



ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

9/29/06,
revised

September 22, 2006

U. S. Environmental Protection Agency
RGP – NOI Processing
Municipal Assistance Unit (CMU)
One Congress Street
Boston, MA 02114-2023

J. L. LARONZO Co.

S 9/29/06

Received

VIA OVERNIGHT DELIVERY

Re: Remediation General Permit – Notice of Intent
Construction Dewatering in Support of the
Planned Site Redevelopment of a portion of the
Former Hingham Shipyard
349 Lincoln Street
Hingham, Massachusetts

On behalf of Samuels & Associates Hingham LLC (Samuels, the “Owner”) and J. Derenzo Company (“Operator”), LFR Inc. (LFR) is submitting the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) for the above-referenced location (the “Site”). This RGP-NOI pertains to a Category III-Contaminated Construction Dewatering, sub-Category B - Known Contamination Sites. The completed NOI-RGP Form is included as Attachment A.

General Site Information

The Site is a portion of the former Hingham Shipyard which is being redeveloped for residential, commercial and retail uses. In conjunction with the redevelopment, construction activities relating to utility installations and subsurface excavations are expected to encounter groundwater and require dewatering. Prior environmental investigations at the Site have identified the presence of volatile organic compounds (VOCs) in groundwater at concentrations exceeding Reportable Concentrations under the Massachusetts Contingency Plan (MCP). A Release Notification was previously reported to the Massachusetts Department of Environmental Protection (MassDEP), which assigned a Release Tracking Number (RTN) of 4-3023722 to the release. Dewatering within the limits of the MCP Disposal Site Boundary will be managed under this NOI. Work at the Site outside of the Disposal Site Boundary will be managed in accordance with the provisions of the U.S. EPA General Permit Coverage for Construction Dewatering.

In accordance with the instructions set forth in Appendix V of the RGP, general facility/site information is provided in Section 1 of the NOI. A Locus Map illustrating

194 Forbes Road
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781.356.7300 m
781.356.2211 f
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the location of the Site and the outfall locations is included as Attachment B, Figure 1. Discharge information is included in Section 2 of the NOI, and a Process Flow Diagram is included as Figure 2.

Contaminant information is included in Section 3 of the NOI. Recent laboratory analytical results for all parameters listed in Appendix III of the RGP are included in Attachment C.

Discharge Information

As part of planned construction activities, excavation of soil will be conducted to install underground utilities and to construct foundation structures. Due to the expected presence of groundwater at approximate depths of 9 to 19 feet below ground surface at the Site, dewatering will be necessary. J. Derenzo Company will be the Site Operator and responsible for the management of excavation dewatering at the Site.

Groundwater will be pumped from the excavation(s) into a fractionation (frac) tank or settling basin to allow suspended solids to settle before being pumped to a bag-filter system. The bag-filter unit will include two, parallel piped vessels fitted with 15-micron bag filters. The filtered water will be piped to two (2) 1,000 pound liquid-phase carbon units piped in series. Sample ports will be provided to allow collection of influent, midpoint, and effluent water samples. A flow meter/totalizer will be used to measure the discharge flow rates and cumulative volume treated.

The treated water will be discharged to the Weymouth Back River through a stormwater catch basin system located in proximity to the treatment system. This system has three outfalls, as shown on Figure 1. The average discharge rate of treated water is anticipated to be on the order of 30 gallons-per-minute [0.067 cubic feet per second, cfs], with a peak discharge rate of up to 100 gallons-per-minute [0.223 cfs]. The Project is targeted to begin in early October 2006 and is expected to be completed by September 2008. Discharges under this NOI are expected to occur intermittently throughout the construction period.

A Process Flow Diagram is included as Figure 2.

Contaminant Information

During previous environmental investigations of the Site, groundwater contaminants were evaluated through the installation of groundwater monitoring wells and groundwater sampling and analysis. In order to characterize the expected untreated water for all of the parameters listed in Appendix III, LFR recently sampled groundwater from well MW TP-3 which is located in the vicinity of the planned work and also within the disposal site boundary. Samples collected from this well were submitted to Con-test Analytical Laboratory for analysis. A copy of the laboratory Certificate of Analysis is included as Attachment C.

Receiving Water Information

As noted above, the treated water will be discharged to the Hingham Back River through a stormwater catch basin. The approximate location of the planned discharge is shown on Figure 1. The state water quality classification for this receiving water is SA. The Weymouth Back River is located in the Weymouth River Basin and coastal drainage area (310 CMR 04, reference area #74).

Please contact me at (781) 356-7300 (x262) should you should have any questions regarding this submittal.

Sincerely,

LFR Inc.



Michael J. Baer, PG
Senior Geologist

Attachments

- C: MADEP, SE Region
- M. Rennie, J. Derenzo
- L. Green, Samuels & Associates Hingham LLC

Attachment A
Notice of Intent Form

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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 : Portion of the Former Hingham Shipyard - Samuels & Associates Hingham LLC Parcel		Facility/site address : 349			
Location of facility/site : longitude: <u>70.92</u> latitude: <u>42.25</u>		Facility SIC code(s): 531	Street: Lincoln Street		
b) Name of facility/site owner : Samuels & Associates Hingham LLC		Town: Hingham			
Email address of owner: lgreen@samuelsre.com		State: MA	Zip: 02043	County: Plymouth	
Telephone no. of facility/site owner : (617) 603-5418		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 : (617) 266-8788					
Address of owner (if different from site): Street: 333 Newbury Street, 2nd Floor					
Town: Boston		State: MA	Zip: 02115	County: Suffolk	
c) Legal name of operator : J. Derenzo Company		Operator telephone no : (508) 897-8023			
		Operator fax no.: (508) 897-8525		Operator email: mrennie@jderenzo.com	
Operator contact name and title: Michael Rennie, Director of Operations					

Address of operator (if different from owner):		Street: 338 Howard Street	
Town: Brockton	State: MA	Zip: 02302	County: Plymouth
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 ___ No <input checked="" type="checkbox"/>			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ___ No <input checked="" type="checkbox"/> If "yes," 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 storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 2. phase I or II construction storm water general permit? Y <input checked="" type="checkbox"/> N ___ , if Y, number: MAR10000, MAR10C474 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: Excavation dewatering associated with Site redevelopment activities and utility installations		
b) Provide the following information about each discharge:	1) Number of discharge points: 3	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <u>0.22</u> Average flow <u>0.07</u> Is maximum flow a design value ? Y ___ N <input checked="" type="checkbox"/> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. estimated
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>70.92</u> lat. <u>42.25</u> ; pt.2: long. <u>70.92</u> lat. <u>42.25</u> ; pt.3: long. <u>70.92</u> lat. <u>42.25</u> ; 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 <input checked="" type="checkbox"/> or seasonal _____? Is discharge ongoing Yes _____ No <input checked="" type="checkbox"/> ?
c) Expected dates of discharge (mm/dd/yy): start <u>10/09/06</u> end <u>09/30/08</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information. 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 <input checked="" type="checkbox"/>	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	160.2	12.5	355			
2. Total Residual Chlorine		<input checked="" type="checkbox"/>	1	Grab	330.4	0.02	0.02			
3. Total Petroleum Hydrocarbons		<input checked="" type="checkbox"/>	1	Grab	1664	0.2	0.31			
4. Cyanide	<input checked="" type="checkbox"/>		1	Grab	335.3	0.01	ND			
5. Benzene		<input checked="" type="checkbox"/>	1	Grab	8260B	1	ND			
6. Toluene		<input checked="" type="checkbox"/>	1	Grab	8260B	1	ND			
7. Ethylbenzene		<input checked="" type="checkbox"/>	1	Grab	8260B	1	ND			
8. (m,p,o) Xylenes		<input checked="" type="checkbox"/>	1	Grab	8260B	1	ND			
9. Total BTEX ⁴		<input checked="" type="checkbox"/>	1	Grab	8260B	1	ND			

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)	✓		1	Grab	504	0.02	ND			
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	Grab	8260B	1	ND			
12. tert-Butyl Alcohol (TBA)	✓		1	Grab	8260B	20	ND			
13. tert-Amyl Methyl Ether (TAME)	✓		1	Grab	8260B	0.5	ND			
14. Naphthalene		✓	1	Grab	8260B	5	ND			
15. Carbon Tetrachloride	✓		1	Grab	8260B	1	ND			
16. 1,4 Dichlorobenzene	✓		1	Grab	8260B	1	ND			
17. 1,2 Dichlorobenzene	✓		1	Grab	8260B	1	ND			
18. 1,3 Dichlorobenzene	✓		1	Grab	8260B	1	ND			
19. 1,1 Dichloroethane		✓	2	Grab	8260B	1	96			
20. 1,2 Dichloroethane	✓		1	Grab	8260B	1	ND			
21. 1,1 Dichloroethylene		✓	2	Grab	8260B	1	13			
22. cis-1,2 Dichloroethylene		✓	2	Grab	8260B	1	1600			
23. Dichloromethane (Methylene Chloride)	✓		1	Grab	8260B	5	ND			
24. Tetrachloroethylene		✓	2	Grab	8260B	1	760			

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	✓		1	Grab	8260B	1	ND			
26. 1,1,2 Trichloroethane	✓		1	Grab	8260B	1	ND			
27. Trichloroethylene		✓	2	Grab	8260B	1	2000			
28. Vinyl Chloride		✓	1	Grab	8260B	2	1200			
29. Acetone	✓		1	Grab	8260B	50	ND			
30. 1,4 Dioxane	✓		1	Grab	8260B	50	ND			
31. Total Phenols	✓		1	Grab	8270	1	ND			
32. Pentachlorophenol	✓		1	Grab	8270	1	ND			
33. Total Phthalates ⁵ (Phthalate esters)	✓		1	Grab	8270		ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	Grab	8270	1	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	Grab	8270	1	4.26			
a. Benzo(a) Anthracene		✓	1	Grab	8270	0.05	0.44			
b. Benzo(a) Pyrene		✓	1	Grab	8270	0.1	0.68			
c. Benzo(b)Fluoranthene		✓	1	Grab	8270	0.05	1.32			
d. Benzo(k) Fluoranthene		✓	1	Grab	8270	0.39	0.39			
e. Chrysene		✓	1	Grab	8270	0.2	0.56			

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	✓		1	Grab	8270	0.5	ND			
g. Indeno(1,2,3-cd) Pyrene		✓	1	Grab	8270	0.5	0.87			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	Grab	8270		1.69			
h. Acenaphthene	✓		1	Grab	8270	0.3	ND			
i. Acenaphthylene	✓		1	Grab	8270	0.3	ND			
j. Anthracene	✓		1	Grab	8270	0.2	ND			
k. Benzo(ghi) Perylene		✓	1	Grab	8270	0.5	0.61			
l. Fluoranthene		✓	1	Grab	8270	0.5	0.78			
m. Fluorene	✓		1	Grab	8270	1	ND			
n. Naphthalene-		✓	1	Grab	8270	1	ND			
o. Phenanthrene		✓	1	Grab	8270	0.1	0.3			
p. Pyrene	✓		1	Grab	8270	1	ND			
37. Total Polychlorinated Biphenyls (PCBs)		✓	1	Grab	8082	0.2	0.31			
38. Antimony	✓		1	Grab	7041	1.5	ND			
39. Arsenic	✓		1	Grab	6010B	50	ND			
40. Cadmium		✓	1	Grab	6010B	5	0.7			
41. Chromium III		✓	1	Grab	6010B	4	16			
42. Chromium VI	✓		1	Grab	6010B	4	ND			

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		✓	1	Grab	6010	0.5	229			
44. Lead		✓	1	Grab	6010	2	76			
45. Mercury		✓	1	Grab	7470	0.04	0.17			
46. Nickel		✓	1	Grab	6010	2	6			
47. Selenium	✓		1	Grab	6010	50	ND			
48. Silver	✓		1	Grab	6010	5	ND			
49. Zinc		✓	1	Grab	6010	5	120			
50. Iron		✓	1	Grab	6010	20	12.4			
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 <input checked="" type="checkbox"/> N <input type="checkbox"/></p>	<p>If yes, which metals? Copper, lead, zinc</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: N/A Saltwater receiving water body 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> If "Yes," list which metals: Copper, lead, zinc</p>

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: Treatment system to include a frac tank to allow for solids to settle followed by an in-line sedimentation bag filtering unit equipped with 15 micron filter bags and two (2) 1,000 to 2,000 pound granular activated carbon units (in series).						
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 <u>30</u> Maximum flow rate of treatment system <u>100</u> Design flow rate of treatment system <u>75</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): N/A						

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 <input checked="" type="checkbox"/>	River/brook <input checked="" type="checkbox"/>	Wetlands _____	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: Discharge from water treatment system will be directed to on-site stormwater catch basins which drain into the nearby Weymouth Back River						

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water N/A 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)?
 Pathogens

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? 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

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.

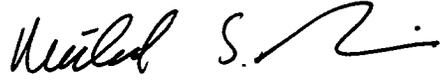
Analytical results are attached

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: Portion of the Former Hingham Shipyard - Samules & Associates Hingham LLC Parcel

Operator signature:


MICHAEL S. RENNIE.

Title:

JDC - PROJECT MANAGER.

Date:

26 SEPT 06

Attachment B

Figures