

Environmental
Resources
Management

399 Boylston Street, 6th Floor
Boston, MA 02116
(617) 646-7800
(617) 267-6447 (fax)

<http://www.erm.com>

09 December 2003
Reference: 0001922.03

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Site Cleanup
1 Winter Street
Boston, MA 02108



Re: Linking Release Tracking Number (RTN) 3-22665 to RTN 3-13302
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts (the "Site")

Dear BWSC Representative:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is submitting the attached Tier Classification Transmittal Form, BWSC-107 for the above-referenced Site to link Release Tracking Number (RTN) 3-22665 to RTN 3-13302 and Tier IB Permit Number 133939. A Release Notification Form (RNF) was submitted to the Department of Environmental Protection (Department) on 11 March 2003 in response to the discovery of chromium in groundwater at the Site at a concentration above the applicable Reportable Concentration (RCGW-1), triggering release notification pursuant to 310 CMR 40.0315(1). On 2 April 2003, the Department issued RTN 3-22665 for this release condition.

Comprehensive Response Actions are ongoing at the approximately 83-acre Former Raytheon Facility and are tracked under RTN 3-13302 and Tier IB Permit No. 133939. As part of these ongoing response actions, ERM conducted in situ chemical oxidation (ISCO) pilot studies to evaluate the efficacy of permanganate oxidation at abating chlorinated hydrocarbons (primarily trichloroethene (TCE)) in groundwater. These activities were presented to the Department in the following Release Abatement Measure (RAM) documents:

- RAM Plan, 11 September 2001;
- RAM 120-Day Status Report, 31 January 2002;
- RAM Six-Month Status Report, 25 July 2002;
- RAM Plan - Modification #1, 22 October 2002;

- RAM Six-Month Status Report, 31 January 2003; and
- RAM Modification Second Six Month Status Report, 31 July 2003.

As part of the ISCO pilot study activities, ERM collected groundwater samples from two pilot study areas for laboratory analysis of chromium. As detailed in ERM's letter to the Department dated 11 March 2003, a total of 50 chromium samples were collected and analyzed from these pilot study areas. Of these samples, chromium was detected in five samples, of which one sample exceeded the applicable RCGW-1 standard. Subsequent to this letter, an additional 48 samples were collected and analyzed for chromium. Chromium was detected in seven additional samples with five detections exceeding RCGW-1.

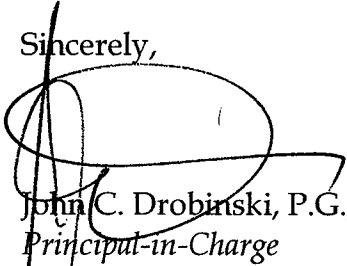
The groundwater samples that exceeded the RCGW-1 standard were collected from wells where permanganate was observed. Chromium was not detected in the baseline samples collected from these wells prior to ISCO pilot studies. Chromium is more soluble in groundwater under oxidizing conditions, which would be expected during and following injection of permanganate. Therefore, ERM believes that chromium detected in groundwater is a transient condition and will likely naturally attenuate once the aquifer returns to ambient oxidation-reduction conditions.

Re-evaluation of the Site Numerical Ranking Score (NRS) in response to the addition of chromium to RTN 3-13302 does not result in an increase of the NRS score of the Site as submitted to the Department by ERM in Major Permit Modification Application, Permit No. 133939, 25 May 2000 and Request for Permit Extension - Transmittal No. W038777, 14 May 2003. The Site is currently listed as a Tier IB Permit with Special Conditions. Reclassification of the Site is not necessary.


Future response actions addressing RTN 3-22665 will be conducted as part of the ongoing response under RTN 3-13302 and Tier IB Permit No. 133939.

If the Department requires additional information or clarification, please contact either of the undersigned at (617) 267-8377.

Sincerely,



John C. Drobinski, P.G., LSP
Principal-in-Charge


R. Joseph Fiocco, Jr., P.G.
Senior Project Manager

Enc. Appendix A BWSC-107 Tier Classification Transmittal Form

cc: Mr. Edwin Madera, Sr. Environmental Engineer, Restoration
Projects, Raytheon Company, 528 Boston Post Rd., MS-1880,
Sudbury, MA 01776

Public Repository (Primary Location), Former Raytheon Facility,
Wayland Public Library, Louise Brown, 5 Concord Road,
Wayland, MA 01778

Public Repository (Secondary Location), Former Raytheon
Facility, Wayland Town Hall, 41 Cochituate Road, Wayland, MA
01778



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC107

TIER CLASSIFICATION TRANSMITTAL FORM

Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number

3 - 13302

A. DISPOSAL SITE LOCATION:

1. Disposal Site Name: Former Raytheon Facility

2. Street Address: 430 Boston Post Road

3. City/Town: Wayland, MA

4. ZIP Code: 01778-0000

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

☐ 1. Submit a new **Tier Classification Submittal for a Tier I Site**, including a **Numerical Ranking Scoresheet (BWSC107A)** (check one) A Tier I Permit Application must also be submitted.

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC

☐ 2. Submit a new **Tier Classification Submittal for a Tier II Site**, including the **Numerical Ranking Scoresheet (BWSC107A)** and the **Tier II Compliance History (BWSC107B)**

☐ 3. Submit a **Phase I Completion Statement** as per 310 CMR 40.0480

If previously submitted, provide date _____ mm/dd/yyyy

☐ 4. Submit a **Phase II Scope of Work** as per 310 CMR 40.0834

If previously submitted, provide date _____ mm/dd/yyyy

☐ 5. Submit a **Phase II Conceptual Scope of Work supporting a Tier Classification Submittal**

☐ 6. Submit a **Tier II Extension Submittal** for Response Actions at a Tier II Site including the **Tier II Compliance History (BWSC107B)**

☐ 7. Submit a **Tier II Transfer Submittal** for a change in person(s) undertaking Response Actions at a Tier II Site including the **Tier II Compliance History (BWSC107B)** and the **Tier II Transferor Certification (BWSC107C)**

Proposed effective date of transfer : _____
mm/dd/yyyy

☐ 8. Submit a **Revised Tier Classification Submittal**, including a **Numerical Ranking Scoresheet (BWSC107A)** A Major Permit Modification may also need to be submitted.

If this revised submittal is re-classifying the site check the new classification.

☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☐ d. Tier II

☒ 9. Submit a **Notice that an additional Release Tracking Number(s) is (are) being linked to this Tier Classified Site (Primary RTN)**. Future response actions addressing the Release or Threat of Release notification condition associated with additional Release Tracking Numbers (RTNs) will be conducted as part of the Response Actions planned or ongoing at the Primary Site listed above. For a previously Tier Classified Primary Site, if there is a reasonable likelihood that the addition of the new secondary RTN(s) would change the classification of the site, a **Revised Tier Classification Submittal** must also be made.

Provide Release Tracking Number(s): a. 3 - 22665 b. -

All future Response Actions must occur according to the deadlines applicable to the Primary RTN. Use only the Primary RTN when making future submittals for this site unless specifically relating to response actions started before the linking occurred.



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Release Tracking Number

3 - 13302

C. 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 of this form indicates that a **Tier I or Tier II Classification Submittal** including the **Numerical Ranking System Scoresheet** is being submitted, this Tier Classification Submittal has been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and, 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) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Phase I Completion Statement** is being submitted, 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;

> if Section B of this form indicates that a **Phase II Scope of Work** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed 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;

> if Section B of this form indicates that a **Tier II Extension Submittal** or a **Tier II Transfer Submittal** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being 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) complies(y) 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 #: 2196

2. First Name: John 3. Last Name: Drobinski

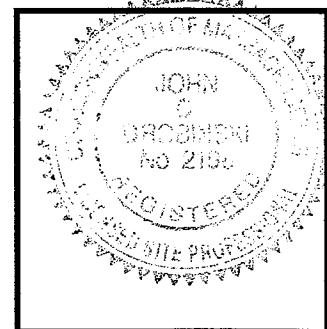
4. Telephone: (617) 646-7800 5. Ext.: _____ 6. FAX: (617) 267-6447

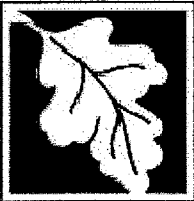
7. Signature: [Signature]

8. Date: 11/13/03

mm/dd/yyyy

9. LSP Stamp:





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Release Tracking Number

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D. 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: Raytheon Company
3. Contact First Name: Edwin 4. Last Name: Madera
5. Street: 528 Boston Post Road, MS1880 6. Title: Manager, Env. Rest. Div.
7. City/Town: Sudbury 8. State: MA 9. ZIP Code: 01778-0000
10. Telephone: (978) 440-1813 11. Ext.: _____ 12. FAX: (978) 440-2176

E. RELATIONSHIP OF PERSON MAKING SUBMITTAL TO DISPOSAL SITE:

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

F. 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 any Phase Reports to DEP.
- ☐ 3. Check here to certify that a Legal Notice of a Tier Classification or Re-classification Submittal has been or will be made according to 310 CMR 40.1403, and a copy of the notice sent to DEP, the Chief Municipal Officer and the Local Board of Health.
- ☐ 4. For a Tier II Extension Submittal, check here to certify that a statement summarizing why a Permanent or Temporary Solution has not been achieved at the Disposal Site is attached.
- ☐ 5. For a Tier II Transfer Submittal, check here to certify that a statement summarizing the reasons for the proposed change in person(s) undertaking the Response Actions is attached. All Response Actions must be completed by the deadline applicable to the person who first filed either a Tier Classification Submittal for the Disposal Site or received a Waiver of Approvals.
- ☐ 6. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.
- ☐ 7. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



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Pursuant to 310 CMR 40.0500 (Subpart E)

G. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, Edwin Madera, 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.

If submitting a Tier II Classification, Extension or Transfer, I also attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the/those Licensed Site Professional(s) employed or engaged to render Professional Services for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies) understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made learn(s) that it/they is/are unable to proceed with the necessary response actions.

2. By: Edwin B. Madera 3. Title: Manager, Env. Rest. Div.
Signature

4. For: Raytheon Company 5. Date: 11/13/03
(Name of person or entity recorded in Section D) mm/dd/yyyy

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

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):

