	ND	ug/l	14.					
Acetophenone	ND	ug/l	19.					
Nitrosodipiperidine	ND	ug/l	19.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	19.					
n-Nitrosodimethylamine	ND	ug/l	48.					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0709392-01
INF-062907

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
SVOC's by GC/MS 8270 cont'd				1	8270C	0702 10:00	0703 19:58	RL
2,4,6-Trichlorophenol	ND	ug/l	4.8					
p-Chloro-m-cresol	ND	ug/l	4.8					
2-Chlorophenol	ND	ug/l	5.8					
2,4-Dichlorophenol	ND	ug/l	9.6					
2,4-Dimethylphenol	ND	ug/l	9.6					
2-Nitrophenol	ND	ug/l	19.					
4-Nitrophenol	ND	ug/l	9.6					
2,4-Dinitrophenol	ND	ug/l	29.					
4,6-Dinitro-o-cresol	ND	ug/l	19.					
Pentachlorophenol	ND	ug/l	9.6					
Phenol	ND	ug/l	6.8					
2-Methylphenol	ND	ug/l	5.8					
3-Methylphenol/4-Methylphenol	ND	ug/l	5.8					
2,4,5-Trichlorophenol	ND	ug/l	4.8					
2,6-Dichlorophenol	ND	ug/l	9.6					
Benzoic Acid	ND	ug/l	48.					
Benzyl Alcohol	ND	ug/l	9.6					
Carbazole	ND	ug/l	4.8					
Pyridine	ND	ug/l	48.					
2-Picoline	ND	ug/l	19.					
Pronamide	ND	ug/l	19.					
Methyl methanesulfonate	ND	ug/l	19.					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	32.0	%	21-120					
Phenol-d6	26.0	%	10-120					
Nitrobenzene-d5	60.0	%	23-120					
2-Fluorobiphenyl	53.0	%	43-120					
2,4,6-Tribromophenol	85.0	%	10-120					
4-Terphenyl-d14	70.0	%	33-120					
PAH by GC/MS SIM 8270M				1	8270C-M	0702 10:00	0707 22:42	RL
Acenaphthene	ND	ug/l	0.19					
2-Chloronaphthalene	ND	ug/l	0.19					
Fluoranthene	0.54	ug/l	0.19					
Hexachlorobutadiene	ND	ug/l	0.48					
Naphthalene	ND	ug/l	0.19					
Benzo(a)anthracene	0.29	ug/l	0.19					
Benzo(a)pyrene	0.27	ug/l	0.19					
Benzo(b)fluoranthene	0.22	ug/l	0.19					
Benzo(k)fluoranthene	0.38	ug/l	0.19					
Chrysene	0.25	ug/l	0.19					
Acenaphthylene	ND	ug/l	0.19					
Anthracene	ND	ug/l	0.19					
Benzo(ghi)perylene	ND	ug/l	0.19					
Fluorene	ND	ug/l	0.19					
Phenanthrene	0.20	ug/l	0.19					
Dibenzo(a,h)anthracene	ND	ug/l	0.19					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.19					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0709392-01
INF-062907

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
PAH by GC/MS SIM 8270M cont'd				1	8270C-M	0702 10:00	0707 22:42	RL
Pyrene	0.50	ug/l	0.19					
1-Methylnaphthalene	ND	ug/l	0.19					
2-Methylnaphthalene	ND	ug/l	0.19					
Pentachlorophenol	ND	ug/l	0.77					
Hexachlorobenzene	ND	ug/l	0.77					
Perylene	ND	ug/l	0.19					
Biphenyl	ND	ug/l	0.19					
2,6-Dimethylnaphthalene	ND	ug/l	0.19					
1-Methylphenanthrene	ND	ug/l	0.19					
Benzo(e)Pyrene	ND	ug/l	0.19					
Hexachloroethane	ND	ug/l	0.77					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	29.0	%	21-120					
Phenol-d6	26.0	%	10-120					
Nitrobenzene-d5	72.0	%	23-120					
2-Fluorobiphenyl	52.0	%	43-120					
2,4,6-Tribromophenol	67.0	%	10-120					
4-Terphenyl-d14	69.0	%	33-120					
Polychlorinated Biphenyls				5	608	0702 20:00	0707 21:40	JB
Aroclor 1016	ND	ug/l	0.284					
Aroclor 1221	ND	ug/l	0.284					
Aroclor 1232	ND	ug/l	0.284					
Aroclor 1242	ND	ug/l	0.284					
Aroclor 1248	ND	ug/l	0.284					
Aroclor 1254	ND	ug/l	0.284					
Aroclor 1260	ND	ug/l	0.284					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	74.0	%	30-150					
Decachlorobiphenyl	42.0	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0709392

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Solids, Total Suspended for sample(s) 01 (L0709338-01, WG286192-2)					
Solids, Total Suspended	100	88	mg/l	13	32
Cyanide, Total for sample(s) 01 (L0709140-01, WG285781-3)					
Cyanide, Total	ND	ND	mg/l	NC	
Chlorine, Total Residual for sample(s) 01 (L0709392-01, WG285637-3)					
Chlorine, Total Residual	ND	ND	mg/l	NC	
TPH for sample(s) 01 (L0709392-01, WG285785-4)					
TPH	ND	ND	mg/l	NC	34
Total Metals for sample(s) 01 (L0709412-02, WG286092-1)					
Arsenic, Total	0.0103	0.0098	mg/l	5	20
Copper, Total	0.1036	0.0998	mg/l	4	20
Lead, Total	0.0506	0.0484	mg/l	4	20
Total Metals for sample(s) 01 (L0709412-02, WG286109-1)					
Iron, Total	0.54	0.53	mg/l	2	
Total Metals for sample(s) 01 (L0709269-01, WG285930-3)					
Mercury, Total	ND	ND	mg/l	NC	
Polychlorinated Biphenyls for sample(s) 01 (L0709267-01, WG285821-4)					
Aroclor 1016	ND	ND	ug/l	NC	30
Aroclor 1221	ND	ND	ug/l	NC	30
Aroclor 1232	ND	ND	ug/l	NC	30
Aroclor 1242	ND	ND	ug/l	NC	30
Aroclor 1248	ND	ND	ug/l	NC	30
Aroclor 1254	ND	ND	ug/l	NC	30
Aroclor 1260	ND	ND	ug/l	NC	30
Surrogate(s)	Recovery				QC Criteria
2,4,5,6-Tetrachloro-m-xylene	72.0	71.0	%		30-150
Decachlorobiphenyl	20.0	27.0	%		30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0709392

Parameter	% Recovery	QC Criteria
Cyanide, Total LCS for sample(s) 01 (WG285781-2)		
Cyanide, Total	99	
Chlorine, Total Residual LCS for sample(s) 01 (WG285637-2)		
Chlorine, Total Residual	105	
TPH LCS for sample(s) 01 (WG285785-2)		
TPH	90	64-132
Total Metals LCS for sample(s) 01 (WG286092-4)		
Antimony, Total	92	80-120
Arsenic, Total	90	80-120
Cadmium, Total	99	80-120
Chromium, Total	90	80-120
Copper, Total	91	80-120
Lead, Total	93	80-120
Nickel, Total	94	80-120
Selenium, Total	92	80-120
Silver, Total	92	80-120
Zinc, Total	93	80-120
Total Metals LCS for sample(s) 01 (WG286109-4)		
Iron, Total	99	
Total Metals LCS for sample(s) 01 (WG285930-1)		
Mercury, Total	102	
Volatile Organics by GC/MS 8260 LCS for sample(s) 01 (WG286548-3)		
Chlorobenzene	107	75-130
Benzene	103	76-127
Toluene	104	76-125
1,1-Dichloroethene	99	61-145
Trichloroethene	104	71-120
Surrogate(s)		
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130
Dibromofluoromethane	103	70-130
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG285710-2)		
Acenaphthene	60	46-118
1,2,4-Trichlorobenzene	33	39-98
2-Chloronaphthalene	51	40-140
1,2-Dichlorobenzene	37	40-140
1,4-Dichlorobenzene	32	36-97
2,4-Dinitrotoluene	100	24-96
2,6-Dinitrotoluene	97	40-140
Fluoranthene	99	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0709392

Continued

Parameter	% Recovery	QC Criteria
SVOC's by GC/MS 8270 LCS for sample(s) 01 (WG285710-2)		
4-Chlorophenyl phenyl ether	66	40-140
n-Nitrosodi-n-propylamine	78	41-116
Butyl benzyl phthalate	98	40-140
Anthracene	88	40-140
Pyrene	98	26-127
Hexachloropropene	17	40-140
P-Chloro-M-Cresol	75	23-97
2-Chlorophenol	54	27-123
2-Nitrophenol	65	30-130
4-Nitrophenol	35	10-80
2,4-Dinitrophenol	77	30-130
Pentachlorophenol	86	9-103
Phenol	20	12-110
Surrogate(s)		
2-Fluorophenol	29	21-120
Phenol-d6	23	10-120
Nitrobenzene-d5	61	23-120
2-Fluorobiphenyl	54	43-120
2,4,6-Tribromophenol	82	10-120
4-Terphenyl-d14	81	33-120
PAH by GC/MS SIM 8270M LCS for sample(s) 01 (WG285708-2)		
Acenaphthene	56	40-140
2-Chloronaphthalene	56	40-140
Fluoranthene	99	40-140
Anthracene	62	40-140
Pyrene	94	40-140
Pentachlorophenol	59	30-130
Surrogate(s)		
2-Fluorophenol	31	21-120
Phenol-d6	26	10-120
Nitrobenzene-d5	82	23-120
2-Fluorobiphenyl	51	43-120
2,4,6-Tribromophenol	79	10-120
4-Terphenyl-d14	101	33-120
Polychlorinated Biphenyls LCS for sample(s) 01 (WG285821-2)		
Aroclor 1016	89	40-140
Aroclor 1260	95	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	76	30-150
Decachlorobiphenyl	38	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0709392

Continued

Parameter	% Recovery	QC Criteria
Cyanide, Total SPIKE for sample(s) 01 (L0709392-01, WG285781-4)		
Cyanide, Total	105	
TPH SPIKE for sample(s) 01 (L0709346-01, WG285785-3)		
TPH	81	64-132
Total Metals SPIKE for sample(s) 01 (L0709412-02, WG286092-2)		
Antimony, Total	91	80-120
Arsenic, Total	93	80-120
Cadmium, Total	98	80-120
Chromium, Total	87	80-120
Copper, Total	86	80-120
Lead, Total	90	80-120
Nickel, Total	88	80-120
Selenium, Total	91	80-120
Silver, Total	86	80-120
Zinc, Total	91	80-120
Total Metals SPIKE for sample(s) 01 (L0709412-02, WG286109-2)		
Iron, Total	86	
Total Metals SPIKE for sample(s) 01 (L0709269-01, WG285930-2)		
Mercury, Total	125	
Polychlorinated Biphenyls SPIKE for sample(s) 01 (L0709267-01, WG285821-3)		
Aroclor 1016	65	40-140
Aroclor 1260	52	40-140
Surrogate(s)		
2,4,5,6-Tetrachloro-m-xylene	58	30-150
Decachlorobiphenyl	20	30-150

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0709392

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC/MS 8260 for sample(s) 01 (L0709392-01, WG286548-2)					
Chlorobenzene	93	84	10	20	75-130
Benzene	93	86	8	20	76-127
Toluene	93	86	8	20	76-125
1,1-Dichloroethene	92	87	6	20	61-145
Trichloroethene	110	93	17	20	71-120
Surrogate(s)					
1,2-Dichloroethane-d4	111	111	0		70-130
Toluene-d8	100	99	1		70-130
4-Bromofluorobenzene	98	99	1		70-130
Dibromofluoromethane	111	110	1		70-130
SVOC's by GC/MS 8270 for sample(s) 01 (L0709392-01, WG285710-4)					
Acenaphthene	76	71	7	30	46-118
1,2,4-Trichlorobenzene	48	44	9	30	39-98
2-Chloronaphthalene	71	71	0	30	40-140
1,2-Dichlorobenzene	47	42	11	30	40-140
1,4-Dichlorobenzene	45	38	17	30	36-97
2,4-Dinitrotoluene	100	95	5	30	24-96
2,6-Dinitrotoluene	100	95	5	30	40-140
Fluoranthene	100	95	5	30	40-140
4-Chlorophenyl phenyl ether	86	81	6	30	40-140
n-Nitrosodi-n-propylamine	81	76	6	30	41-116
Butyl benzyl phthalate	95	90	5	30	40-140
Anthracene	86	81	6	30	40-140
Pyrene	95	90	5	30	26-127
Hexachloropropene	45	41	9	30	40-140
P-Chloro-M-Cresol	83	81	2	30	23-97
2-Chlorophenol	62	59	5	30	27-123
2-Nitrophenol	69	64	8	30	30-130
4-Nitrophenol	67	74	10	30	10-80
2,4-Dinitrophenol	95	93	2	30	30-130
Pentachlorophenol	83	83	0	30	9-103
Phenol	38	40	5	30	12-110
Surrogate(s)					
2-Fluorophenol	47	48	2		21-120
Phenol-d6	44	49	11		10-120
Nitrobenzene-d5	68	63	8		23-120
2-Fluorobiphenyl	63	61	3		43-120
2,4,6-Tribromophenol	93	87	7		10-120
4-Terphenyl-d14	83	79	5		33-120
PAH by GC/MS SIM 8270M for sample(s) 01 (L0709392-01, WG285708-4)					
Acenaphthene	67	71	6	40	40-140
2-Chloronaphthalene	76	67	13	40	40-140
Fluoranthene	100	100	0	40	40-140
Anthracene	90	90	0	40	40-140

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0709392

Continued

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
PAH by GC/MS SIM 8270M for sample(s) 01 (L0709392-01, WG285708-4)					
Pyrene	100	95	5	40	40-140
Pentachlorophenol	64	64	0	40	30-130
Surrogate(s)					
2-Fluorophenol	49	51	4		21-120
Phenol-d6	51	54	6		10-120
Nitrobenzene-d5	99	87	13		23-120
2-Fluorobiphenyl	77	72	7		43-120
2,4,6-Tribromophenol	90	85	6		10-120
4-Terphenyl-d14	103	97	6		33-120

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG286192-1)								
Solids, Total Suspended	ND	mg/l	5.0	30	2540D		0706 15:50	DW
Blank Analysis for sample(s) 01 (WG285781-1)								
Cyanide, Total	ND	mg/l	0.005	30	4500CN-CE	0702 18:10	0705 20:06	DD
Blank Analysis for sample(s) 01 (WG285637-1)								
Chlorine, Total Residual	ND	mg/l	0.02	30	4500CL-D		0630 00:15	LR
Blank Analysis for sample(s) 01 (WG285785-1)								
TPH	ND	mg/l	4.00	74	1664A	0702 10:30	0703 09:30	AT
Blank Analysis for sample(s) 01 (WG286092-3)								
Total Metals								
Antimony, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Arsenic, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Cadmium, Total	ND	mg/l	0.0002	1	6020	0705 17:00	0706 13:24	BM
Chromium, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Copper, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Lead, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Nickel, Total	ND	mg/l	0.0005	1	6020	0705 17:00	0706 13:24	BM
Selenium, Total	ND	mg/l	0.001	1	6020	0705 17:00	0706 13:24	BM
Silver, Total	ND	mg/l	0.0004	1	6020	0705 17:00	0706 13:24	BM
Zinc, Total	ND	mg/l	0.0050	1	6020	0705 17:00	0706 13:24	BM
Blank Analysis for sample(s) 01 (WG286109-3)								
Total Metals				19	200.7			
Iron, Total	ND	mg/l	0.05	19	200.7	0705 17:00	0706 13:08	AI
Blank Analysis for sample(s) 01 (WG285930-4)								
Total Metals								
Mercury, Total	ND	mg/l	0.0002	3	245.1	0703 14:30	0705 12:09	DM
Blank Analysis for sample(s) 01 (WG286548-4)								
Volatile Organics by GC/MS 8260				1	8260B		0710 09:44	PD
Methylene chloride	ND	ug/l	5.0					
1,1-Dichloroethane	ND	ug/l	0.75					
Chloroform	ND	ug/l	0.75					
Carbon tetrachloride	ND	ug/l	0.50					
1,2-Dichloropropane	ND	ug/l	1.8					
Dibromochloromethane	ND	ug/l	0.50					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG286548-4)								
Volatile Organics by GC/MS 8260 cont'd				1	8260B		0710 09:44	PD
1,1,2-Trichloroethane	ND	ug/l	0.75					
Tetrachloroethene	ND	ug/l	0.50					
Chlorobenzene	ND	ug/l	0.50					
Trichlorofluoromethane	ND	ug/l	2.5					
1,2-Dichloroethane	ND	ug/l	0.50					
1,1,1-Trichloroethane	ND	ug/l	0.50					
Bromodichloromethane	ND	ug/l	0.50					
trans-1,3-Dichloropropene	ND	ug/l	0.50					
cis-1,3-Dichloropropene	ND	ug/l	0.50					
1,1-Dichloropropene	ND	ug/l	2.5					
Bromoform	ND	ug/l	2.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50					
Benzene	ND	ug/l	0.50					
Toluene	ND	ug/l	0.75					
Ethylbenzene	ND	ug/l	0.50					
Chloromethane	ND	ug/l	2.5					
Bromomethane	ND	ug/l	1.0					
Vinyl chloride	ND	ug/l	1.0					
Chloroethane	ND	ug/l	1.0					
1,1-Dichloroethene	ND	ug/l	0.50					
trans-1,2-Dichloroethene	ND	ug/l	0.75					
Trichloroethene	ND	ug/l	0.50					
1,2-Dichlorobenzene	ND	ug/l	2.5					
1,3-Dichlorobenzene	ND	ug/l	2.5					
1,4-Dichlorobenzene	ND	ug/l	2.5					
Methyl tert butyl ether	ND	ug/l	1.0					
p/m-Xylene	ND	ug/l	1.0					
o-Xylene	ND	ug/l	1.0					
cis-1,2-Dichloroethene	ND	ug/l	0.50					
Dibromomethane	ND	ug/l	5.0					
1,4-Dichlorobutane	ND	ug/l	5.0					
Iodomethane	ND	ug/l	5.0					
1,2,3-Trichloropropane	ND	ug/l	5.0					
Styrene	ND	ug/l	1.0					
Dichlorodifluoromethane	ND	ug/l	5.0					
Acetone	ND	ug/l	5.0					
Carbon disulfide	ND	ug/l	5.0					
2-Butanone	ND	ug/l	5.0					
Vinyl acetate	ND	ug/l	5.0					
4-Methyl-2-pentanone	ND	ug/l	5.0					
2-Hexanone	ND	ug/l	5.0					
Ethyl methacrylate	ND	ug/l	5.0					
Acrolein	ND	ug/l	12.					
Acrylonitrile	ND	ug/l	5.0					
Bromochloromethane	ND	ug/l	2.5					
Tetrahydrofuran	ND	ug/l	10.					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG286548-4)								
Volatile Organics by GC/MS 8260 cont'd				1	8260B	0710	09:44	PD
2,2-Dichloropropane	ND	ug/l	2.5					
1,2-Dibromoethane	ND	ug/l	2.0					
1,3-Dichloropropane	ND	ug/l	2.5					
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50					
Bromobenzene	ND	ug/l	2.5					
n-Butylbenzene	ND	ug/l	0.50					
sec-Butylbenzene	ND	ug/l	0.50					
tert-Butylbenzene	ND	ug/l	2.5					
o-Chlorotoluene	ND	ug/l	2.5					
p-Chlorotoluene	ND	ug/l	2.5					
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5					
Hexachlorobutadiene	ND	ug/l	0.60					
Isopropylbenzene	ND	ug/l	0.50					
p-Isopropyltoluene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	2.5					
n-Propylbenzene	ND	ug/l	0.50					
1,2,3-Trichlorobenzene	ND	ug/l	2.5					
1,2,4-Trichlorobenzene	ND	ug/l	2.5					
1,3,5-Trimethylbenzene	ND	ug/l	2.5					
1,2,4-Trimethylbenzene	ND	ug/l	2.5					
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5					
Ethyl ether	ND	ug/l	2.5					
Tert-Butyl Alcohol	ND	ug/l	50.					
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0					
1,4-Dioxane	ND	ug/l	250					
Surrogate(s)	Recovery		QC Criteria					
1,2-Dichloroethane-d4	111	%	70-130					
Toluene-d8	100	%	70-130					
4-Bromofluorobenzene	102	%	70-130					
Dibromofluoromethane	111	%	70-130					
Blank Analysis for sample(s) 01 (WG285710-1)								
SVOC's by GC/MS 8270				1	8270C	0702	10:00 0705	13:43 RL
Acenaphthene	ND	ug/l	5.0					
Benzidine	ND	ug/l	50.					
1,2,4-Trichlorobenzene	ND	ug/l	5.0					
Hexachlorobenzene	ND	ug/l	5.0					
Bis(2-chloroethyl)ether	ND	ug/l	5.0					
1-Chloronaphthalene	ND	ug/l	5.0					
2-Chloronaphthalene	ND	ug/l	6.0					
1,2-Dichlorobenzene	ND	ug/l	5.0					
1,3-Dichlorobenzene	ND	ug/l	5.0					
1,4-Dichlorobenzene	ND	ug/l	5.0					
3,3'-Dichlorobenzidine	ND	ug/l	50.					
2,4-Dinitrotoluene	ND	ug/l	6.0					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG285710-1)								
SVOC's by GC/MS 8270 cont'd				1	8270C	0702 10:00	0705 13:43	RL
2,6-Dinitrotoluene	ND	ug/l	5.0					
Azobenzene	ND	ug/l	5.0					
Fluoranthene	ND	ug/l	5.0					
4-Chlorophenyl phenyl ether	ND	ug/l	5.0					
4-Bromophenyl phenyl ether	ND	ug/l	5.0					
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0					
Bis(2-chloroethoxy)methane	ND	ug/l	5.0					
Hexachlorobutadiene	ND	ug/l	10.					
Hexachlorocyclopentadiene	ND	ug/l	30.					
Hexachloroethane	ND	ug/l	5.0					
Isophorone	ND	ug/l	5.0					
Naphthalene	ND	ug/l	5.0					
Nitrobenzene	ND	ug/l	5.0					
NDPA/DPA	ND	ug/l	15.					
n-Nitrosodi-n-propylamine	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					
Chrysene	ND	ug/l	5.0					
Acenaphthylene	ND	ug/l	5.0					
Anthracene	ND	ug/l	5.0					
Benzo(ghi)perylene	ND	ug/l	5.0					
Fluorene	ND	ug/l	5.0					
Phenanthrene	ND	ug/l	5.0					
Dibenzo(a,h)anthracene	ND	ug/l	5.0					
Indeno(1,2,3-cd)pyrene	ND	ug/l	7.0					
Pyrene	ND	ug/l	5.0					
Benzo(e)pyrene	ND	ug/l	5.0					
Biphenyl	ND	ug/l	5.0					
Perylene	ND	ug/l	5.0					
Aniline	ND	ug/l	20.					
4-Chloroaniline	ND	ug/l	5.0					
1-Methylnaphthalene	ND	ug/l	5.0					
2-Nitroaniline	ND	ug/l	5.0					
3-Nitroaniline	ND	ug/l	5.0					
4-Nitroaniline	ND	ug/l	7.0					
Dibenzofuran	ND	ug/l	5.0					
a,a-Dimethylphenethylamine	ND	ug/l	50.					
Hexachloropropene	ND	ug/l	10.					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG285710-1)								
SVOC's by GC/MS 8270 cont'd				1	8270C	0702 10:00	0705 13:43	RL
Nitrosodi-n-butylamine	ND	ug/l	10.					
2-Methylnaphthalene	ND	ug/l	5.0					
1,2,4,5-Tetrachlorobenzene	ND	ug/l	20.					
Pentachlorobenzene	ND	ug/l	20.					
a-Naphthylamine	ND	ug/l	25.					
b-Naphthylamine	ND	ug/l	20.					
Phenacetin	ND	ug/l	10.					
Dimethoate	ND	ug/l	20.					
4-Aminobiphenyl	ND	ug/l	10.					
Pentachloronitrobenzene	ND	ug/l	10.					
Isodrin	ND	ug/l	10.					
p-Dimethylaminoazobenzene	ND	ug/l	10.					
Chlorobenzilate	ND	ug/l	20.					
3-Methylcholanthrene	ND	ug/l	20.					
Ethyl Methanesulfonate	ND	ug/l	15.					
Acetophenone	ND	ug/l	20.					
Nitrosodipiperidine	ND	ug/l	20.					
7,12-Dimethylbenz(a)anthracene	ND	ug/l	20.					
n-Nitrosodimethylamine	ND	ug/l	50.					
2,4,6-Trichlorophenol	ND	ug/l	5.0					
p-Chloro-m-cresol	ND	ug/l	5.0					
2-Chlorophenol	ND	ug/l	6.0					
2,4-Dichlorophenol	ND	ug/l	10.					
2,4-Dimethylphenol	ND	ug/l	10.					
2-Nitrophenol	ND	ug/l	20.					
4-Nitrophenol	ND	ug/l	10.					
2,4-Dinitrophenol	ND	ug/l	30.					
4,6-Dinitro-o-cresol	ND	ug/l	20.					
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					
2,6-Dichlorophenol	ND	ug/l	10.					
Benzoic Acid	ND	ug/l	50.					
Benzyl Alcohol	ND	ug/l	10.					
Carbazole	ND	ug/l	5.0					
Pyridine	ND	ug/l	50.					
2-Picoline	ND	ug/l	20.					
Pronamide	ND	ug/l	20.					
Methyl methanesulfonate	ND	ug/l	20.					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	33.0	%	21-120					
Phenol-d6	25.0	%	10-120					
Nitrobenzene-d5	56.0	%	23-120					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG285710-1)								
SVOC's by GC/MS 8270 cont'd				1	8270C	0702 10:00	0705 13:43	RL
2-Fluorobiphenyl	44.0	%	43-120					
2,4,6-Tribromophenol	75.0	%	10-120					
4-Terphenyl-d14	73.0	%	33-120					
Blank Analysis for sample(s) 01 (WG285708-1)								
PAH by GC/MS SIM 8270M				1	8270C-M	0702 10:00	0708 14:23	RL
Acenaphthene	ND	ug/l	0.20					
2-Chloronaphthalene	ND	ug/l	0.20					
Fluoranthene	ND	ug/l	0.20					
Hexachlorobutadiene	ND	ug/l	0.50					
Naphthalene	ND	ug/l	0.20					
Benzo(a)anthracene	ND	ug/l	0.20					
Benzo(a)pyrene	ND	ug/l	0.20					
Benzo(b)fluoranthene	ND	ug/l	0.20					
Benzo(k)fluoranthene	ND	ug/l	0.20					
Chrysene	ND	ug/l	0.20					
Acenaphthylene	ND	ug/l	0.20					
Anthracene	ND	ug/l	0.20					
Benzo(ghi)perylene	ND	ug/l	0.20					
Fluorene	ND	ug/l	0.20					
Phenanthrene	ND	ug/l	0.20					
Dibenzo(a,h)anthracene	ND	ug/l	0.20					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20					
Pyrene	ND	ug/l	0.20					
1-Methylnaphthalene	ND	ug/l	0.20					
2-Methylnaphthalene	ND	ug/l	0.20					
Pentachlorophenol	ND	ug/l	0.80					
Hexachlorobenzene	ND	ug/l	0.80					
Perylene	ND	ug/l	0.20					
Biphenyl	ND	ug/l	0.20					
2,6-Dimethylnaphthalene	ND	ug/l	0.20					
1-Methylphenanthrene	ND	ug/l	0.20					
Benzo(e)Pyrene	ND	ug/l	0.20					
Hexachloroethane	ND	ug/l	0.80					
Surrogate(s)	Recovery		QC Criteria					
2-Fluorophenol	36.0	%	21-120					
Phenol-d6	32.0	%	10-120					
Nitrobenzene-d5	88.0	%	23-120					
2-Fluorobiphenyl	53.0	%	43-120					
2,4,6-Tribromophenol	77.0	%	10-120					
4-Terphenyl-d14	107	%	33-120					
Blank Analysis for sample(s) 01 (WG285821-1)								
Polychlorinated Biphenyls				5	608	0702 20:00	0707 18:49	JB
Aroclor 1016	ND	ug/l	0.250					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709392

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG285821-1)								
Polychlorinated Biphenyls cont'd				5	608	0702 20:00	0707 18:49	JB
Aroclor 1221	ND	ug/l	0.250					
Aroclor 1232	ND	ug/l	0.250					
Aroclor 1242	ND	ug/l	0.250					
Aroclor 1248	ND	ug/l	0.250					
Aroclor 1254	ND	ug/l	0.250					
Aroclor 1260	ND	ug/l	0.250					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	78.0	%	30-150					
Decachlorobiphenyl	13.0	%	30-150					

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

3. Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

5. Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

19. Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

74. Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. 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, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. 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, Inc.

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

CHAIN OF CUSTODY

PAGE 1 OF ____

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 6/29

ALPHA Job #: L0709392

Client Information

Client: Tetra Tech Rizzo
Address: One Grant St. Framingham, MA
Phone: (508) 903-2000
Fax: (508) 903-2001
Email: Ian.Cannan@tetratech.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: FF - Dedham
Project Location: Dedham, MA
Project #: 1279696003-001
Project Manager: William Phelps
ALPHA Quote #:

Turn-Around Time

☒ Standard (5 Day) ☐ RUSH (only confirmed if pre-approved!)
Date Due: 7/9/2007 Time: AM

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
NPDES - RGP	MLs as required by EPA, see attached

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
DLs must meet EPA Minimum Levels see attached sheets

SAMPLE HANDLING

Filtration
☐ Done
☒ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs (8260) Low DL*	Phenols (624)	TSS, TRC (330.5)	TCN (Cyanide) 335.4	metals * Total	8270 PAH Low	Phthalates 625	TPH-1664	PCB-608	Hold Samples		Sample Specific Comments	TOTAL # BOTTLES
09392-01	INF-062907	6/29/07	0740	WW	IS	X											* for all analysis see	2
↓	↓	↓	↓	↓	↓		X										attached sheets for	3
								X									compounds and specified	2
									X								Minimum Reporting Limits	1
										X							*metals: see attached list	1
											X							2
												X						2
													X					2
✓														X				2

Container Type	V	V/AG	P	P	P	AG	AG	AG	AG		P
Preservative	HCl	S/Sal	P.–	NaOH	HNO3	–	Sod Bi	HCl	Sod BS		–

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6.30.7 1300	Don Bauch	6.30.7 1330
Don Bauch	6.30.7	[signature]	6/30/07 1900

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

Appendix VI: Minimum Levels and Test Methods

PARAMETER - CAS No. -	Minimum Levels and Test Methods[1, 2, 3]				
	GC[4]	GCMS[5]	LC[6]	FAA[7]	Other
1. Total Suspended Solids (TSS)					**5 mg/l** **Method 160.2**
2. Total Residual Chlorine (TRC)					**20 ug/l** **Method 330.5**
3. Total Petroleum Hydrocarbons (TPH)					**5 mg/l** **Method 1664**
4. Cyanide (total) **- 57125 -**					**10 ug/l** **Method 335.4**
5. Benzene (B) **- 71432 -**	**0.5 ug/l** Method 602	**2** ug/l Method 624			Method 8260C[2]
6. Toluene (T) **- 108883 -**	**0.5 ug/l** Method 602	**2 ug/l** Method 624			Method 8260C[2]
7. Ethylbenzene (E) **- 100414 -**	**0.5 ug/l** Method 602	**2 ug/l** Method 624			Method 8260C[2]
8. (m,p,o) Xylenes (X) **- 108383;106423; 95476-**	**0.5 ug/l** Method 602	**10 ug/l** Method 1624			Method 8260C[2]
9. Total BTEX	**0.5 ug/l** Method 602	**2 ug/l** Method 624			Method 8260C[2]
10. Ethylene Dibromide (EDB) **(1,2- Dibromoethane) - 106934 -**	**1.0 ug/l** Method 618 **0.01 ug/l** Method 504.1	**0.1 ug/l** Methods 524.2			Method 8260C[2]

PARAMETER - CAS No. -	Minimum Levels and Test Methods (40 CFR 136)				
	GC	GCMS	LC	FAA	Other
11. Methyl-tert-Butyl Ether (MtBE)	**0.5 ug/l** Method 602[8]	**5.0 ug/l Method 524.2**			Method 8260C[2]
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol) - 75650 -	**0.5 ug/l** Method 602[8]	**100 ug/l Method 1666**			Method 8260C[2]
13. tert-Amyl Methyl Ether (TAME) -994058-	**0.5 ug/l** Method 602[8]				Method 8260C[2]
14. Naphthalene - 91203 -	**10 ug/l** Method 610 GC/FID	**2 ug/l** Method 625 **5.0 ug/l Method 524.2**	**0.2 ug/l** Method 610 HPLC		Method 8270D[3]
15. Carbon Tetrachloride - 56235 -	**0.5 ug/l** Method 601	**2 ug/l** Methods 624, 1624			Method 8260C[2]
16. 1,4 Dichlorobenzene (p-DCB) - 106467 -	**0.5 ug/l** Methods 601, 602	**2 ug/l** Methods 624, 625			Method 8260C[2]
17. 1,2 Dichlorobenzene (o-DCB) - 95501 -	**0.5 ug/l** Methods 601, 602	**2 ug/l** Methods 624, 625			Method 8260C[2]
18. 1,3 Dichlorobenzene (m-DCB) - 541731 -	**0.5 ug/l** Methods 601, 602	**2 ug/l** Methods 624, 625			Method 8260C[2]
19. 1,1 Dichloroethane (DCA) - 75343 -	**0.5 ug/l** Method 601	**1 ug/l** Method 624			Method 8260C[2]
20. 1,2 Dichloroethane (DCA)- 107062 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]

PARAMETER - CAS No. -	Minimum Levels and Test Methods (40 CFR 136)				
	GC	GCMS	LC	FAA	Other
21. 1,1 Dichloroethylene (DCE) - 75354 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
22. cis-1,2 Dichloro-ethylene (DCE) -156592-	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
23. Dichloromethane (Methylene Chloride)- 75092 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
24. Tetrachloroethylene (PCE) - 127184 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
25. 1,1,1 Trichloro-ethane (TCA) - 71556 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
26. 1,1,2 Trichloro-ethane (TCA) - 79005 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
27. Trichloroethylene (TCE) - 79016 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
28. Vinyl Chloride - 75014 -	**0.5 ug/l** Method 601	**2 ug/l** Method 624			Method 8260C[2]
29. Acetone - 67641 -	**1.0 ug/l** Method 524.2	**50 ug/l** Method 1624			Method 8260C[2]
30. 1,4 Dioxane -123911-		**50 ug/l** Method 1624			Method 8260C[2]
31. Total Phenols - 108952	**1.0 ug/l** **Method 624** Method 8260[2]	**1 ug/l** Methods 625, 1625			Method 8260C[2] Method 8270D[3]
32. Pentachlorophenol (PCP) - 87865 -	**1.0 ug/l** Method 604 GCFID	**5 ug/l** Methods 625, 1625			Method 8270D[3]

PARAMETER - CAS No. -	Minimum Levels and Test Methods (40 CFR 136)				
	GC	GCMS	LC	FAA	Other
33. Total Phthalates [9] **(Phthalate esthers)**		**10 ug/l*** Method 625			Method 8270D[3]
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate] - 117817 -	**10 ug/l** Method 606	**5 ug/l** Method 625			Method 8270D[3]
35. Total Group I Polynuclear Aromatic Hydrocarbons (PAH)					Method 8270D[3]
a. Benzo(a) Anthracene -56553-	**10 ug/l** Method 610 GC	**5 ug/l** Method 625	0.05 ug/l Method 610 HPLC		Method 8270D[3]
b. Benzo(a) Pyrene -50328 -		**10 ug/l** Method 625	**2 ug/l** Method 610 HPLC		Method 8270D[3]
c. Benzo(b)Fluoranthene - 205992 -		**10 ug/l** Method 625	**0.1 ug/l** Method 610 HPLC		Method 8270D[3]
d. Benzo(k)Fluoranthene - 207089 -		**10 ug/l** Method 625	**2 ug/l** Method 610 HPLC		Method 8270D[3]
e. Chrysene - 218019 -		**10 ug/l** Method 625	**5 ug/l** Method 610 HPLC		Method 8270D[3]
f. Dibenzo(a,h) anthracene		**10 ug/l** Method 625	**0.1 ug/l** Method 610 HPLC		Method 8270D[3]
g. Indeno(1,2,3-cd) Pyrene - 193395 -		**10 ug/l** Method 625	**0.15 ug/l** Method 610		Method 8270D[3]
36. Total Group II Polynuclear Aromatic Hydrocarbons (PAH)					Method 8270D[3]

Minor Modification on Remediation General Permit (RGP):

On March 22, 2007, EPA made a minor modification to the RGP to correct the Minimum Level, (ML) for total phthalates (Phthalates and esthers). using Gas Chromatography/Mass Spectrometry (GCMS) from 5ug/l, Method 625 to 10 ug/l, Method 625. This change is just in Row 33 on Page 4 of Appendix VI.

h. Acenaphthene - 83329 -	**1 ug/l** Method 610 GC/FID	**1 ug/l** Method 625	**0.5 ug/l** Method 610 HPLC		Method 8270D[3]
i. Acenaphthylene - 208968 -		**10 ug/l** Method 625	**0.2 ug/l** Method 610 HPLC		Method 8270D[3]
PARAMETER - CAS No. -	**Minimum Levels and Test Methods (40 CFR 136)**				
	GC	**GCMS**	**LC**	**FAA**	**Other**
j. Anthracene - 120127 -		**10 ug/l** Method 625	**2 ug/l** Method 610 HPLC		Method 8270D[3]
k. Benzo(ghi) Perylene - 191242 -		**5 ug/l** Method 625	**0.1 ug/l** Method 610 HPLC		Method 8270D[3]
l. Fluoranthene - 206440 -	**10 ug/l** Method 610 GC/FID	**1 ug/l** Method 625	**0.5 ug/l** Method 610 HPLC		Method 8270D[3]
m. Fluorene - 86737 -		**10 ug/l** Method 625	**0.1 ug/l** Method 610 HPLC		Method 8270D[3]
n. Naphthalene - 91203 -	**10 ug/l** Method 610 GC/FID	**2 ug/l** Method 625 **5.0 ug/l Method 524.2**	**0.2 ug/l** Method 610 HPLC		Method 8270D[3]
o. Phenanthrene - 85018 -		**5 ug/l** Method 625	**0.05 ug/l** Method 610 HPLC		Method 8270D[3]
p. Pyrene - 129000 -		**10 ug/l** Method 625	**0.05 ug/l** Method 610 HPLC		Method 8270D[3]
37. Total Polychlorinated Biphenyls (PCBs)[10]	**0.5 ug/l** Method 608				**0.00005** ug/l Method 1668a[11]

Inorganic parameters:	Minimum Levels (ug/l) and Test Methods			
	Flame Atomic Absorption	Inductively Coupled Plasma	Furnace Atomic Absorption	Other
38. Antimony	200 ug/l	50 ug/l	5 ug/l	
39. Arsenic		5 ug/l	2 ug/l	
40. Cadmium	10 ug/l	5 ug/l	0.5 ug/l	
Inorganic parameters:	Minimum Levels (ug/l) and Test Methods			
	Flame Atomic Absorption	Inductively Coupled Plasma	Furnace Atomic Absorption	Other
41. Chromium (total)	Method 218.1	10 ug/l Methods 200.7[11], 200.8, 200.15, 1620	5 ug/l Method 200.9	50 ug/l
42. Chromium (hexavalent)				10 ug/l Method 218.6 Method 1636
43. Copper	20 ug/l	5 ug/l	3 ug/l	
44. Lead	100 ug/l	40 ug/l	3 ug/l	
45. Mercury				0.2 ug/l
46. Nickel	30 ug/l	10 ug/l	5 ug/l	
47. Selenium		50 ug/l	5 ug/l	
48. Silver	50 ug/l	10 ug/l	2 ug/l	
49. Zinc	30 ug/l	10 ug/l		
50. Iron		Methods 6010b 200.7[12]		

1. 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). Where a minimum level (ML) is listed but a test method is not specified, permittee may use any of the available methods approved for use under 40 CFR 136, including alternatives approved by this permit, that meets that ML. See EPA's "Methods and Guidance for the Analysis of Water" at www.epa.gov/water/owrccatalog.nsf. Where test method is specified but ML not listed for that method, the lowest ML for listed methods must be used before concentration can be considered as "non-detect."

2. For measuring volatile organic compounds, Method 8260C (or the latest version) may be used as a substitute for CWA Methods 524.2, 602, 624, or 1624. Method 8260C must be preceded by Method 5030 as the preparation method. However, any method changes must be accompanied by documented quality assurance quality control (QA/QC) test results to prove that the analytical process can achieve the lower detection limits of Method 8260C.

3. For measuring semi-volatile organic compounds, Method 8270D may be used as a substitute for Methods 610, 625, or 1625. Method 8270D must be preceded by Method 3535 or Method 3520C as the sample preparation method. In either case, the quality control requirements of Method 3500B must be taken into account. The sample preparation method must be specified with data analysis records. Method 8270D may be modified to provide lower detection and quantitation limits using Selected Ion Monitoring (SIM). Any method changes must be accompanied by documented quality assurance quality control (QA/QC) test results to prove that the analytical process can achieve the lower detection limits of Method 8270D.

4. GC - gas chromatography

5. GCMS - gas chromatography/mass spectrometry

6. LC - high pressure liquid chromatography

7. Flame Atomic Absorption

8. For measuring fuel oxygenates, Method 602 must be modified to include a heated purge.

9. The sum of individual phthalate compounds.

10. 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 Aroclor analyses"*.

11. Method 1668a (HRGC/HRMS) has been proposed by EPA and is currently being validated. When approval of the method is finalized, it will be approved for use with this general permit.

12. Methods 6010b and 200.7 for metals may only be used when sample prepared with SW-846 digestion method, Method 3010.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Tetra Tech Rizzo

Address: 1 Grant Street

Framingham, MA 01701-9005

Attn: Mr. Ray Johnson

Project Number: 1279695003

Site: FF-DEDHAM

Laboratory Job Number: L0709913

Date Received: 12-JUL-2007

Date Reported: 17-JUL-2007

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0709913-01	INFLUENT-071207	DEDHAM

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

Authorized by: _____
Technical Representative

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0709913

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

Pesticides by GC 504

The LCS % recoveries are above method acceptance criteria. All associated samples are non-detect.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0709913-01
INFLUENT-071207
Sample Matrix: WATER

Date Collected: 12-JUL-2007 13:30
Date Received : 12-JUL-2007
Date Reported : 17-JUL-2007

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Chromium, Hexavalent	ND	mg/l	0.010	30 3500CR-D	0712 19:20	0712 19:20	NM
Pesticides by GC 504				14 504.1	0716 17:00	0716 19:26	SS
1,2-Dibromoethane	ND	ug/l	0.019				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0709913

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Chromium, Hexavalent for sample(s) 01 (L0709913-01, WG286869-1)					
Chromium, Hexavalent	ND	ND	mg/l	NC	20

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0709913

Parameter	% Recovery	QC Criteria
Chromium, Hexavalent LCS for sample(s) 01 (WG286869-3)		
Chromium, Hexavalent	96	85-115
Pesticides by GC 504 LCS for sample(s) 01 (WG287268-2)		
1,2-Dibromoethane	135	70-130
1,2-Dibromo-3-chloropropane	132	70-130
Chromium, Hexavalent SPIKE for sample(s) 01 (L0709913-01, WG286869-4)		
Chromium, Hexavalent	100	85-115
Pesticides by GC 504 SPIKE for sample(s) 01 (L0709913-01, WG287268-3)		
1,2-Dibromoethane	126	

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0709913

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG286869-2)								
Chromium, Hexavalent	ND	mg/l	0.010	30	3500CR-D	0712 19:20	0712 19:20	NM
Blank Analysis for sample(s) 01 (WG287268-1)								
Pesticides by GC 504				14	504.1	0716 17:00	0716 18:19	SS
1,2-Dibromoethane	ND	ug/l	0.020					
1,2-Dibromo-3-chloropropane	ND	ug/l	0.020					

REFERENCES

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. 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, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. 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, Inc.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7/17/07

ALPHA Job #: L0709913

ALPHA ANALYTICAL LABORATORIES

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: E-1220

Address: ONE GRANT STREET
FRAMINGHAM, MA 01702

Phone: 508.903.2389

Fax: 508.903.2001

Email: BILL.PHELPS@TETRATECH.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: EF - DEDHAM

Project Location: DEDHAM

Project #: 1279695003

Project Manager: RAY JOHNSON

ALPHA Quote #:

Turn-Around Time

☐ Standard ☑ RUSH (only confirmed if pre-approved!)

Date Due: 72-HR Time: 3/17/07

Report Information - Data Deliverables

☐ FAX ☑ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: EPA NPDES

Criteria: RGP

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☑ No Are MCP Analytical Methods Required?

☐ Yes ☑ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

* NEED TO MEET EPA NPDES RGP REPORTING LEVELS *

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: TOTAL HEX CHROME	ANALYSIS: EDB BY 504	Sample Specific Comments	TOTAL # BOTTLES
9913, 1	INFLUENT. 071207	7.12.07	1330	WW	VGP	X	X	* $Na_2S_2O_3$ PRESERV.	3

SAMPLE HANDLING

Filtration
☐ Done
☑ Not needed
☐ Lab to do

Preservation
☐ Lab to do
(Please specify below)

Container Type	P	V
Preservative	—	*

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
			7/12 17:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

Flow Characteristics:

Max Q_d = 200 gpm (0.45 ft^3/s) ⇒ 0.29 MGD

Ave. Q_d = 70 gpm (0.16 ft^3/s) ⇒ 0.10 MGD

Dilution Factor (DF) = $(Q_d^{max} + Q_s)/Q_d$

Q_s = 7Q10 = 0.14 ft^3/s

$$DF = \frac{0.45\ ft^3/s + 0.14\ ft^3/s}{0.45\ ft^3/s} = 1.3$$

General Contaminants:

Mass (lbs/day) = MGD · concentration (mg/L) · 8.34 lbs/gal

lbs/day = 1/2.2 Kg/lb

Max = $\left(0.29\ MGD \cdot \frac{36\ mg/L}{2.2} \cdot 8.34\right)$ = 39.6 Kg/day (40)

Ave = $\left(0.10\ MGD \cdot \frac{36\ mg/L}{2.2} \cdot 8.34\right)$ = 13.6 Kg/day (14)

Metals: Total

Antimony - 0.0014 mg/L

Max = $\left(0.29\ MGD \cdot \frac{1.4\ E^{-3}}{2.2} \cdot 8.34\right)$ = $1.5\ E^{-3}$ Kg/day

Ave = $\left(0.1\ MGD \cdot \frac{1.4\ E^{-3}}{2.2} \cdot 8.34\right)$ = $5.3\ E^{-4}$ Kg/day

Arsenic = 0.0103 mg/L

Max = $\left(0.29\ MGD \cdot \frac{1.03\ E^{-2}}{2.2} \cdot 8.34\right)$ = $1.1\ E^{-2}$ Kg/day

Ave = $\left(0.1\ MGD \cdot \frac{1.03\ E^{-2}}{2.2} \cdot 8.34\right)$ = $3.9\ E^{-3}$ Kg/day

TETRA TECH RIZZO

JOB Dedham - FFDV. - Contaminant Info - RGP

SHEET NO. 1 OF

CALCULATED BY ISC DATE 7/10/07

CHECKED BY DATE

SCALE

Metals (cont.)

Cadmium = 0.0007 mg/L

$$\text{Max} = \left(0.29 \cdot \frac{7E^{-4}}{2.2} \cdot 8.34\right) = 7.7E^{-4} \text{ Kg/day}$$

$$\text{Ave} = \left(0.1 \text{ MGD} \cdot \frac{7E^{-4}}{2.2} \cdot 8.34\right) = 2.6E^{-4} \text{ Kg/day}$$

Chromium = 0.0266 mg/L

$$\text{Max} = \left(0.29 \text{ MGD} \cdot \frac{2.66E^{-2}}{2.2} \cdot 8.34\right) = 2.9E^{-2} \text{ Kg/day}$$

$$\text{Ave} = \left(0.1 \text{ MGD} \cdot \frac{2.66E^{-2}}{2.2} \cdot 8.34\right) = 1.0E^{-2} \text{ Kg/day}$$

Copper = 0.1875 mg/L

$$\text{Max} = \left(0.29 \text{ MGD} \cdot \frac{1.875E^{-1}}{2.2} \cdot 8.34\right) = 2.1E^{-1} \text{ Kg/day}$$

$$\text{Ave} = \left(0.1 \text{ MGD} \cdot \frac{1.875E^{-1}}{2.2} \cdot 8.34\right) = 7.1E^{-2} \text{ Kg/day}$$

Iron = 32 mg/L

$$\text{Max} = \left(0.29 \text{ MGD} \cdot \frac{32 \text{ mg/L}}{2.2} \cdot 8.34\right) = 35 \text{ Kg/day}$$

$$\text{Ave} = \left(0.1 \text{ MGD} \cdot \frac{32 \text{ mg/L}}{2.2} \cdot 8.34\right) = 12 \text{ Kg/day}$$

Lead = 0.2446 mg/L

$$\text{Max} = \left(0.29 \text{ MGD} \cdot \frac{0.2446}{2.2} \cdot 8.34\right) = 2.7E^{-1} \text{ Kg/day}$$

$$\text{Ave} = \left(0.1 \text{ MGD} \cdot \frac{0.2446}{2.2} \cdot 8.34\right) = 9.3E^{-2} \text{ Kg/day}$$

TETRA TECH RIZZO

JOB FF - Dedham - Contaminant Info - RGP
SHEET NO. 2 OF
CALCULATED BY ISC DATE
CHECKED BY DATE
SCALE

Metals (cont.)

Nickel = 0.0273 mg/L

$$\text{Max} = \left(0.29\ \text{MGD} \cdot \frac{2.73\,E^{-2}}{2.2} \cdot 8.34\right) = 3.0\,E^{-2}\ \text{Kg/day}$$

$$\text{Ave} = \left(0.1\ \text{MGD} \cdot \frac{2.73\,E^{-2}}{2.2} \cdot 8.34\right) = 1.0\,E^{-2}\ \text{Kg/day}$$

Selenium = 0.003 mg/L

$$\text{Max} = \left(0.29\ \text{MGD} \cdot \frac{3\,E^{-3}}{2.2} \cdot 8.34\right) = 3.3\,E^{-3}\ \text{Kg/day}$$

$$\text{Ave} = \left(0.1\ \text{MGD} \cdot \frac{3\,E^{-3}}{2.2} \cdot 8.34\right) = 1.1\,E^{-3}\ \text{Kg/day}$$

Zinc = 0.2036 mg/L

$$\text{Max} = \left(0.29\ \text{MGD} \cdot \frac{2.036\,E^{-1}}{2.2} \cdot 8.34\right) = 2.2\,E^{-1}\ \text{Kg/day}$$

$$\text{Ave} = \left(0.1\ \text{MGD} \cdot \frac{2.036\,E^{-1}}{2.2} \cdot 8.34\right) = 7.7\,E^{-2}\ \text{Kg/day}$$

PAHs

Fluoranthene = 0.54 mg/L $\Rightarrow$ $5.4\,E^{-4}$ mg/L

$$\text{Max} = \left(0.29 \cdot \frac{5.4\,E^{-4}}{2.2} \cdot 8.34\right) = 5.9\,E^{-4}\ \text{Kg/day}$$

$$\text{Ave} = \left(0.1\ \text{MGD} \cdot \frac{5.4\,E^{-4}}{2.2} \cdot 8.34\right) = 2.0\,E^{-4}\ \text{Kg/day}$$

Benzo(a)anthracene = 0.29 mg/L $\Rightarrow$ $2.9\,E^{-4}$ mg/L

$$\text{Max} = \left(0.29 \cdot \frac{2.9\,E^{-4}}{2.2} \cdot 8.34\right) = 3.2\,E^{-4}\ \text{Kg/day}$$

$$\text{Ave} = \left(0.1 \cdot \frac{2.9\,E^{-4}}{2.2} \cdot 8.34\right) = 1.1\,E^{-4}\ \text{Kg/day}$$

TETRA TECH RIZZO

JOB FF-Dedham - Contaminant Info - RBP

SHEET NO. 3 OF

CALCULATED BY ISC DATE 7/10/07

CHECKED BY DATE

SCALE

PAHs (cont.)

Benzo(a)pyrene = 0.27 ug/L = $2.7 E^{-7}$ mg/L

Max = $\frac{(0.29 \text{ MGD} \cdot 2.7E^{-7} \cdot 8.34)}{2.2}$ = $3.0 E^{-7}$ Kg/day

Ave = $\frac{(0.1 \text{ MGD} \cdot 2.7E^{-7} \cdot 8.34)}{2.2}$ = $1.0 E^{-7}$ Kg/day

Benzo(b)fluoranthene = 0.22 ug/L = $2.2 E^{-7}$ mg/L

Max = $\frac{(0.29 \text{ MGD} \cdot 2.2E^{-7} \cdot 8.34)}{2.2}$ = $2.4 E^{-7}$ Kg/day

Ave = $\frac{(0.1 \text{ MGD} \cdot 2.2E^{-7} \cdot 8.34)}{2.2}$ = $8.3 E^{-8}$ Kg/day

Benzo(k)fluoranthene = 0.38 ug/L = $3.8 E^{-7}$ mg/L

Max = $\frac{(0.29 \cdot 3.8E^{-7} \cdot 8.34)}{2.2}$ = $4.2 E^{-7}$ Kg/day

Ave = $\frac{(0.1 \cdot 3.8E^{-7} \cdot 8.34)}{2.2}$ = $1.4 E^{-7}$ Kg/day

Chrysene = 0.25 ug/L = $2.5 E^{-7}$ mg/L

Max = $\frac{(0.29 \text{ MGD} \cdot 2.5E^{-7} \cdot 8.34)}{2.2}$ = $2.7 E^{-7}$ Kg/day

Ave = $\frac{(\frac{0.1}{0.29} \text{ MGD} \cdot 2.5E^{-7} \cdot 8.34)}{2.2}$ = $9.5 E^{-8}$ Kg/day

Phenanthrene = 0.20 ug/L = $2.0 E^{-7}$ mg/L

Max = $\frac{(0.29 \text{ MGD} \cdot 2.0E^{-7} \cdot 8.34)}{2.2}$ = $2.2 E^{-7}$ Kg/day

Ave = $\frac{(0.1 \text{ MGD} \cdot 2.0E^{-7} \cdot 8.34)}{2.2}$ = $7.6 E^{-8}$ Kg/day

TETRA TECH RIZZO

JOB EF. Dedham - Contaminant Info - RGP

SHEET NO. 4 OF

CALCULATED BY IX DATE 7/10/07

CHECKED BY DATE

SCALE

PAHs (cont.)

Pyrene = 0.50 mg/L = $5.0E^{-7}$ mg/L

Max = $\frac{(0.29\ MGD \cdot 5.0E^{-7} \cdot 8.34)}{2.2}$ = $5.5\ E^{-7}$ Kg/day

Ave = $\frac{(0.1\ MGD \cdot 5.0E^{-7} \cdot 8.34)}{2.2}$ = $1.9\ E^{-7}$ Kg/day

---

VOCs

Tetrachloroethene - 1.0 mg/L, 2.6 mg/L Ave = 1.8 mg/L

Max = $\frac{(0.29\ MGD \cdot 2.6E^{-6} \cdot 8.34)}{2.2}$ = $2.9\ E^{-6}$ Kg/day

Ave = $\frac{(0.1\ MGD \cdot 1.8E^{-6} \cdot 8.34)}{2.2}$ = $6.8\ E^{-7}$ Kg/day

1,1,1-Trichloroethane - 81 mg/L, 186 mg/L Ave = 133 mg/L

Max = $\frac{(0.29\ MGD \cdot 1.86E^{-4} \cdot 8.34)}{2.2}$ = $2.0\ E^{-4}$ Kg/day

Ave = $(0.1\ MGD \cdot 1.33E^{-4} \cdot 8.34)/2.2$ = $5.0\ E^{-5}$ Kg/day

1,1-Dichloroethene - 1.0 mg/L, 4.6 mg/L Ave = 2.8 mg/L

Max = $\frac{(0.29\ MGD \cdot 4.6E^{-6} \cdot 8.34)}{2.2}$ = $5.1\ E^{-6}$ Kg/day

Ave = $\frac{(0.1\ MGD \cdot 2.8E^{-6} \cdot 8.34)}{2.2}$ = $1.1\ E^{-6}$ Kg/day

Trichloroethene - 15 mg/L, 40.8 mg/L Ave = 27.5 mg/L

Max = $\frac{(0.29\ MGD \cdot 4.08E^{-5} \cdot 8.34)}{2.2}$ = $4.5\ E^{-5}$ Kg/day

Ave = $\frac{(0.1\ MGD \cdot 2.75E^{-5} \cdot 8.34)}{2.2}$ = $1.0\ E^{-5}$ Kg/day

TETRA TECH RIZZO

JOB FF - Dedham - Contaminated Lake - RGP

SHEET NO. 5 OF

CALCULATED BY ISC DATE 7/10/07

CHECKED BY DATE

SCALE

VOCs (cont.)

Cis, 1,2-Dichloroethene - 1.7 mg/L, 5.9 mg/L Ave = 3.8 mg/L

$$Max = \left(0.29 \cdot \frac{5.9E^{-6}}{2.2} \cdot 8.34\right) = 6.5E^{-6}\ Kg/day$$

$$Ave = \left(0.1 \cdot \frac{3.8E^{-6}}{2.2} \cdot 8.34\right) = 1.4E^{-6}\ Kg/day$$

1,1-Dichloroethane - ND(1.5 ug/L), 3.0 mg/L

$$Max = \left(0.29 \cdot \frac{3.0E^{-6}}{2.2} \cdot 8.34\right) = 3.3E^{-6}\ Kg/day$$

$$Ave = \left(0.1 \cdot \frac{3.0E^{-6}}{2.2} \cdot 8.34\right) = 1.1E^{-6}\ Kg/day$$

TETRA TECH RIZZO

JOB FF-Dedham - Contaminant Info - RGP

SHEET NO. 6 OF

CALCULATED BY IK DATE 7/10/07

CHECKED BY DATE

SCALE

DAVID J. FIELD, P.E.
DIRECTOR OF ENGINEERING

JASON L. MAMMONE, P.E.
INFRASTUCTURE ENGINEER

RONALD I. LAWRENCE
PROJECT ENGINEER

MATTHEW D. MARINO
GIS MANAGER

TOWN OF DEDHAM

Commonwealth of Massachusetts

55 RIVER STREET
DEDHAM, MA 02026-2935

(781) 751-9350
FAX (781) 751-9359

www.dedham-ma.gov

DEPARTMENT OF INFRASTRUCTURE ENGINEERING

July 19, 2007

John J. Shipe
Fairfield Residential LLC
405 Cochituate Road, Suite 302
Framingham, MA 01701

RE: Permission to Discharge to Municipal Storm Water Drainage System

Dear Mr. Shipe:

The Town of Dedham grants Fairfield Development, LLC approval to discharge treated water from the sewer line excavation and dewatering to the municipal storm water system via storm water catch basins in Elm Street or Rustcraft Road, provided that a Remediation General Permit (RGP) for the discharge is obtained from EPA and that the discharge complies with all applicable EPA and DEP limits for storm water discharges including but not limited to turbidity and TSS.

Also, in order to verify compliance, please forward tests results to the Town of Dedham Conservation Commission through Donald Yonika.

Sincerely,

David J. Field, P.E.
Director of Engineering

Cc: William G. Keegan, Jr., Town Administrator
Donald Yonika, Conservation Agent
Joseph M. Flanagan, Director of Public Works
Jason L. Mammone, P.E., Infrastructure Engineer
Ronald I. Lawrence, Project Engineer

S:\Sewer\Rustcraft Road Sewer Project\Fairfield Discharge Letter 07192007.doc

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: Construction Dewatering - 250 Elm Street

Operator signature:

Title: Project Manager

Date: 7/19/07

Construction Dewatering - 250 Elm Street

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

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

or electronically mailed to NPDES.Generalpermits@epa.gov,
or faxed to the EPA Office at 617-918-0505.

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the phone number or address listed in Section I.B. below.

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

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

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

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

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

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

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

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

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

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