Environmental Strategies & Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

November 1, 2010

United States Environmental Protection Agency
EPA - Region I
Attn: Remediation General Permit NOI Processing
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, Massachusetts 02109-3912

MAG910302

Re: Remediation General Permit - Notice of Intent
Former Oil Depot
50 Sturgis Street
Woburn, MA 01801
Middlesex County

Dear Sir or Madam:

Environmental Strategies and Management (ES&M), on behalf of the City of Woburn, is pleased to submit this National Pollution Discharge Elimination System (NPDES) Remediation General Permit (RGP) Notice of Intent (NOI) for the discharge of treated groundwater originating from MCP remediation activities at the above referenced location (the "Site"). Authorization to discharge has been granted under an existing RGP for the Site (#MAG910302), but under the 2010 Final Remediation General Permit conditions, this NOI is being submitted as a re-application as required by the Environmental Protection Agency.

This NOI has been completed and has included a review of all literature pertaining to the Areas of Critical Environmental Concern (ACEC), Endangered Species Act (ESA), and the National Historic Preservation Act (NHPA). This review is documented below:

- Review of Appendix I "Areas of Critical Environment Concern" (June 2009), found that there are no ACEC located in the City of Woburn, MA.
- Review of the Interactive Priority and Estimated Habitats provided by the MassWildlife online viewer (2008), shows that the Site is not located within a NHESP Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife area. Therefore, permit eligibility meets "Criterion A." The map generated by the MassWildlife online viewer is attached.
- An electronic review of the Massachusetts Cultural Resource Information System database, made available through the Massachusetts Historical Commission, found that no area, building, burial ground, object, or structure is located on the property located at 50 Sturgis Street, the Site, or near the discharge into Horn Pond. This documentation is attached. In addition, there is no anticipated new construction associated with the MCP remediation activities. Therefore, permit eligibility meets "Criteria 1."

All required information has been included in this document and the following is a list of attachments.

Attachment A: Site Map – Woburn System Piping Diagram
Attachment B: Dilution Factor Calculations and USGS Streamstats Data-Collection Station Report
Attachment C: Piping and Instrumentation Diagram
Attachment D: Site Locus Map
Attachment E: Treatment system analytical lab reports
Attachment F: 2008 Priority Habitat and Estimated Habitat Natural Heritage and Endangered Species Program Map
Attachment G: Massachusetts Cultural Resource Information System Documentation

In addition to filing with the EPA, this NOI will be submitted concurrently to the City of Woburn Board of Health as required under this request for General Permit.

If you have any questions, please contact our office at 508-226-1800.

Sincerely,

Environmental Strategies & Management, Inc.

Joseph Callahan
Project Manager

Copy: Mr. John Fralick, City of Woburn Board of Health

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

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

a) Name of **facility/site**: Former Oil Depot		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 71° 9' 36" W latitude: 42° 28' 24" N	Facility SIC code(s): 8422 NAIC code: 712130	Street: 50 Sturgis Street		
b) Name of **facility/site owner:** City of Woburn		Town: Woburn		
Email address of facility/site owner: jfralick@cityofwoburn.com		State: MA	Zip: 01801	County: Middlesex
Telephone no. of facility/site **owner**: (781) 932-4407				
Fax no. of facility/site **owner**: (781) 932-4455		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ☒ 4. Other ○ if so, describe: Municipal		
Address of **owner** (if different from site):				
Street: 10 Common Street				
Town: Woburn	State: MA	Zip: 01801	County: Middlesex	
c) Legal name of **operator**:	**Operator** telephone no: (508) 226-1800			
Environmental Strategies and Management	**Operator** fax no.: (508) 226-1811	**Operator** email: jcallahan@esm-inc.com		
Operator contact name and title: Joseph L. Callahan, Project Manager				
Address of **operator** (if different from owner):	Street: 273 West Main Street			
Town: Norton	State: MA	Zip: 02766	County: Bristol	

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

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ○ N ☒
If Y, please list:
1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ☒, if Y, number:
2. Final Dewatering General Permit? Y ○ N ☒, if Y, number:
3. EPA Construction General Permit? Y ○ N ☒, if Y, number:
4. Individual NPDES permit? Y ○ N ☒, if Y, number:
5. any other water quality related individual or general permit? Y ☒ N ○, if Y, number: MAG910302 → Existing RGP

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ○ N ☒

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☒ C. Petroleum Sites with Additional Contamination ☐
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

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

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:
Discharge of treated effluent water from an MCP related groundwater extraction and treatment system

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 0.056 Is maximum flow a **design value**? Y ☒ N ○
Average flow (include units) 0.01 cfs Is average flow a design value or estimate? True Value

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	71° 9' 36" W	long	42° 28' 24" N	pt.2: lat.		long	;
pt.3: lat		long		pt.4: lat.		long	;
pt.5: lat		long		pt.6: lat.		long	;
pt.7: lat		long		pt.8: lat.		long	; etc.

4) If hydrostatic testing, total volume of the discharge (gals): NA

5) Is the discharge intermittent ○ or seasonal ○ ?
Is discharge ongoing? Y ☒ N ○

c) Expected dates of discharge (mm/dd/yy): start 5/15/2007 end 12/31/2015

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See Attached

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☐	NA							
2. Total Residual Chlorine (TRC)		☐	☐	NA							
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	1	Grab	8100M	210 ug/l	1200			
4. Cyanide (CN)	57125	☐	☐	NA							
5. Benzene (B)	71432	☒	☐	~~NA~~ 1	Grab	8260B	2 ug/l	ND			
6. Toluene (T)	108883	☒	☐	1	Grab	8260B	2 ug/l	ND			
7. Ethylbenzene (E)	100414	☒	☐	1	Grab	8260B	2 ug/l	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Grab	8260B	2 ug/l	ND			
9. Total BTEX [2]	n/a	☒	☐	1	Grab	8260B	2 ug/l	ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☐	☐	NA							
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☐	☐	NA							
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☐	☐	NA							

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☐	☐	NA							
14. Naphthalene	91203	☐	☒	1	Grab	8270D	0.5 ug/l	7.0			
15. Carbon Tetrachloride	56235	☐	☐	NA							
16. 1,2 Dichlorobenzene (o-DCB)	95501	☐	☐	NA							
17. 1,3 Dichlorobenzene (m-DCB)	541731	☐	☐	NA							
18. 1,4 Dichlorobenzene (p-DCB)	106467	☐	☐	NA							
18a. Total dichlorobenzene		☐	☐	NA							
19. 1,1 Dichloroethane (DCA)	75343	☐	☐	NA							
20. 1,2 Dichloroethane (DCA)	107062	☐	☐	NA							
21. 1,1 Dichloroethene (DCE)	75354	☐	☐	NA							
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☐	NA							
23. Methylene Chloride	75092	☐	☐	NA							
24. Tetrachloroethene (PCE)	127184	☐	☐	NA							
25. 1,1,1 Trichloro-ethane (TCA)	71556	☐	☐	NA							
26. 1,1,2 Trichloro-ethane (TCA)	79005	☐	☐	NA							
27. Trichloroethene (TCE)	79016	☐	☐	NA							

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☐	☐	NA							
29. Acetone	67641	☒	☐	1	Grab	8260B	50 ug/l	ND			
30. 1,4 Dioxane	123911	☐	☐	NA							
31. Total Phenols	108952	☐	☐	NA							
32. Pentachlorophenol (PCP)	87865	☐	☐	NA							
33. Total Phthalates (Phthalate esters) [4]		☐	☐	NA							
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☐	☐	NA							
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270D	0.2 ug/l	ND			
a. Benzo(a) Anthracene	56553	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
b. Benzo(a) Pyrene	50328	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
c. Benzo(b)Fluoranthene	205992	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
d. Benzo(k)Fluoranthene	207089	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
e. Chrysene	21801	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	Grab	8270D	0.2 ug/l	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	1	Grab	8270D	0.5 ug/l	13.6			

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☐	☒	1	Grab	8270D	0.5 ug/l	2.0			
i. Acenaphthylene	208968	☒	☐	1	Grab	8270D	0.5 ug/l	ND			
j. Anthracene	120127	☒	☐	1	Grab	8270D	0.5 ug/l	ND			
k. Benzo(ghi) Perylene	191242	☒	☐	1	Grab	8270D	0.5 ug/l	ND			
l. Fluoranthene	206440	☒	☐	1	Grab	8270D	0.5 ug/l	ND			
m. Fluorene	86737	☐	☒	1	Grab	8270D	0.5 ug/l	3.1			
n. Naphthalene	91203	☐	☒	1	Grab	8270D	0.5 ug/l	7.0			
o. Phenanthrene	85018	☐	☒	1	Grab	8270D	0.5 ug/l	1.5			
p. Pyrene	129000	☒	☐	1	Grab	8270D	0.5 ug/l	ND			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☐	☐	NA							
38. Chloride	16887006	☐	☒	1	Grab	EPA 300.0A	5,000 ug/l	260,000			
39. Antimony	7440360	☐	☐	NA							
40. Arsenic	7440382	☐	☐	NA							
41. Cadmium	7440439	☐	☐	NA							
42. Chromium III (trivalent)	16065831	☒	☐	1	Grab	CALC	50 ug/l	ND			
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Grab	SM3500CrB	10 ug/l	10			
44. Copper	7440508	☐	☐	NA							
45. Lead	7439921	☐	☐	NA							
46. Mercury	7439976	☐	☐	NA							
47. Nickel	7440020	☒	☐	1	Grab	EPA 200.7	50 ug/l	ND			
48. Selenium	7782492	☐	☐	NA							
49. Silver	7440224	☐	☐	NA							
50. Zinc	7440666	☒	☐	1	Grab	EPA 200.7	50 ug/l	ND			
51. Iron	7439896	☐	☒	1	Grab	EPA 200.7	50 ug/l	9,000			
Other (describe):		☐	☐								

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

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☒ N ○	If yes, which metals? Iron
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Iron DF: 9.21 Metal: DF: Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ☒ N ○ If Y, list which metals: Iron

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

Recovery of contaminated groundwater from five pumping wells to a treatment system consisting of oil/water separation, filtration, and granulated activated carbon prior to discharge. (See attached)

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

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 6.0 gpm Maximum flow rate of treatment system 25 gpm
Design flow rate of treatment system 25 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):
Not applicable

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

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Effluent from the treatment system will be discharged into a stormdrain that connects to Horn Pon

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. See Attached

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.46 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ☒ N ○ If yes, for which pollutant(s)?
Nutrients, Organic enrichment/low DO, Noxious aquatic Plants
Is there a final TMDL? Y ○ N ☒ If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

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

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ☒ B ○ C ○ D ○ E ○ F ○

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ○ N ○ Underway ○

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ○ N ○

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ☒ 2 ○ 3 ○

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

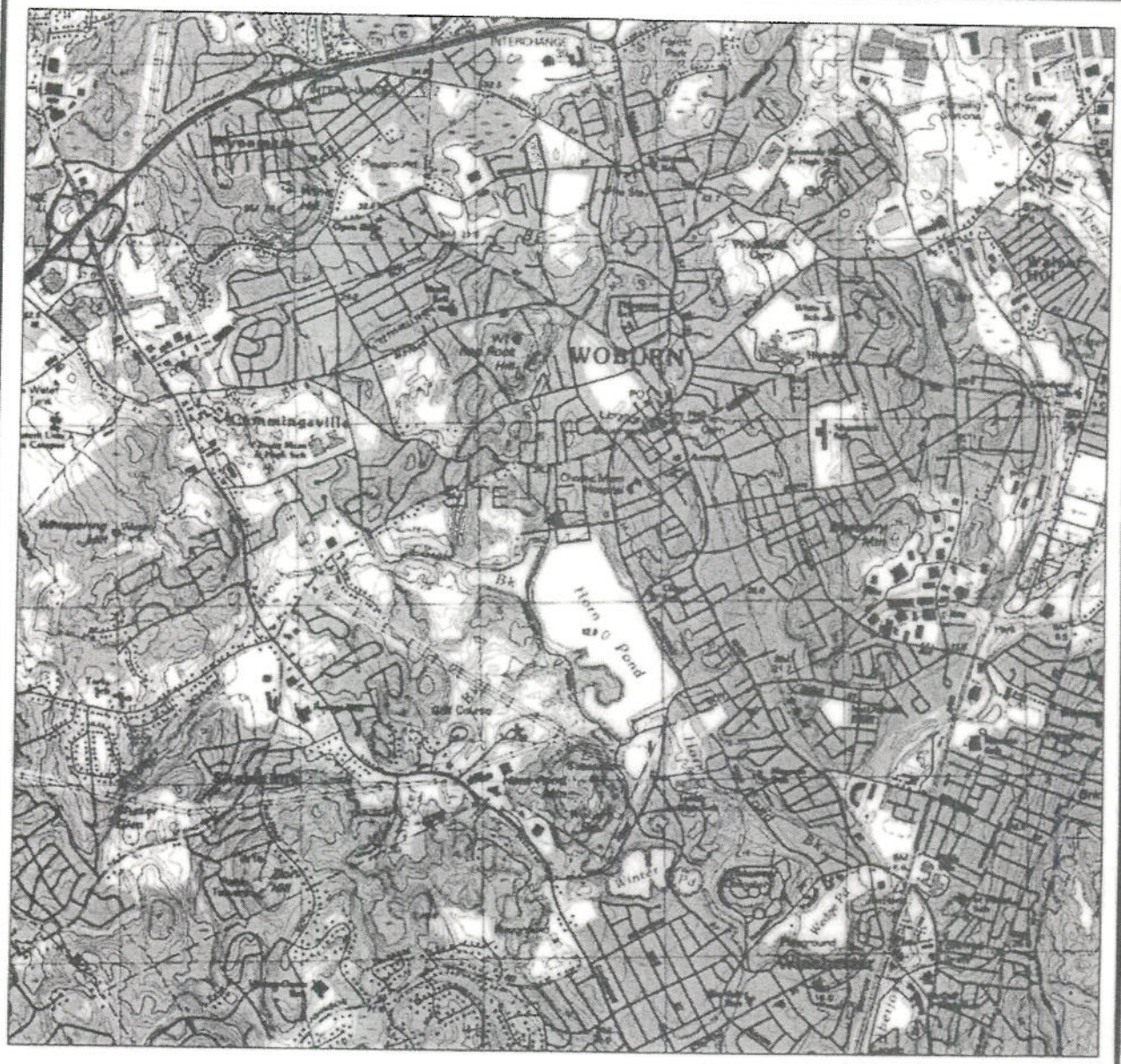
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Former Oil Depot
Operator signature:	Joseph L. Callahan
Printed Name &Title:	JOSEPH L. CALLAHAN
Date:	11/1/2010

Attachment D



SOURCE: U.S.G.S.7.5 x 15 MINUTE
TOPOGRAPHIC QUADRANGLE
BOSTON NORTH, MASS. (1985)
SITE COORDINATES:
LAT: 42° 28' 21" N
LON: 71° 09' 34" W

SCALE 1:25 000

Environmental Strategies & Management, Inc.
184 Front Main Street
Norton, MA 02766
(508) 285-9700
(508) 285-3957 fax
info@esm-inc.com

GAUGING DATE:	DRAWING DATE:	ACAD FILE:
NA	03/25/04	WOBURN2/SLM

SITE LOCUS MAP

CLIENT:		PM:
CITY OF WOBURN		DH
LOCATION: 50 STURGIS STREET WOBURN, MA		LSP: JC
DESIGNED: –	DWG: AF	PROJECT NO.: 2003-225	FIGURE: 1

Attachment E

Laboratory Report

Resource Laboratories, LLC
124 Heritage Avenue #10 Portsmouth, NH 03801

Joe Callahan
Environmental Strategies & Management
273 West Main Street
Norton, MA 02766

PO Number: None
LabID: 15972
Date Received: 1/8/09

Project: 2008-036 Woburn Sturgis

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Resource Laboratories, LLC

(for)

Susan Sylvester
Principal, General Manager

1/22/09
Date

Total number of pages 7

Resource Laboratories, LLC Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: 2008-036 Woburn Sturgis
Lab ID: 15972

Lab Number: 15972-001
Sample ID: CT1 INF
Matrix: Water
Sampled: 1/8/09 11:25

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
naphthalene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
acenaphthene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
fluorene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
phenanthrene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
anthracene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
fluoranthene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
pyrene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	70	43-116	%	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
o-terphenyl SUR	73	33-141	%	1	AJD	1/9/09	1937	1/13/09	14:05	SW3510B8270C
TPH C10-C36	< 200	200	ug/L	1	JLZ	1/9/09	1936	1/13/09	19:12	SW3510C8100
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	75	40-140	%	1	JLZ	1/9/09	1936	1/13/09	19:12	SW3510C8100
o-terphenyl SUR	85	40-140	%	1	JLZ	1/9/09	1936	1/13/09	19:12	SW3510C8100

Lab Number: 15972-002
Sample ID: CT1 EFF
Matrix: Water
Sampled: 1/8/09 11:35

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
naphthalene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
acenaphthene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
fluorene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
phenanthrene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
anthracene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
fluoranthene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
pyrene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	64	43-116	%	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
o-terphenyl SUR	71	33-141	%	1	AJD	1/9/09	1937	1/13/09	14:42	SW3510B8270C
TPH C10-C36	< 200	200	ug/L	1	JLZ	1/9/09	1936	1/13/09	19:26	SW3510C8100
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	64	40-140	%	1	JLZ	1/9/09	1936	1/13/09	19:26	SW3510C8100
o-terphenyl SUR	77	40-140	%	1	JLZ	1/9/09	1936	1/13/09	19:26	SW3510C8100

Project ID: 2008-036 Woburn Sturgis
Lab ID: 15972
Lab Number: 15972-003
Sample ID: CT2 EFF
Matrix: Water
Sampled: 1/8/09 11:47

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
acenaphthene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
fluorene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
phenanthrene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
anthracene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
fluoranthene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
pyrene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	74	43-116	%	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
o-terphenyl SUR	89	33-141	%	1	AJD	1/15/09	1949	1/20/09	23:54	SW3510B8270C
TPH C10-C36	< 200	200	ug/L	1	JLZ		0900133	1/15/09	15:57	SW3510C8100
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	85	40-140	%	1	JLZ		0900133	1/15/09	15:57	SW3510C8100
o-terphenyl SUR	92	40-140	%	1	JLZ		0900133	1/15/09	15:57	SW3510C8100

Project ID: 2008-036 Woburn Sturgis
Lab ID: 15972

Lab Number: 15972-001
Sample ID: CT1 INF
Matrix: Water
Sampled: 1/8/09 11:25

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Arsenic	< 0.008	0.008	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Chromium	< 0.05	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Copper	< 0.02	0.02	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Iron	**0.73**	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Lead	< 0.006	0.006	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7
Zinc	< 0.05	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:23	E200.7

Lab Number: 15972-002
Sample ID: CT1 EFF
Matrix: Water
Sampled: 1/8/09 11:35

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Arsenic	< 0.008	0.008	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Chromium	< 0.05	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Copper	< 0.02	0.02	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Iron	**0.56**	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Lead	< 0.006	0.006	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7
Zinc	< 0.05	0.05	mg/L	1	BJS	1/12/09	1940	1/12/09	13:20	E200.7

Lab Number: 15972-003
Sample ID: CT2 EFF
Matrix: Water
Sampled: 1/8/09 11:47

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Arsenic	< 0.008	0.008	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Chromium	< 0.05	0.05	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Copper	< 0.02	0.02	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Iron	**0.24**	0.05	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Lead	< 0.006	0.006	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7
Zinc	< 0.05	0.05	mg/L	1	BJS	1/13/09	1954	1/19/09	14:59	E200.7

Project ID: 2008-036 Woburn Sturgis
Lab ID: 15972

Lab Number: 15972-001
Sample ID: CT1 INF
Matrix: Water
Sampled: 1/8/09 11:25

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Total Suspended Solids (TSS)	< 5	5	mg/L	1	APA		0900065	1/9/09		SM2540D
Chromium, Trivalent	< 0.05	0.05	mg/L	1			0900125			CALC

Lab Number: 15972-002
Sample ID: CT1 EFF
Matrix: Water
Sampled: 1/8/09 11:35

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Total Suspended Solids (TSS)	< 5	5	mg/L	1	APA		0900065	1/9/09		SM2540D
Chromium, Trivalent	< 0.05	0.05	mg/L	1			0900125			CALC

Lab Number: 15972-003
Sample ID: CT2 EFF
Matrix: Water
Sampled: 1/8/09 11:47

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Total Suspended Solids (TSS)	< 5	5	mg/L	1	APA		0900132	1/9/09		SM2540D
Chromium, Trivalent	< 0.05	0.05	mg/L	1			0900131			CALC