



WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

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MAG 910350

February 29, 2008

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

Subject: Remediation General Permit – Notice of Intent
Commercial Property, 40 Rugg Road, Allston, Massachusetts
MassDEP RTN 3-0506/3-26493
ECS Project No. 05-206049

Dear EPA Municipal Assistance Unit:

On behalf of Eljen Corporation, Environmental Compliance Services, Inc. (ECS) has prepared this Notice of Intent (NOI) for the Remediation General Permit for the commercial property located at 40 Rugg Road in Allston, Massachusetts. The purpose of the NOI is to gain coverage under the Remediation General Permit for the discharge of treated water at this commercial property.

SITE DESCRIPTION

The Site is currently improved with three one-story brick buildings, consisting of two attached structures located at 10 Penniman Road and one structure located at 40 Rugg Road, and a separate two-story metal structure at 84 Braintree Street. The Site is primarily covered with asphalt pavement, with a brick storage building on the north eastern side. Pertinent site features are depicted in Figure 2 – Site Plan.

The Site is located in an industrial and commercialized area of Allston, Massachusetts, approximately 0.25 miles south of the Charles River. The Charles River is classified as Class C water for aquatic life and secondary contact use. The Site and surrounding area is zoned for commercial and industrial use. There are no known private wells located within 500 feet of the Site. The nearest drinking water supply is the Chestnut Hill Reservoir, which is located greater than a mile southwest and presumed upgradient of the Site based on localized groundwater flow.

There are no areas designated as Areas of Critical Environmental Concern, wetlands/NHESP Wetlands Habitats or Vernal Pools located within 500 feet of the Site. The Site is not mapped within the boundaries of a Potentially Productive Aquifer, Zone II Area, and Interim Wellhead Protection Area (IWPA) or Zone A area. Based on this information, physical Site characteristics, and the frequency and intensity of Site use, Method 1 cleanup categories under the Massachusetts Contingency Plan (MCP) have been identified as S-2/GW-2 and S-2/GW-3 for soil, and GW-2 and GW-3 for groundwater.

RELEASE HISTORY

According to the MassDEP website and the Environmental First Search Report (Appendix B), the Site was first listed because of the detection of oil and hazardous materials (OHM) in soil and groundwater, as reported for the 84 Braintree Street address, in June 1986 by Bewick Associates, Inc. (Bewick). MassDEP (then the DEQE) assigned Release Tracking Number (RTN) 3-0506 in response to this reported condition.

Following the detection of light non-aqueous phase liquid (LNAPL) in monitoring well B-2 during gauging and monitoring activities, MassDEP issued a Notice of Responsibility (NOR) and a second RTN 3-26104 to Eljen on July 28, 2006.

An Immediate Response Action (IRA) Plan was submitted in April 2006 for assessment of the releases. IRA activities since then have included the installation of soil borings and groundwater monitoring wells, collection and analysis of soil and groundwater samples, and the collection and analysis of indoor air samples. Imminent Hazard Evaluations (IHE) have also been conducted in conjunction with the indoor air sampling.

In March of 2007, ECS submitted a Phase I Initial Site Investigation Report and Tier Classification submittal in accordance with the requirements outlined in 310 CMR 40.0480 and 40.0500 for the Site. According to the Numerical Ranking System (NRS), the Site achieved a score of 428, resulting in a Tier IC Classification.

In October 2007, ECS submitted an IRA Status Report/IRA Plan modification which identified the Immediate Response Action proposed to eliminate or abate IH conditions from soil-vapor infiltration at the Site. This report included the results of pilot studies conducted thus far for the selection and design of the proposed IRA. The report also included the results of a soil-vapor survey representative of the building footprints of all three buildings on the Properties.

The preliminary remedial action alternative for the Site to mitigate and abate the IH condition for indoor air was SVE. ECS obtained verbal authorization from MassDEP on October 22, 2007 to proceed with the implementation of a SVE system at the Site to eliminate the indoor air inhalation pathway and associated IH Condition. ECS also presented an evaluation of Groundwater Containment and Biological Treatment of CVOCs (Bio-recirculation), and Dual-Phase Vapor Extraction (DPVE).

On January 31, 2008, ECS submitted an IRA Status/Conceptual Design Report summarizing IRA activities and presenting a conceptual design for remediation of soil and groundwater at the site. Recognizing the continued IH condition within indoor air, particularly in 84 Braintree Street, the focus of the remedial approach will be to implement dual phase vapor extraction (DPVE) to remediate soil and groundwater within the suspected source area (well ECS-2 at 40 Rugg Road, well MW-101 at 20 Penniman Road, and ECS-205 at 10 Penniman Road) and beneath the sub-slabs at all three buildings referred to on the Property.

The following remedial goals were developed:

1. Reduction of CVOCs in soil and groundwater specifically to mitigate IH conditions in indoor air within all three (3) buildings associated with the "Properties" and the building referred to as 20 Penniman Road (see Figure 2 for locations).

2. Hydraulically contain fuel oil compounds and CVOC concentrations in downgradient wells and, through the use of bio-stimulants, further reduce concentrations to below GW-2/GW-3 clean-up standards with the ultimate goal of obtaining a Permanent Solution for the Site.

DISCHARGE/TREATMENT SYSTEM INFORMATION

This NPDES RGP will cover discharges from the dual-phase vapor extraction (DPVE) system. The system will utilize two recovery well points and one horizontal well. Each recovery well will have a sand pack. The purpose of the sand packs will be to minimize suspended solids in the wells. The DPVE system will consist of a 25-horsepower, oil-sealed liquid-ring pump capable of extracting up to 145 cfm at a vacuum of 18 inches of mercury (in. Hg). This flow rate will allow for the operation of all three (3) extraction wells simultaneously. The DPVE system will include a moisture knockout with high level switch, vacuum relief valve, and inlet air filter. Liquids will be pumped from the vapor/liquid separator at a flow rate of approximately 1 to 3 gpm, through cartridge filters and two 500-pound liquid-phase GAC units arranged in series. Treated groundwater will be discharged underground to an on-site catch basin located on Rugg Road immediately adjacent to the parking lot at 40 Rugg Road. ECS will obtain a catch basin tap-in and discharge permit from the Boston Water and Sewer Commission.

Based on the laboratory analytical results of groundwater collected at the Site, the primary potential contaminants believed to be present are: chlorinated solvents and fuel oil PAHs. These potential contaminants in groundwater will be treated via the GAC units.

RECEIVING SURFACE WATER INFORMATION

Effluent from the treatment system will be directed to an on site catch basin, which discharges to the Charles River. The Charles River is designated as a Class B surface water at the point of discharge.

REQUEST FOR COVERAGE UNDER THE NPDES RGP

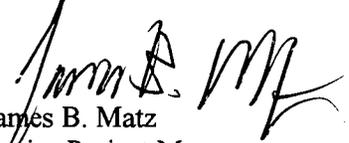
On behalf of our client, ECS requests coverage under the NPDES RGP for the discharge of recovered water during construction dewatering activities within contaminated areas to the surface waters of the Charles River. The attached NOI form provides the requisite information pertaining to this NOI. Applicable treatment of the recovered water, compliance sampling, reporting and required submittals to the EPA will be conducted by ECS.

In accordance with the NOI-RGP, a copy of the completed NOI-RGP is being submitted to the MADEP Division of Watershed Management, 627 Main St, 2nd Floor, Worcester, MA, 01608.

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If you have any questions regarding the above mentioned information, please do not hesitate to call 781-246-8897.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.


James B. Matz
Senior Project Manager

cc: MADEP Division of Watershed Management,
627 Main St, 2nd Floor, Worcester, MA, 01608

Attachments:

- Form for Notice of Intent for General Remediation Permit
- Figure 1 – Site Locus Map
- Figure 1a – Discharge Location
- Figure 2 – Site Plan
- Figure 6 – GWPT Piping & Instrumentation Diagram 1
- Figure 7 – GWPT Piping & Instrumentation Diagram 2
- Figure 8 – P & ID Symbols
- Table 2 – Concentrations of Volatile Organic Compounds
- Table 3 – Concentrations of Volatile Petroleum Hydrocarbons
- Table 4 – Concentrations of Extractable Petroleum Hydrocarbons]
- Table 5 – Concentrations of Soluble Metals
- Laboratory Analytical Data Reports

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

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

a) Name of facility/site: Commercial Property		Facility/site address:		
Location of facility/site: longitude: 71 00' 42.92" latitude: 42 15' 27.37"	Facility SIC code(s): NA	Street: 40 Rugg Road		
b) Name of facility/site owner: Eljen Corporation		Town: Allston		
Email address of owner: NA	State: MA	Zip: 02134	County: Suffolk	
Telephone no. of facility/site owner: (781) 891-7876		Owner is (check one): 1. Federal ___ 2. State/Tribal ___ 3. Private <input checked="" type="checkbox"/> 4. other, if so, describe:		
Fax no. of facility/site owner:				
Address of owner (if different from site): Street: 9 Bishop Forest Drive				
Town: Waltham	State: MA	Zip: 02452	County: Middlesex	
c) Legal name of operator: Environmental Compliance Services, Inc.	Operator telephone no: (781) 246-8897			
	Operator fax no.: (781) 246-8950		Operator email: jmatz@ecsconsult.com	
Operator contact name and title: James Matz, Senior Project Manager				

Address of operator (if different from owner):		Street: 607 North Avenue, Suite 11	
Town: Wakefield	State: MA	Zip: 01880	County: Middlesex
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <input checked="" type="checkbox"/> No ___ 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <input checked="" type="checkbox"/> No ___			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <input checked="" type="checkbox"/> No ___ If "yes," please list: 1. site identification # assigned by the state of NH or MA: RTN 3-0506/26493 2. permit or license # assigned: Tier IC Permit 3. state agency contact information: name, location, and telephone number: MassDEP Northeast Region, 205A Lowell St, Wilmington, MA 978-694-3200		f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 2. phase I or II construction storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 3. individual NPDES permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 4. any other water quality related permit? Y ___ N <input checked="" type="checkbox"/> , 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: Treated groundwater discharge from on site dual phase vapor extraction remediation 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 <u>0.01</u> Average flow <u>0.01</u> Is maximum flow a design value ? Y <input checked="" type="checkbox"/> N ___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. 3 gallons per minute is anticipated maximum flowrate
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>71° 8' 17"</u> lat. <u>42° 21' 54"</u> ; 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): N/A	5) Is the discharge intermittent _____ or seasonal _____? Is discharge ongoing Yes <input checked="" type="checkbox"/> No _____?
c) Expected dates of discharge (mm/dd/yy): start <u>04/10/08</u> end <u>06/01/09</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: See Figure 2 - Site Plan and treatment system schematic attached 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

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

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

Gasoline Only	VOC Only <input checked="" type="checkbox"/>	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		<input checked="" type="checkbox"/>	1	grab	2540D	5	2.2E6	NC	2.2E6	NC
2. Total Residual Chlorine		<input checked="" type="checkbox"/>	1	grab	8167	20	0.29	NC	0.29	NC
3. Total Petroleum Hydrocarbons		<input checked="" type="checkbox"/>	1	grab	madep	5	30.5	NC	30.5	NC
4. Cyanide	<input checked="" type="checkbox"/>		1	grab	335.4	10	<1E-5	NC	<1E-5	NC
5. Benzene	<input checked="" type="checkbox"/>		7	grab	8260C	10	<5	NC	<5	NC
6. Toluene	<input checked="" type="checkbox"/>		7	grab	8260C	10	<5	NC	<5	NC
7. Ethylbenzene	<input checked="" type="checkbox"/>		7	grab	8260C	10	<5	NC	<5	NC
8. (m,p,o) Xylenes	<input checked="" type="checkbox"/>		7	grab	8260C	20	<5	NC	<5	NC
9. Total BTEX ⁴	<input checked="" type="checkbox"/>		7	grab	8260C		<5	NC	<5	NC

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓		14	grab	8260C	10	<200	NC	<1	NC
11. Methyl-tert-Butyl Ether (MtBE)	✓		7	grab	8260C	10	<5	NC	<5	NC
12. tert-Butyl Alcohol (TBA)	✓		14	grab	8260C	100	<500	NC	<10	NC
13. tert-Amyl Methyl Ether (TAME)	✓		14	grab	8260C	10	<100	NC	<1	NC
14. Naphthalene		✓	20	grab	8260C	10	14.7	NC	<6	NC
15. Carbon Tetra-chloride	✓		30	grab	8260C	10	<200	NC	<1	NC
16. 1,4 Dichlorobenzene		✓	30	grab	8260C	10	2.7	NC	<10	NC
17. 1,2 Dichlorobenzene		✓	30	grab	8260C	10	1.8	NC	<10	NC
18. 1,3 Dichlorobenzene	✓		30	grab	8260C	10	<100	NC	<1	NC
19. 1,1 Dichloroethane	✓		30	grab	8260C	10	<100	NC	<1	NC
20. 1,2 Dichloroethane	✓		30	grab	8260C	10	<500	NC	<10	NC
21. 1,1 Dichloroethylene	✓		30	grab	8260C	10	<200	NC	<10	NC
22. cis-1,2 Dichloro-ethylene		✓	30	grab	8260C	10	3E4	NC	1.4E3	NC
23. Dichloromethane (Methylene Chloride)	✓		30	grab	8260C	50	<50	NC	<50	NC
24. Tetrachloroethylene		✓	30	grab	8260C	10	1.8E7	NC	100	NC

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		30	grab	8260C	10	<100	NC	<10	NC
26. 1,1,2 Trichloroethane	✓		30	grab	8260C	10	<100	NC	<10	NC
27. Trichloroethylene		✓	30	grab	8260C	10	394	NC	<10	NC
28. Vinyl Chloride		✓	30	grab	8260C	10	1E3	NC	<10	NC
29. Acetone	✓		14	grab	8260C	100	<100	NC	<100	NC
30. 1,4 Dioxane	✓		14	grab	8260C	200	<200	NC	<200	NC
31. Total Phenols	✓		1	grab	8270C	2.84	<2.78	NC	<2.78	NC
32. Pentachlorophenol	✓		1	grab	8270C	2.84	<2.78	NC	<2.78	NC
33. Total Phthalates ⁵ (Phthalate esthers)	✓		1	grab	8270C	2.84	<2.78	NC	<2.78	NC
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270C	2.84	<2.78	NC	<2.78	NC
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)										
a. Benzo(a) Anthracene		✓	13	grab	MADEP	5	9.79	NC	<6	NC
b. Benzo(a) Pyrene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
c. Benzo(b)Fluoranthene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
d. Benzo(k) Fluoranthene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
e. Chrysene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC

⁵The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
g. Indeno(1,2,3-cd) Pyrene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)										
h. Acenaphthene		✓	13	grab	MADEP	5	9.79	NC	<6.27	NC
i. Acenaphthylene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
j. Anthracene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
k. Benzo(ghi) Perylene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
l. Fluoranthene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
m. Fluorene		✓	13	grab	MADEP	5	5.96	NC	<6.27	NC
n. Naphthalene-	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
o. Phenanthrene		✓	13	grab	MADEP	5	6.55	NC	<6.27	NC
p. Pyrene	✓		13	grab	MADEP	5	<8.62	NC	<6.54	NC
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.2	<0.23	NC	<0.23	NC
38. Antimony		✓	4	grab	200.7	50	1E-5	NC	<6E-6	NC
39. Arsenic		✓	4	grab	200.7	5	8E-6	NC	<4E-6	NC
40. Cadmium	✓		4	grab	200.7	5	<2E-6	NC	<2E-6	NC
41. Chromium III	✓		4	grab	200.7	5	<5E-6	NC	<5E-6	NC
42. Chromium VI	✓		1	grab	218.6	10	<5E-5	NC	<5E-5	NC

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	4	grab	200.7	2.5	7E-6	NC	<5E-6	NC
44. Lead	✓		4	grab	200.7	0.2	<7E-6	NC	<7E-6	NC
45. Mercury	✓		4	grab	245.1	0.2	<2E-7	NC	<2E-7	NC
46. Nickel		✓	4	grab	200.7	2.5	9E-6	NC	<5E-6	NC
47. Selenium	✓		4	grab	200.7	1.2	<1E-5	NC	<1E-5	NC
48. Silver	✓		4	grab	200.7	0.8	<5E-6	NC	<5E-6	NC
49. Zinc	✓		4	grab	200.7	2.5	<6E-6	NC	<6E-6	NC
50. Iron		✓	4	grab	200.7	2.5	.125	NC	17.55	NC
Other (describe):										

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

<p><i>Step 1:</i> Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ___ N <u>✓</u></p>	<p>If yes, which metals?</p>
<p><i>Step 2:</i> For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: _____ DF: _____</p>	<p>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, chromium(III), copper, iron, nickel, lead, zinc</p>