



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC104

RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number

3 - **601**

A. SITE LOCATION:

1. Site Name/Location Aid: Former Jet-Line/Geochem

2. Street Address: 263 Howard Street

3. City/Town: Lowell 4. ZIP Code: 01852-0000

5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
 a. Tier 1A b. Tier 1B c. Tier 1C d. Tier 2

6. If a Tier I Permit has been issued, provide Permit Number: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of RAO Statement (if previously submitted): _____
mm/dd/yyyy

2. Submit a Response Action Outcome (RAO) Statement

a. Check here if this RAO Statement covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. - -

3. Submit a Revised Response Action Outcome Statement

a. Check here if this Revised RAO Statement covers additional Release Tracking Numbers (RTNs), not listed on the RAO Statement or previously submitted Revised RAO Statements. RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. - -

4. Submit a Response Action Outcome Partial (RAO-P) Statement

Check above box, if any Response Actions remain to be taken to address conditions associated with this disposal site having the Primary RTN listed in the header section of this transmittal form. This RAO Statement will record only an RAO-Partial Statement for that RTN. A final RAO Statement will need to be submitted that references all RAO-Partial Statements and, if applicable, covers any remaining conditions not covered by the RAO-Partial Statements.

5. Submit an optional Phase I Completion Statement supporting an RAO Statement

6. Submit a Periodic Review Opinion evaluating the status of a Temporary Solution for a Class C RAO Statement (Section E is optional)

7. Submit a Retraction of a previously submitted Response Action Outcome Statement (Sections D & E are not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

AGENCY Jones Environmental
ID. NO. MAD 047075734
FILE # R-12
#103846



RDMS DocID 103846



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C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input checked="" type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input checked="" type="checkbox"/> 12. Air Sparging |
| <input type="checkbox"/> 13. Removal of Contaminated Soils | |

- a. Re-use, Recycling or Treatment
- i. On Site Estimated volume in cubic yards _____
- ii. Off Site Estimated volume in cubic yards _____

ii.a. Facility Name: _____ Town: _____ State: _____

ii.b. Facility Name: _____ Town: _____ State: _____

iii. Describe: _____

- b. Landfill
- i. Cover Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

- ii. Disposal Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town: _____ State: _____



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C. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

15. Removal of Other Contaminated Media:

a. Specify Type and Volume: 26 drums of OHM impacted liquid and 3 drums of OHM impacted soil/
sediment from the former sump in Building 2 on 9/16/1986

b. Facility Name: NA Town: NA State: NA

c. Facility Name: _____ Town: _____ State: _____

16. Other Response Actions:

Describe: _____

17. Use of Innovative Technologies:

Describe: _____

D. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the disposal site, or site of the Threat of Release.
Select **ONLY** one Class.

1. Class A-1 RAO: Specify one of the following:

a. Contamination has been reduced to background levels. b. A Threat of Release has been eliminated.

2. Class A-2 RAO: You **MUST** provide justification that reducing contamination to or approaching background levels is infeasible.

3. Class A-3 RAO: You **MUST** provide an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to or approaching background levels is infeasible.

4. Class A-4 RAO: You **MUST** provide an implemented AUL, justification that reducing contamination to or approaching background levels is infeasible, and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface or below an engineered barrier is infeasible. If the permanent solution relies upon an engineered barrier, you must also provide a Phase III report justifying the selection of the engineered barrier.



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D. RESPONSE ACTION OUTCOME CLASS (cont.):

- 5. Class B-1 RAO: Specify one of the following:
 - a. Contamination is consistent with background levels
 - b. Contamination is **NOT** consistent with background levels.
- 6. Class B-2 RAO: You **MUST** provide an implemented AUL.
- 7. Class B-3 RAO: You **MUST** provide an implemented AUL and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface is infeasible.
- 8. Class C RAO: Specify one:
 - a. Monitoring
 - b. Passive Operation and Maintenance
 - c. Active Operation and Maintenance (defined at 310 CMR 40.0006)

E. RESPONSE ACTION OUTCOME INFORMATION:

1. Specify the Risk Characterization Method(s) used to achieve the RAO described above:
 - a. Method 1
 - b. Method 2
 - c. Method 3
 - d. Method Not Applicable-Contamination reduced to or consistent with background, or Threat of Release abated
2. Specify all Soil and Groundwater Categories. More than one Soil Category and more than one Groundwater Category may apply at a Site. Be sure to check off all **APPLICABLE** categories.
 - a. Soil Category(ies) Applicable:

<input type="checkbox"/> i. S-1/GW-1	<input type="checkbox"/> iv. S-2/GW-1	<input type="checkbox"/> vii. S-3/GW-1
<input type="checkbox"/> ii. S-1/GW-2	<input checked="" type="checkbox"/> v. S-2/GW-2	<input type="checkbox"/> viii. S-3/GW-2
<input type="checkbox"/> iii. S-1/GW-3	<input checked="" type="checkbox"/> vi. S-2/GW-3	<input type="checkbox"/> ix. S-3/GW-3
 - b. Groundwater Category(ies) Impacted:

<input type="checkbox"/> i. GW-1	<input checked="" type="checkbox"/> ii. GW-2	<input checked="" type="checkbox"/> iii. GW-3	<input type="checkbox"/> iv. No Groundwater Impacted
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3. Specify remediation conducted.
 - a. Check here if soil remediation was conducted.
 - b. Check here if groundwater remediation was conducted.
4. Estimate the number of acres this RAO Statement applies to: 0.6



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F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that either an RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion is being provided, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

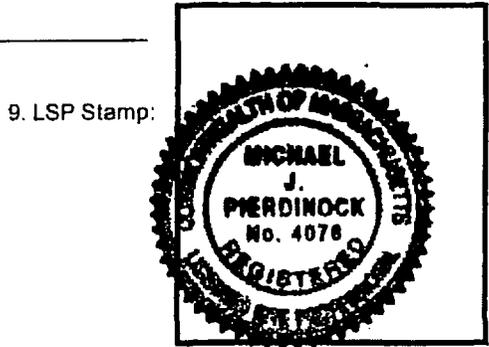
1. LSP #: 4078

2. First Name: Michael J. 3. Last Name: Pierdinock

4. Telephone: (508) 830-3344 5. Ext.: 110 6. FAX: (508) 830-3360

7. Signature: 

8. Date: 3/8/06
 mm/dd/yyyy



G. PERSON MAKING SUBMITTAL:

1. Check all that apply: a. change in contact name b. change of address c. change in the person undertaking response actions

2. Name of Organization: Jones Environmental Services (Northeast), Inc.

3. Contact First Name: Jim 4. Last Name: Green

5. Street: 263 Howard Street 6. Title: CFO, CEO & President

7. City/Town: Lowell 8. State: MA 9. ZIP Code: 01852-0000

10. Telephone: (978) 453-7772 11. Ext.: _____ 12. FAX: _____



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H. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON MAKING SUBMITTAL:

1. RP or PRP a. Owner b. Operator c. Generator d. Transporter
 e. Other RP or PRP Specify: _____

2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

4. Any Other Person Making Submittal Specify Relationship: _____

I. REQUIRED ATTACHMENT AND SUBMITTALS:

1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of an RAO Statement that relies on the public way/rail right-of-way exemption from the requirements of an AUL.
3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of a RAO Statement with instructions on how to obtain a full copy of the report.
4. Check here to certify that documentation is attached specifying the location of the Site, or the location and boundaries of the Disposal Site subject to this RAO Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site.
5. Check here if required to submit one or more AULs. You must submit an AUL Transmittal Form (BWSC113) and a copy of each implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for Class A-3, A-4, B-2, B-3 RAO Statements)
- a. Notice of Activity and Use Limitation b. Number of Notices submitted: 1
- c. Grant of Environmental Restriction d. Number of Grants submitted: _____
6. If an RAO Compliance Fee is required for any of the RTNs listed on this transmittal form, check here to certify that an RAO Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
7. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Address/Location Aid. Send corrections to the DEP Regional Office.
8. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



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J. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, Jim Green, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: [Signature]
Signature

3. Title: CEO & President

4. For: Jones Environmental Services (Northeast), Inc.
(Name of person or entity recorded in Section G)

5. Date: 2/10/06
mm/dd/yyyy

6. Check here if the address of the person providing certification is different from address recorded in Section G.

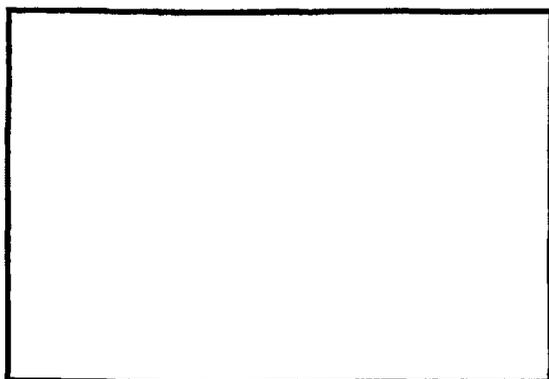
7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)



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0601

C. 15. Removal of Other Contaminated Media

As set forth in the Response Action Outcome Report, twenty-six drums of liquid and three drums of soil/sediment were reported to have been removed from the former sump located in the southeast corner of Building 2 on September 16, 1986. The liquid and soil/sediment removed was reported to have be impacted primarily by Volatile Organic Compounds ("VOCs") and some metals (barium, cadmium, chromium, lead, selenium and silver). The material was reported to have been transported off-Site for disposal. A copy of the disposal documentation, including the name and address of the disposal facility, was not included in the historical environmental assessment reports reviewed by Lightship Engineering, LLC ("Lightship Engineering"). The disposal activities were reported to have occurred in 1986 well before the current management, Jones Environmental Services (Northeast), Inc. ("JES"), assumed management of the property in 2000 and well before Lightship Engineering was retained by JES to provide LSP services for the Site in 2002.

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I. REQUIRED ATTACHMENT AND SUBMITTALS:

1. Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and or approval(s) issued by DEP or EPA.

The Site is subject to the condition set forth in the DEP Notice of Noncompliance with the MCP ("NON") NON-NE-06-3A-031 dated February 16, 2006 that states that to "return to compliance and avoid an Administrative Penalty that could exceed \$1,000 per day per violation, you must submit a Tier II Classification Extension Submittal and a Response Action Outcome (RAO) Statement to DEP within 60 days of your receipt of this NON."

The DEP stated that a Tier II Classification Extension Submittal would not be required to return to compliance and avoid administrative penalties as long as the RAO is submitted to DEP by March 10, 2006.