

Raytheon Company

Major Permit Modification  
Application  
Permit No. 133939

*Former Raytheon Facility*

*430 Boston Post Road*

*Wayland, Massachusetts*

25 May 2000

ERM Ref. No. 143.51

**Environmental Resources Management**  
399 Boylston Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02116



Raytheon Company

Major Permit Modification  
Application  
Permit No. 133939


*Former Raytheon Facility*


*430 Boston Post Road*

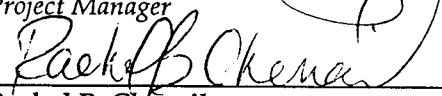
*Wayland, Massachusetts*

25 May 2000

143,51

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

  
\_\_\_\_\_  
John W. McTigue, P.G., LSP  
Project Manager

  
\_\_\_\_\_  
Rachel B. Chenail  
Project Engineer

Environmental Resources Management  
399 Boylston Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02116

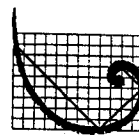


ERM00078

**Environmental  
Resources  
Management**

399 Boylston Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02116  
(617) 267-8377  
(617) 267-6447 (fax)

<http://www.erm.com>



**ERM®**

25 May 2000  
Reference: 143.51

Data Entry Section  
Bureau of Waste Site Cleanup  
Massachusetts Department of Environmental Protection  
205 A Lowell Street  
Wilmington, Massachusetts 01887

RE: Application for Major Permit Modification-Transmittal No.  
W012110  
Former Raytheon Facility  
430 Boston Post Road  
Wayland, Massachusetts  
Permit No. 133939

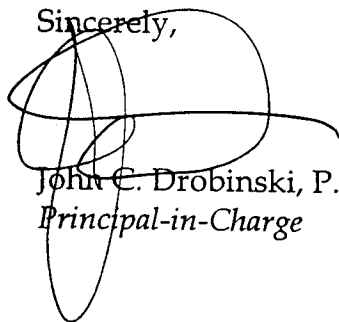
Dear Representative:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is submitting this Application for Major Permit Modification for Permit 133939 issued for the above subject site in May 1997 (Release Tracking Nos. 3-13302, 3-13574, 3-14042, 3-19482). A modification is sought to upgrade the existing Tier IB Permit to Tier IA based on re-evaluation of the site Numerical Ranking Score (NRS) in response to results obtained during the Phase II-Comprehensive Site Assessment.

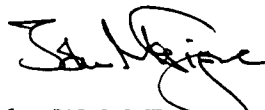
Please note that this application includes an LSP Opinion concluding that Comprehensive Response Actions (Phase II and Phase III) should continue during Department review of this application and therefore requests the Department's written approval to proceed.

If you have any questions regarding this submittal, or require additional information, please contact the undersigned at (617) 267-8377.

Sincerely,



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



John W. McTigue, P.G., LSP  
Project Manager

cc: Ronald Slager Jr., Restoration Project Manager, Raytheon Systems Company, 1001  
Boston Post Road, Marlboro, MA 01752

ERM00079



## **TABLE OF CONTENTS**

|                   |   |
|-------------------|---|
| <b>SECTION 1</b>  | <b>NARRATIVE PURSUANT TO 310 CMR 40.0707(3)</b>   |
| <b>SECTION 2</b>  | <b>TIER CLASSIFICATION TRANSMITTAL FORM</b>   |
| <b>SECTION 3</b>  | <b>NUMERICAL RANKING SYSTEM SCORESHEET</b>  |
| <b>SECTION 4</b>  | <b>TRANSMITTAL FORM FOR MAJOR PERMIT MODIFICATION</b>   |
| <b>SECTION 5</b>  | <b>APPLICATION FOR MAJOR PERMIT MODIFICATION</b>  |
| <b>SECTION 6</b>  | <b>VERIFICATION OF FEE PAYMENT</b>  |
| <b>FIGURES</b>    | <b>FIGURE 1: SITE LOCUS</b>   |
|                   | <b>FIGURE 2: SEDIMENT SAMPLING LOCATIONS</b>  |
| <b>TABLES</b>     | <b>TABLE 1: POLYCHLORINATED BIPHENYL &amp; METALS</b>   |
|                   | <b>TABLE 2: POLYCYCLIC AROMATIC HYDROCARBONS (PAHS), EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) &amp; VOLATILE PETROLEUM HYDROCARBONS (VPH)</b> |
| <b>APPENDICES</b> |   |
| <b>APPENDIX A</b> | <b>SUPPLEMENTAL INFORMATION - TIER IB PERMIT APPLICATION REVIEW</b>   |
| <b>APPENDIX B</b> | <b>PHASE II SCOPE OF WORK &amp; ADDENDUM NO. 1 - PHASE II SCOPE OF WORK</b>   |
| <b>APPENDIX C</b> | <b>PHASE II SITE ASSESSMENT UPDATE</b>  |
| <b>APPENDIX D</b> | <b>NOTICES OF DELAY</b>   |

***APPENDIX E***      ***RELEASE ABATEMENT MEASURE (RAM) PLAN  
RTN #3-13302***

***APPENDIX F***      ***120-DAY RAM STATUS REPORT - RTN #3-13302***

***APPENDIX G***      ***CLASS A-3 RESPONSE ACTION OUTCOME - RTN  
#3-13302***

***APPENDIX H***      ***LEGAL NOTICE AND NOTIFICATION LETTERS***

**BACKGROUND**

The subject site is an approximately 83-acre facility located at 430 Boston Post Road in Wayland, Massachusetts (Figure 1). Raytheon Company (Raytheon) operated the facility from 1955 to 1995. Operations included electronic testing and chemical process Research to support Raytheon's in-house prototype manufacturing. Raytheon operations have been terminated, and the facility decommissioned, sold and sub-leased.

Environmental Resources Management (ERM) completed a Phase I-Initial Site Investigation (Phase I) consistent with the requirements of the Massachusetts Contingency Plan (MCP), specifically 310 CMR 40.0480. The Phase I Report dated May 1996 was submitted to the Massachusetts Department of Environmental Protection (DEP) in July 1996. Additional site assessment and release abatement was conducted in accordance with MCP requirements through December 1996 to support Tier Classification filing in January 1997. DEP issued Raytheon a Tier IB Permit for the site (Permit No. 133939), effective May 1997.

As indicated in the Phase I, potential impacts to sediment from polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and metals were discovered near the former facility storm water outfall in July 1989 by the US Fish & Wildlife Service (USFWS) as part of a study of the Great Meadows National Wildlife Refuge. Subsequent sampling by ERM in May 1990 and July 1995 failed to confirm the results reported by USFWS, particularly for PCBs.

As part of the Phase II-Comprehensive Site Assessment (Phase II) verification sampling of wetland sediments was conducted in November 1998 along a series of transects. Results of the sampling effort were submitted to the Department in a letter from ERM dated 30<sup>th</sup> June 1999. Sediment sampling results indicate the presence of PCBs and metals in wetland sediments immediately adjacent to the former facility. Re-evaluation of the site's Numerical Ranking Score (NRS) indicated no change in the permitted status of the site at that time (i.e., the site classification remained Tier IB).

ERM submitted an addendum to the Phase II Scope of Work (SOW) dated 20 September 1999 describing additional sediment and surface water sampling planned to further define the nature and extent of impact to wetland sediment. Two additional rounds of sampling were conducted in October and November 1999. Sampling locations are displayed on Figure 2. A summary of analytical results from the November 1998, October 1999 and November 1999 sampling rounds is included in Table 1. A preliminary evaluation of results suggest:

- The extent of impact associated with organic compounds (including EPH, PAHs and PCBs) is largely defined to an area within approximately 175 feet from the eastern bank of the wetland.
- The extent of impact associated with metals (primarily chromium and silver) requires additional analysis to define the western extent of impact in wetland sediments.

Additional characterization of the wetland habitat was conducted by qualified wildlife biologists. Activities included mapping wetland vegetation, compiling an inventory of potential site-specific environmental receptors and collecting plant tissue samples. These activities were necessary to support a Stage II Environmental Risk Characterization for the site pursuant to 310 CMR 40.0995. Preliminary results indicate:

1. An area of stunted vegetative growth was mapped in the southeast portion of the wetland (Figure 1). The growth density of cattails within this area was estimated at 5 stems/square meter verses an average stem density of 50-stems/square meter in the wetland outside of this area. Samples of cattail roots collected from within the area of stunted growth indicated uptake of chromium at concentrations up to 60 ppm.
2. Terrestrial receptors include meadow vole and muskrat (observed on site), sparrow, red-winged blackbird and Northern Harrier (an endangered raptor species observed downstream of the study area).
3. One endangered plant species, River Bulrush was observed along the western edge of the wetland bordering the Sudbury River outside of the suspected area of impact.

4. The wetland is a habitat for both aquatic and terrestrial receptors, depending on the flood stage of the river. During periods of inundation, the habitat is not suitable for terrestrial receptors, but available to potential aquatic receptors.

Correlation of areas of sediment impact with the results of vegetative mapping and analysis of plant tissue suggested the potential for an Imminent Hazard (IH) Condition. Pursuant to 310 CMR 40.48.0955, Imminent Hazard Risk Characterization, (3), "The following conditions shall constitute and Imminent Hazard to the environment; a) evidence of stressed biota attributable to the disposal site." A preliminary quantitative assessment of the potential risk to human health, suggests site conditions do not pose an IH to human health or public safety. Therefore, the potential IH condition is specific to the evidence of stressed biota associated with historic releases at the site.

Pursuant to 40.0321, Raytheon and ERM verbally notified MA DEP of the potential IH condition on April 26<sup>th</sup> and agreed to conduct an Immediate Response Action (IRA) pursuant to 310 CMR 40.0412. MA DEP authorized the IRA to include continued assessment of the nature and extent of impact in the wetlands and further evaluation of potential risks to human health and the environment consistent with the existing Phase II Scope of Work. On May 4<sup>th</sup> Raytheon, ERM and Tim Boyle of MA DEP Emergency Response, Northeast Regional Office (NERO) visited the site to confirm the reported conditions and authorized actions as part of the IRA. Mr. Boyle indicated that continued assessment, as specified in the Phase II Scope of Works, was appropriate, and that remedial abatement should be considered as a Phase IV remedial response action.

Pursuant to 310 CMR 40.0530, re-evaluation of the site Numerical Ranking Score (NRS) indicates that the need to file this Major Permit Modification Application in order to upgrade the site tier classification and permit from IB to IA.

## 1.2

### *DESCRIPTION OF MODIFICATION*

Pursuant to 310 CMR 40.0707, this Major Permit Modification is sought to upgrade the site classification from Tier IB to Tier IA. The modification is based on re-evaluation of the site NRS from 546 to 732. The re-scoring was conducted in response to new information obtained during



performance of the Phase II concerning the nature and extent of impact to sediment and vegetation in the wetland.

### **1.3      *LSP TIER CLASSIFICATION OPINION***

Outlined in Section H of the Application Form in Section 5 of this Application.

### **1.4      *COMPLIANCE HISTORY***

Outlined in Section E of the Application Form in Section 5 of this Application.

Note: Raytheon is no longer the operator at the site.

### **1.6      *LSP OPINION REGARDING CONTINUATION OF COMPREHENSIVE RESPONSE ACTIONS DURING PERMIT REVIEW***

IRA response actions will continue in accordance with the previous verbal approval of the Department. An IRA Plan will be submitted within the sixty-day notification period to document the IRA activities within the wetland.

In addition, ERM is currently evaluating a chlorinated solvent impact to groundwater on the upland portion of the site.

Based on the historic nature of this release and the need to complete Phase II and Phase III Comprehensive Response Actions prior to conducting remedial actions under Phase IV, ERM requests that MA DEP authorize in writing, continuation of Phase II and Phase III response actions during permit review including:

- Defining the nature and extent of impact to affected media (largely groundwater, surface water and wetland sediment);
- Quantifying the potential risks posed by site conditions to human health, safety, public welfare and the environment;
- Evaluating Remedial Alternatives and identifying the Preferred Alternative.



**TIER CLASSIFICATION, TIER II EXTENSION &  
TIER II TRANSFER TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number

3 - 13302

**A. DISPOSAL SITE LOCATION:**

Disposal Site Name: Former Raytheon Facility

Street: 430 Boston Post Road Location Aid: \_\_\_\_\_

City/Town: Weyland ZIP Code: 01778-0000

Related Release Tracking Numbers That This Submittal Will Address: 3-13574, 3-14042, 3-19482

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

- ☒ Submit a new or revised **Tier Classification Submittal for a Tier I Site**, including a Numerical Ranking Scoresheet (complete Sections A, B, C, I, J, K and L).
- ☐ Submit a new or revised **Tier Classification Submittal for a Tier II Site**, including a Numerical Ranking Scoresheet (complete Sections A, B, C, F, G, I, J, K and L).
- ☐ Submit a **Notice that an additional Release Tracking Number(s) is (are) being linked to this Tier Classified Site** and rescoring is not required at this time (complete Sections A, B, J, K and L). If this submittal is for a Tier I Site, you must also submit a Minor Permit Modification Transmittal Form (BWSC-109).

List Additional Release Tracking Number(s): \_\_\_\_\_

- ☐ Submit a **Phase I Completion Statement supporting a Tier Classification Submittal** (complete Sections A, B, I, J, K and L).
- ☐ Submit a **Tier II Extension Submittal for Response Actions at a Tier II Site** (complete Sections A, B, D, F, G, I, J, K and L).
- ☐ Submit a **Tier II Extension Submittal for Response Actions taken after expiration of a Waiver**, pursuant to 310 CMR 40.0630(4) (complete Sections A, B, D, F, J, K and L, and also complete Sections G and I or Section H).\*
- ☐ Submit a **Tier II Transfer Submittal for a change in person(s) undertaking Response Actions at a Tier II Site** (complete Sections A, B, E, F, G, I, J, K, L, M, N and O).
- ☐ Submit a **Tier II Transfer Submittal for a change in person(s) undertaking Response Actions at a Waiver Site**, pursuant to 310 CMR 40.0630(6) (complete Sections A, B, E, F, J, K, L, M, N and O, and also complete Sections G and I or Section H).\*

**You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.**

**\*NOTE: The Waiver expires on the effective date of this submittal and all further Response Actions must be taken as a Tier II Site.**

**C. TIER CLASSIFICATION SUBMITTAL:**

Numerical Ranking Score for Disposal Site: (from Numerical Ranking Scoresheet) 732

Proposed Tier Classification of Disposal Site: (check one) ☒ Tier IA ☐ Tier IB ☐ Tier IC ☐ Tier II

Check which, if any, of the Tier I inclusionary criteria are met by the Disposal Site, pursuant to 310 CMR 40.0520:

- ☒ Groundwater is located within an Interim Wellhead Protection Area or a Zone II, and there is evidence of groundwater contamination by an Oil or Hazardous Material at the time of Tier Classification at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360.
- ☒ An Imminent Hazard is present at the time of Tier Classification.
- ☒ Check here if this Tier Classification revises a previous submittal for this Disposal Site. You must include a revised Numerical Ranking Scoresheet with this submittal. If a Tier I Permit has been issued, you may also need to submit a Major Permit Modification Application (BWSC 10).

If incorporating additional Release(s) into the Disposal Site, list Release Tracking Number(s): 3-19482

**D. TIER II EXTENSION SUBMITTAL REQUIREMENTS:**

State the expiration date of the Tier II Classification or Waiver for the Disposal Site, whichever is applicable: \_\_\_\_\_

**Attach a statement summarizing why a Permanent or Temporary Solution has not been achieved at the Disposal Site. A Tier II Extension is effective for a period of one year beyond the current expiration date of the Tier II Classification or Waiver.**

**E. TIER II TRANSFER SUBMITTAL REQUIREMENTS:**

State the proposed effective date of the change in person(s) undertaking Response Actions at the Disposal Site: \_\_\_\_\_

**Attach a statement summarizing the reasons for the proposed change in person(s) undertaking the Response Actions. 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.**



**TIER CLASSIFICATION, TIER II EXTENSION &  
TIER II TRANSFER TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number

3 - 13302

**F. DISPOSAL SITE COMPLIANCE HISTORY SUMMARY:**

- > If providing either a **Tier Classification Submittal for a Tier II Site** or a **Tier II Extension Submittal for a Walver Site**, the person named in **Section J** must provide a Compliance History.
- > If providing a **Tier II Extension Submittal for a Tier II Site**, the person named in **Section J** must **update** their Compliance History since the effective date of the Tier II Classification.
- > If providing a **Tier II Transfer Submittal for a Tier II or Walver Site**, the person named in **Section M** must provide a Compliance History.

Compliance History for (provide only one name per History): Raytheon is no longer an operator at the site.

☐ Check here if there has been no change to the Compliance History of the person named above (Extension Submittal for a Tier II Site ONLY).

List all permits or licenses that have been issued by the Department that are relevant to this Disposal Site:

| PROGRAM:                                 | PERMIT NUMBER: | PERMIT CATEGORY: | FACILITY ID: |
|--|----------------|------------------|--------------|
| Air Quality                              |                |                  |              |
| Hazardous Waste (M.G.L. c. 21C)          |                |                  |              |
| Solid Waste                              |                |                  |              |
| Industrial Wastewater Management         |                |                  |              |
| Water Supply                             |                |                  |              |
| Water Pollution Control/Surface Water    |                |                  |              |
| Water Pollution Control/Groundwater      |                |                  |              |
| Water Pollution Control/Sewer Connection |                |                  |              |
| Wetland & Waterways                      |                |                  |              |

List all other Federal, state or local permits, licenses, certifications, registrations, variances, or approvals that are relevant to this Disposal Site:

| ISSUING AUTHORITY OR PROGRAM, OR DOCUMENTATION TYPE: | IDENTIFICATION NUMBER: | DATE ISSUED: |
|--|------------------------|--------------|
|  |                        |              |
|  |                        |              |
|  |                        |              |
|  |                        |              |

If needed, attach to this Transmittal Form a statement further describing the Compliance History of this Disposal Site. This statement must describe the compliance history of the person named above with the following:

- (1) DEP regulations; and
- (2) other laws for the protection of health, safety, public welfare and the environment administered or enforced by any other government agency.

Such a statement should identify information such as:

- (1) actions relevant to the Disposal Site taken by the Department to enforce its requirements including, but not limited to, a Notice of Noncompliance (NON), Notice of Intent to Assess Civil Administrative Penalty (PAN), Notice of Intent to Take Response Action (NORA), and an administrative enforcement order;
- (2) administrative consent orders;
- (3) judicial consent judgements;
- (4) similar administrative actions taken by other Federal, state or local agencies;
- (5) civil or criminal actions relevant to the Disposal Site brought on behalf of the DEP or other Federal, state, or local agencies; and
- (6) any additional relevant information.

For each action identified, provide the following information:

- (1) name of the issuing authority, type of action, identification number and date issued;
- (2) description of noncompliance cited;
- (3) current status of the matter; and
- (4) final disposition, if any.



**TIER CLASSIFICATION, TIER II EXTENSION &  
TIER II TRANSFER TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number

3 - 13302

**G. CERTIFICATION OF ABILITY AND WILLINGNESS:**

- > If providing either a **Tier II Classification Submittal** or a **Tier II Extension Submittal**, the person who signs this certification **MUST** be the person named in **Section J**, or that person's agent.
- > If providing a **Tier II Transfer Submittal**, the person who signs this certification **MUST** be the person named in **Section M**, or that person's agent.

I 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.

By: \_\_\_\_\_ Title: \_\_\_\_\_  
(signature)

For: \_\_\_\_\_ Date: \_\_\_\_\_  
(print name of person or entity recorded in Section J or M, as appropriate)

**If you are submitting either a Tier II Extension Submittal for a Walver Site or a Tier II Transfer Submittal for a Walver Site, you may choose to sign the alternative Ability and Willingness Certification found in Section H in place of providing the certification in Section G and the LSP Opinion in Section I.**

**H. ALTERNATIVE CERTIFICATION OF ABILITY AND WILLINGNESS:**

- > If providing a **Tier II Extension Submittal for a Walver Site**, the person who signs this certification **MUST** be the person named in **Section J**, or that person's agent.
- > If providing a **Tier II Transfer Submittal for a Walver Site**, the person who signs this certification **MUST** be the person named in **Section M**, or that person's agent.

I 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 Consultant-of-Record 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.

By: \_\_\_\_\_ Title: \_\_\_\_\_  
(signature)

For: \_\_\_\_\_ Date: \_\_\_\_\_  
(print name of person or entity recorded in Section J or M, as appropriate)

**I. LSP OPINION:**

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 (iii) the provisions of 309 CMR 4.03(5), 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** which relies upon a previously submitted Phase I Completion Statement 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;

> if Section B of this form indicates that a **Phase I Completion Statement** or a **Tier I or Tier II Classification Submittal** which does not rely upon a previously submitted 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) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

**SECTION I IS CONTINUED ON THE NEXT PAGE**



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-107A

TIER CLASSIFICATION, TIER II EXTENSION &  
TIER II TRANSFER TRANSMITTAL FORM

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number

3 - 13302

I. LSP OPINION: (continued)

> 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.

☐ 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.

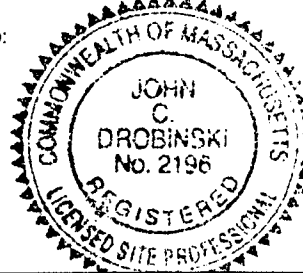
LSP Name: John C. Drobinski LSP #: 2196 Stamp:

Telephone: 617-267-8377 Ext.: 152

FAX: (optional) 617-267-6447

Signature: [Signature]

Date: 5/25/00



J. PERSON MAKING SUBMITTAL: (For Transfer Submittals describe person currently undertaking response actions, not transferee)

Name of Organization: Ravtheon Company

Name of Contact: Ronald C. Slager, Jr. Title: Restoration Project Manager

Street: 1001 Boston Post Road

City/Town: Marlborough State: MA ZIP Code: 01752-0000

Telephone: 508-490-1770 Ext.: \_\_\_\_\_ FAX: (optional) \_\_\_\_\_

K. RELATIONSHIP TO DISPOSAL SITE OF PERSON MAKING SUBMITTAL: (check one)

☒ RP or PRP Specify: ☐ Owner ☐ Operator ☐ Generator ☐ Transporter Other RP or PRP: Past Operator

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

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

☐ Any Other Person Making Submittal Specify Relationship: \_\_\_\_\_

L. CERTIFICATION OF PERSON MAKING SUBMITTAL:

I, Ronald C. Slager, Jr., 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.

By: [Signature] Title: Restoration Project Manager  
(signature)

For: Ravtheon Company Date: 5/24/00  
(print name of person or entity recorded in Section J)

Enter address of the person providing certification(s), including Ability and Willingness Certification where applicable, if different from address recorded in Section J:

Street: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Ext.: \_\_\_\_\_ FAX: (optional) \_\_\_\_\_

**YOU MUST 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, AND YOU MAY INCUR ADDITIONAL COMPLIANCE FEES.**

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Waste Site CleanupNUMERICAL RANKING SYSTEM SCORESHEET  
(310 CMR 40.1511)

| CLASSIFICATION SUBMITTAL |                                     | DISPOSAL SITE SCORE |     |     |     |    |       |
|--------------------------|-------------------------------------|---------------------|-----|-----|-----|----|-------|
| Initial Submittal        | Re-Classification                   | II                  | III | IV  | V   | VI | TOTAL |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 325                 | 152 | 120 | 135 | —  | 732   |

|                                   |   |   |   |    |
|-----------------------------------|---|---|---|----|
| Disposal Site Tier Classification | I |   |   | II |
| Permit Category (Tier I Only)     | A | B | C |    |

\*\*\*\*\*  
DISPOSAL SITE INFORMATION

|                                |                                      |                 |            |
|--------------------------------|--------------------------------------|-----------------|------------|
| DEP Release Tracking Number(s) | 3-19482, 3-14042<br>3-13302, 3-13475 | UTM Coordinates | N: 4692800 |
| DEP Disposal Site Number(s)    |                                      |                 | E: 0304800 |

|                       |                          |            |  |
|-----------------------|--------------------------|------------|--|
| Disposal Site Name    | Former Raytheon Facility |            |  |
| Disposal Site Address | 430 Boston Post Road     |            |  |
|                       | City: Wayland, MA        | Zip: 01778 |  |

|  |  |                                |
|--|--|--------------------------------|
| the Disposal Site classified Tier I because it is located within the boundaries of a Zone II or Interim Wellhead Protection Area and groundwater concentrations equal or exceed RCGW-1 at the time of Tier Classification pursuant to 310 CMR 40.0520(2)(a)1.? | Yes<br><input checked="" type="checkbox"/> | No<br><input type="checkbox"/> |
| the Disposal Site classified Tier I because an Imminent Hazard is present at the time of Tier Classification pursuant to 310 CMR 40.0520(2)(a)2.?  | Yes<br><input checked="" type="checkbox"/> | No<br><input type="checkbox"/> |

I, the undersigned, do hereby certify under the pains and penalties of perjury that I have personally completed this Numerical Ranking System Scoresheet, and have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, and in my professional opinion and judgment that: (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief, this Scoresheet was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and that the information provided is true and correct, and is not false, misleading, or materially incomplete.

|                                      |                         |                  |
|--------------------------------------|-------------------------|------------------|
| Disposal Site Professional Signature | 2196                    | Date             |
| John Drobinski                       | LSP Registration Number | 617-267-8377     |
| Name (Printed)                       | ERM                     | Telephone Number |
|                                      | Company Name            |                  |

I, the undersigned, do hereby certify that I am a Responsible Party, Potentially Responsible Party, or Other Person who will provide certification in accordance with 310 CMR 40.0009.

40.1511 (Continued)

## II. EXPOSURE PATHWAYS

II.

## EXPOSURE PATHWAYS

Score according to 40.1512 - Exposure Pathway Designation Criteria

| MEDIA                                | DESIGNATION            |                           |                            |                                      |
|--------------------------------------|------------------------|---------------------------|----------------------------|--------------------------------------|
|                                      | NONE or NOT APPLICABLE | EVIDENCE OF CONTAMINATION | POTENTIAL EXPOSURE PATHWAY | LIKELY OR CONFIRMED EXPOSURE PATHWAY |
| A. SOIL (Includes Sediment)          | 0                      | 15                        | 100                        | 150                                  |
| B. GROUNDWATER                       | 0                      | 20                        | 100                        | 150                                  |
| C. SURFACE WATER (Includes Wetlands) | 0                      | 20                        | 100                        | 150                                  |
| D. AIR                               | 0                      | 15                        | 100                        | 200                                  |

Note: Score only the highest value for each media, i.e., score None or Not Applicable or Evidence of Contamination or Potential Exposure Pathway or Likely or Confirmed Exposure Pathway.

(A - D)

Summary Rationale for Section II A - D Values and Phase I Report References

See attached

E.

## OHM SOURCES

Number of OHM Sources

See attached

1

2

≥ 3

0

25

50

## SECTION II SCORE (A. + B. + C. + D. + E.)

|    |     |     |    |    |                   |
|----|-----|-----|----|----|-------------------|
| A. | B.  | C.  | D. | E. | TOTAL: (15 - 700) |
| 00 | 100 | 100 | 0  | 25 | 245               |

Check here if Section VI has been used to amend the score for this Section of the NRS.



## ***ATTACHMENT***

### ***II. EXPOSURE PATHWAYS***

#### ***II. A Soil***

OHM has been identified at concentrations greater than or equal to six inches from accessible soil surface and the area is not used for active recreation (Phase I, pg. 43).

#### ***II. B Groundwater***

The site is located within a Zone II Well Head Protection Area and OHM has been identified in groundwater at concentrations greater than or equal to those listed in 310 CMR 40.0976 (Phase I, pg. 43).

#### ***II. C Surface Water***

OHM likely attributable to the disposal site has been identified in concentrations greater than or equal to Ambient Water Quality Standards.

#### ***II. D Air***

OHM likely attributable to the disposal site has not been identified in air and is not likely to be identified in air.

#### ***II. E Number of OHM Sources***

Two sources/releases at the site:

- a) Outfall pipe at wetlands
- b) Release from solvent manhole.

Note: In the previous Tier IB Classification, WAY-02 was identified as the source of groundwater contamination, which has since been remediated. In subsequent investigations, the source of groundwater contamination has been identified as a release from a solvent manhole.



40.1511 (Continued)

## III. DISPOSAL SITE CHARACTERISTICS

III.A.

## OHM TOXICITY SCORE

Highest OHM Toxicity Score  
From Table III.A. or Worksheet III.A.1. on Following Pages.

OHM Scored: Arsenic, PCBs, and Lead

Toxicity Score (1 - 80)

Concentration and Media: 160,000 ppb: 540,000 ppb: 2,300,000 ppb  
in sediment

60

III.B.

## MULTIPLE OHMs

More Than One OHM With an OHM Toxicity Score of  $\geq 30$ 

No

Yes

0

30

III.C.

## OHM MOBILITY and PERSISTENCE

Score according to 40.1514 - OHM Mobility and Persistence

OHM Scored:

GIS, 1,2 DCE (in groundwater.)

Score (0 - 50)

50

III.D.

## DISPOSAL SITE HYDROGEOLOGY

Score according to 40.1515 - Soil Permeability

| DEPTH TO GROUNDWATER<br>(in feet) | SOIL PERMEABILITY |           |      |
|-----------------------------------|-------------------|-----------|------|
|                                   | Low               | Medium    | High |
| > 25                              | 2                 | 4         | 8    |
| 10.1 - 25                         | 4                 | 8         | 12   |
| 5.1 - 10                          | 8                 | <u>12</u> | 16   |
| 0 - 5                             | 12                | 16        | 20   |

## SECTION III SCORE (A + B + C + D)

| A.        | B.        | C.        | D.        | TOTAL: (3 - 180) |
|-----------|-----------|-----------|-----------|------------------|
| <u>60</u> | <u>30</u> | <u>50</u> | <u>12</u> | <u>152</u>       |

Check here if Section VI has been used to amend the score for this Section of the NRS.



310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

40.1511: continued

| Table IIIA. OHM TOXICITY SCORE |   |           |               |                  |                               |                      |                  |
|--------------------------------|---|-----------|---------------|------------------|-------------------------------|----------------------|------------------|
| OHM                            | CONCENTRATION (soil/sediment: $\mu\text{g/g}$ ; surface/groundwater $\mu\text{g/l}$ ) |           |               |                  |                               |                      |                  |
|                                | $\leq 99$   | 100 - 999 | 1,000 - 9,999 | 10,000 - 100,000 | $> 100,000$<br>NAPL $< 0.5''$ | NAPL<br>0.5'' - 12'' | NAPL<br>$> 12''$ |
| Aliphatics C5-C8               | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| C9-C12                         | 1   | 10        | 20            | 30               | 40                            | 50                   | 60               |
| C9-C18                         | 1   | 10        | 20            | 30               | 40                            | 50                   | 60               |
| C19-C36                        | 1   | 10        | 20            | 30               | 40                            | 50                   | 60               |
| Arsenic                        | 20  | 30        | 40            | 50               | 60                            |                      |                  |
| Aromatics C9-C10               | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| C11-C22                        | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| Benzene                        | 15  | 25        | 35            | 45               | 55                            | 65                   | 75               |
| Bis(2-ethylhexyl)phthalate     | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| Cadmium                        | 20  | 30        | 40            | 50               | 60                            |                      |                  |
| Carbon Tetrachloride           | 20  | 30        | 40            | 50               | 60                            | 70                   | 80               |
| Chlorobenzene                  | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| Chromium III                   | 1   | 10        | 20            | 30               | 40                            |                      |                  |
| Chromium VI                    | 10  | 20        | 30            | 40               | 50                            |                      |                  |
| Coal Tar                       | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| Cyanide                        | 5   | 15        | 25            | 35               | 45                            |                      |                  |
| 1,1 Dichloroethane             | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| 1,2 Dichloroethane             | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| Ethylbenzene                   | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| Ethylene Dibromide             | 20  | 30        | 40            | 50               | 60                            | 70                   | 80               |
| #2 Fuel Oil (virgin product)   | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| Gasoline (virgin product)      | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| Lead                           | 20  | 30        | 40            | 50               | 60                            |                      |                  |
| Mercury                        | 20  | 30        | 40            | 50               | 60                            | 70                   | 80               |
| Methylene Chloride             | 10  | 20        | 30            | 40               | 50                            | 60                   | 70               |
| Methyl Ethyl Ketone            | 1   | 10        | 20            | 30               | 40                            | 50                   | 60               |
| Methyl Tert Butyl Ether        | 5   | 15        | 25            | 35               | 45                            | 55                   | 65               |
| Nickel                         | 5   | 15        | 25            | 35               | 45                            |                      |                  |

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

40.1511: continued

| Table III.A. - continued |   |           |               |                  |                          |                    |               |
|--------------------------|---|-----------|---------------|------------------|--------------------------|--------------------|---------------|
| OHM TOXICITY SCORE       |   |           |               |                  |                          |                    |               |
| OHM                      | CONCENTRATION (soil/sediment: $\mu\text{g/g}$ ; surface/groundwater $\mu\text{g/l}$ ) |           |               |                  |                          |                    |               |
|                          | $\leq 99$   | 100 - 999 | 1,000 - 9,999 | 10,000 - 100,000 | > 100,000<br>NAPL < 0.5" | NAPL<br>0.5" - 12" | NAPL<br>> 12" |
| Phenol                   | 1   | 10        | 20            | 30               | 40                       | 50                 | 60            |
| PAHs                     | 10  | 20        | 30            | 40               | 50                       | 60                 | 70            |
| PCBs                     | 20  | 30        | 40            | 50               | 60                       | 70                 | 80            |
| Tetrachloroethylene      | 10  | 20        | 30            | 40               | 50                       | 60                 | 70            |
| Toluene                  | 1   | 10        | 20            | 30               | 40                       | 50                 | 60            |
| 1,1,1 Trichloroethane    | 5   | 15        | 25            | 35               | 45                       | 55                 | 65            |
| Trichloroethylene        | 15  | 25        | 35            | 45               | 55                       | 65                 | 75            |
| Vinyl Chloride           | 15  | 25        | 35            | 45               | 55                       | 65                 | 75            |
| Xylenes                  | 1   | 10        | 20            | 30               | 40                       | 50                 | 60            |
| Zinc                     | 1   | 10        | 20            | 30               | 40                       |                    |               |

*Use Worksheet III.A.1. to determine the OHM Toxicity Score for OHM not listed in Table III.A.  
See 40.1513 for Human Health-Based Toxicity Values for each OHM.*

| Worksheet III.A.1                       |  | OEHM TOXICITY SCORE |               |                  |                          |                    |               |  |
|---|--|---------------------|---------------|------------------|--------------------------|--------------------|---------------|--|
| HUMAN<br>HEALTH-BASED<br>TOXICITY VALUE | CONCENTRATION  |                     |               |                  |                          |                    |               |  |
|   | Use µg/g for Soil and µg/l for Surface Water and Groundwater |                     |               |                  |                          |                    |               |  |
|   | ≤ 99   | 100 - 999           | 1,000 - 9,999 | 10,000 - 100,000 | > 100,000<br>NAPL < 0.5" | NAPL<br>0.5" - 12" | NAPL<br>> 12" |  |
| < 5                                     | 1  | 10                  | 20            | 30               | 40                       | 50                 | 60            |  |
| 5 - 19                                  | 5  | 15                  | 25            | 35               | 45                       | 55                 | 65            |  |
| 20 - 29                                 | 10   | 20                  | 30            | 40               | 50                       | 60                 | 70            |  |
| 30 - 39                                 | 15   | 25                  | 35            | 45               | 55                       | 65                 | 75            |  |
| 40 - 50                                 | 20   | 30                  | 40            | 50               | 60                       | 70                 | 80            |  |

[illegible]

**Table 1**  
**Summary of OHM Toxicity Scores**

| OHM                    | Human Health-Based Toxicity Value | Concentration (Soil-ug/g) | Concentration (Water-ug/l) | OHM Toxicity Score |
|------------------------|-----------------------------------|---------------------------|----------------------------|--------------------|
| C5-C8 Aliphatics       | 8                                 | 29,700                    | NA                         | 35                 |
| C9-C12 Aliphatics      | 4                                 | 75,800                    | NA                         | 30                 |
| C9-C10 Aromatics       | 18                                | 5,390                     | NA                         | 25                 |
| Xylenes                | 4                                 | 2,624                     | NA                         | 20                 |
| C9-C18 Aliphatics      | 4                                 | 6,080,000                 | NA                         | 40                 |
| C19-C36 Aliphatics     | 4                                 | 19,400,000                | NA                         | 40                 |
| C11-C22 Aromatics      | 18                                | 10,600,000                | NA                         | 45                 |
| PAHs, Total            | 25                                | 1,109,200                 | NA                         | 50                 |
| PCBs, Total            | 50                                | 540,000                   | NA                         | 60                 |
| Aluminum               | 4                                 | 26,000,000                | NA                         | 40                 |
| Antimony               | 40                                | 100,000                   | NA                         | 50                 |
| Arsenic                | 46                                | 160,000                   | NA                         | 60                 |
| Barium                 | 8                                 | 490,000                   | NA                         | 45                 |
| Beryllium              | 38                                | 1,800                     | NA                         | 35                 |
| Cadmium                | 50                                | 44,000                    | NA                         | 50                 |
| Chromium, Total        | 4                                 | 37,000,000                | 10                         | 40                 |
| Chromium, Hex          | 25                                | 1,600,000                 | NA                         | 50                 |
| Cobalt                 | 18                                | 14,000                    | NA                         | 35                 |
| Copper                 | 25                                | 22,000,000                | NA                         | 50                 |
| Iron                   | 8                                 | 73,000,000                | NA                         | 45                 |
| Lead                   | 45                                | 2,300,000                 | NA                         | 60                 |
| Manganese              | 8                                 | 1,000,000                 | NA                         | 45                 |
| Mercury                | 40                                | 18,000                    | NA                         | 50                 |
| Nickel                 | 18                                | 96,000                    | NA                         | 35                 |
| Selenium               | 25                                | 3,000                     | NA                         | 40                 |
| Silver                 | 25                                | 560,000                   | NA                         | 50                 |
| Thallium               | 40                                | 11,000                    | NA                         | 50                 |
| Tin                    | 4                                 | 660,000                   | NA                         | 40                 |
| Vanadium               | 25                                | 330,000                   | NA                         | 50                 |
| Zinc                   | 4                                 | 1,700,000                 | NA                         | 40                 |
| Benzene                | 30                                | ND                        | 25                         | 15                 |
| Toluene                | 4                                 | ND                        | 4.1                        | 1                  |
| Ethylbenzene           | 8                                 | ND                        | 31                         | 5                  |
| n-Butylbenzene         | 18                                | 0.07                      | ND                         | 10                 |
| sec-Butylbenzene       | 18                                | 6.7                       | 2.3                        | 10                 |
| Isopropylbenzene       | 25*                               | 7.6                       | 8.6                        | 10                 |
| p-Isopropylbenzene     | 25*                               | 8.7                       | ND                         | 10                 |
| Naphthalene            | 25                                | 70                        | 30                         | 10                 |
| 1,3,5-Trimethylbenzene | 8                                 | 44                        | 31                         | 5                  |
| 1,2,4-Trimethylbenzene | 8                                 | 160                       | 120                        | 15                 |

**Table 1**  
**Summary of OHM Toxicity Scores**

| OHM                    | Human Health-Based Toxicity Value | Concentration (Soil-ug/g) | Concentration (Water-ug/l) | OHM Toxicity Score |
|------------------------|-----------------------------------|---------------------------|----------------------------|--------------------|
| Trichlorofluoromethane | 4                                 | ND                        | 5.8                        | 1                  |
| Tetrachloroethene      | 25                                | NA                        | 39                         | 10                 |
| Trichloroethene        | 30                                | NA                        | 560                        | 25                 |
| 1,1,1 Trichloroethane  | 8                                 | NA                        | 160                        | 15                 |
| 1,1 Dichloroethane     | 22                                | NA                        | 1.2                        | 10                 |
| 1,1 Dichloroethene     | 28                                | NA                        | 8.6                        | 5                  |
| cis-1,2 Dichloroethene | 18                                | NA                        | 35                         | 5                  |
| 1,2,3 Trichlorobenzene | 25*                               | NA                        | 130                        | 20                 |
| Chlorobenzene          | 18                                | NA                        | 2.1                        | 5                  |
| 1,2 Dichlorobenzene    | 8                                 | NA                        | 14                         | 5                  |
| 1,3 Dichlorobenzene    | 25                                | NA                        | 3.4                        | 10                 |
| 1,4 Dichlorobenzene    | 22                                | NA                        | 4                          | 10                 |

NOTE:

NA = Not Analyzed

ND = Not Detected

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

40.1511 (Continued)

IV. HUMAN POPULATION AND LAND USES

| IV.A. HUMAN POPULATION                  |             |             |                   |               |
|---|-------------|-------------|-------------------|---------------|
| Residential Population<br>Within ½ Mile | None<br>(0) | 1 - 99<br>5 | 100 - 999<br>(10) | ≥ 1,000<br>15 |
| Institutions<br>Within 500 feet         | None<br>0   |             | One or More<br>10 |               |
| On-Site Workers                         | None<br>0   | 1 - 99<br>5 | 100 - 999<br>(10) | ≥ 1,000<br>15 |

| IV.B. AQUIFERS                 |           |                        |
|--------------------------------|-----------|------------------------|
| Sole Source Aquifer            | No<br>(0) | Yes<br>25              |
| Potentially Productive Aquifer | No<br>0   | Medium or High<br>(15) |

| IV.C. WATER USE  |                          |               |                                |  |   |
|--|--------------------------|---------------|--------------------------------|--|---|
| Proximity of Disposal Site to<br>Public Drinking Water Supply Source   | Not Applicable (NA)<br>0 |               |                                | Zone A<br>20   | Zone II, IWPA, or<br>SW Intake ≤ 400'<br>(50) |
| Persons Served by Public Drinking Water Supply   | NA<br>0                  | 25 - 999<br>5 | 1,000 - 4,999<br>10            | 5,000 - 49,999<br>(20)                               | ≥ 50,000<br>25                                |
| Private Water Supplies Within 500 Feet   | None<br>0                |               | Commercial<br>Industrial<br>10 | Agriculture<br>Residential<br>(Not Ingested)<br>(15) | Drinking<br>Food Processing<br>25             |
| Alternative Public Water Supply Available<br>(Viable Public Water Supply in Disposal Site Community<br>and Public Water Connection ≤ 500 Feet from Site) | Yes<br>(0)               |               |                                | No<br>25   |   |

| SECTION IV SCORE (A + B + C) |          |          |                         |
|------------------------------|----------|----------|-------------------------|
| A.<br>20                     | B.<br>15 | C.<br>85 | TOTAL: (0 - 205)<br>120 |

Check here if Section VI has been used to amend the score for this Section of the NRS.



40.1511 (Continued)

## V. ECOLOGICAL POPULATION

| V.A. ENVIRONMENTAL RESOURCE AREAS                                       |                         |  |                 |
|---|-------------------------|--|-----------------|
| RESOURCE  | LOCATION                |  |                 |
| Area of Critical Environmental Concern                                  | > 500' from Site<br>(0) | ≤ 500' from Site<br>20                 | On-Site<br>30   |
| Species of Special Concern,<br>Threatened or Endangered Species Habitat | > 500' from Site<br>0   | On-Site or ≤ 500' from Habitat<br>(30) |                 |
| Wetlands, Certified Vernal Pool, or<br>Outstanding Resource Water       | > 100' from Site<br>0   | ≤ 100' from Site<br>20                 | On-Site<br>(30) |
| Fish Habitat  | > 500' from Site<br>0   | ≤ 500' from Site<br>(20)               | On-Site<br>30   |
| Protected Open Space<br>(Local/State/Federal/Trustee)                   | > 500' from Site<br>0   | ≤ 500' from Site<br>(20)               | On-Site<br>30   |

SCORE SECTION V.B. ONLY IF SECTION V.A. SCORE IS ≥ 30.

V.B.

## ENVIRONMENTAL TOXICITY SCORE

Highest Environmental Toxicity Score  
From Table V.B. or Worksheet V.B.1. on Following Pages.

OHM Scored: Mercury: PCBsConcentration and Media: 18,000ppb: 540,000 ppb in sediment

Toxicity Score (1 - 35)

35

## SECTION V. SCORE (A. + B.)

A.

100

B.

35

TOTAL: (0 - 185)

135

Check here if Section VI has been used to amend the score for this Section of the NRS.





40.1511 (Continued)

| OHM                            | CONCENTRATION (soil/sediment: µg/g; surface/groundwater µg/l) |        |           |               |          |
|--------------------------------|---|--------|-----------|---------------|----------|
|                                | < 1   | 1 - 99 | 100 - 999 | 1,000 - 9,999 | ≥ 10,000 |
| Arsenic                        | 5   | 10     | 15        | 20            | 25       |
| Benzene                        | 0   | 1      | 5         | 10            | 15       |
| Bis(2-ethylhexyl)phthalate *   | 5   | 10     | 15        | 20            | 25       |
| Cadmium                        | 10  | 15     | 20        | 25            | 30       |
| Carbon Tetrachloride           | 0   | 1      | 5         | 10            | 15       |
| Chlorobenzene *                | 5   | 10     | 15        | 20            | 25       |
| Chromium III                   | 1   | 5      | 10        | 15            | 20       |
| Chromium VI                    | 5   | 10     | 15        | 20            | 25       |
| Coal Tar *                     | 5   | 10     | 15        | 20            | 25       |
| Cyanide                        | 5   | 10     | 15        | 20            | 25       |
| 1,1 Dichloroethane *           | 5   | 10     | 15        | 20            | 25       |
| 1,2 Dichloroethane             | 0   | 1      | 5         | 10            | 15       |
| Ethylbenzene                   | 0   | 1      | 5         | 10            | 15       |
| Ethylene Dibromide *           | 5   | 10     | 15        | 20            | 25       |
| #2 Fuel Oil (virgin product) * | 1   | 5      | 10        | 15            | 20       |
| Gasoline (virgin product) *    | 5   | 10     | 15        | 20            | 25       |
| Lead                           | 5   | 10     | 15        | 20            | 25       |
| Mercury                        | 15  | 20     | 25        | 30            | 35       |
| Methylene Chloride *           | 5   | 10     | 15        | 20            | 25       |
| Methyl Ethyl Ketone *          | 5   | 10     | 15        | 20            | 25       |
| Methyl Tert Butyl Ether *      | 1   | 5      | 10        | 15            | 20       |
| Nickel                         | 1   | 5      | 10        | 15            | 20       |
| Phenol                         | 0   | 1      | 5         | 10            | 15       |
| PAHs *                         | 5   | 10     | 15        | 20            | 25       |
| PCBs                           | 15  | 20     | 25        | 30            | 35       |
| Tetrachloroethylene            | 0   | 1      | 5         | 10            | 15       |
| Toluene                        | 0   | 1      | 5         | 10            | 15       |
| 1,1,1 Trichloroethane          | 0   | 1      | 5         | 10            | 15       |
| Trichloroethylene              | 0   | 1      | 5         | 10            | 15       |

| Table V.B. ENVIRONMENTAL TOXICITY SCORE |   |        |           |               |          |
|---|---|--------|-----------|---------------|----------|
| OHM                                     | CONCENTRATION (soil/sediment: µg/g; surface/groundwater µg/l) |        |           |               |          |
|   | < 1   | 1 - 99 | 100 - 999 | 1,000 - 9,999 | ≥ 10,000 |
| Vinyl Chloride *                        | 5   | 10     | 15        | 20            | 25       |
| Xylenes *                               | 5   | 10     | 15        | 20            | 25       |
| Zinc                                    | 1   | 5      | 10        | 15            | 20       |

\* Scores derived by default methods 40.1516(2).

## 0.1511 (Continued)

Use Worksheet V.B.1. to determine Environmental Toxicity Scores for OHM not listed in Table V.B.  
See 40.1516 for Environmental Toxicity Values for each OHM.

[illegible]

**Table 2**  
**Summary of Environmental Toxicity Scores**

| OHM                    | Environmental<br>Toxicity Value | Concentration<br>(Soil-ug/g) | Concentration<br>(Water-ug/l) | Environmental<br>Toxicity<br>Score |
|------------------------|---------------------------------|------------------------------|-------------------------------|------------------------------------|
| C5-C8 Aliphatics       | 30                              | 29,700                       | NA                            | 25                                 |
| C9-C12 Aliphatics      | 30                              | 75,800                       | NA                            | 25                                 |
| C9-C10 Aromatics       | 30                              | 5,390                        | NA                            | 25                                 |
| Xylenes                |                                 | 2,624                        | NA                            | 20                                 |
| C9-C18 Aliphatics      | 30                              | 6,080,000                    | NA                            | 25                                 |
| C19-C36 Aliphatics     | 30                              | 19,400,000                   | NA                            | 25                                 |
| C11-C22 Aromatics      | 30                              | 10,600,000                   | NA                            | 25                                 |
| PAHs, Total            |                                 | 1,109,200                    | NA                            | 25                                 |
| PCBs, Total            | 50                              | 540,000                      | NA                            | 35                                 |
| Aluminum               | 20                              | 26,000,000                   | NA                            | 20                                 |
| Antimony               | 30                              | 100,000                      | NA                            | 25                                 |
| Arsenic                | 30                              | 160,000                      | NA                            | 25                                 |
| Barium                 | 20                              | 490,000                      | NA                            | 20                                 |
| Beryllium              | 30                              | 1,800                        | NA                            | 20                                 |
| Cadmium                | 40                              | 44,000                       | NA                            | 30                                 |
| Chromium, Total        | 20                              | 37,000,000                   | 10                            | 20                                 |
| Chromium, Hex          | 30                              | 1,600,000                    | NA                            | 25                                 |
| Cobalt                 | 20                              | 14,000                       | NA                            | 20                                 |
| Copper                 | 30                              | 22,000,000                   | NA                            | 25                                 |
| Iron                   | 20                              | 73,000,000                   | NA                            | 20                                 |
| Lead                   | 30                              | 2,300,000                    | NA                            | 25                                 |
| Manganese              | 20                              | 1,000,000                    | NA                            | 20                                 |
| Mercury                | 50                              | 18,000                       | NA                            | 35                                 |
| Nickel                 | 20                              | 96,000                       | NA                            | 20                                 |
| Selenium               | 30                              | 3,000                        | NA                            | 20                                 |
| Silver                 | 40                              | 560,000                      | NA                            | 30                                 |
| Thallium               | 30                              | 11,000                       | NA                            | 25                                 |
| Tin                    | 20                              | 660,000                      | NA                            | 20                                 |
| Vanadium               | 20                              | 330,000                      | NA                            | 20                                 |
| Zinc                   | 20                              | 1,700,000                    | NA                            | 20                                 |
| Benzene                | 10                              | ND                           | 25                            | 1                                  |
| Toluene                | 10                              | ND                           | 4.1                           | 1                                  |
| Ethylbenzene           | 10                              | ND                           | 31                            | 1                                  |
| n-Butylbenzene         | 30                              | 0.07                         | ND                            | 5                                  |
| sec-Butylbenzene       | 30                              | 6.7                          | 2.3                           | 5                                  |
| Isopropylbenzene       | 30                              | 7.6                          | 8.6                           | 5                                  |
| p-Isopropylbenzene     | 30                              | 8.7                          | ND                            | 5                                  |
| Naphthalene            | 20                              | 70                           | 30                            | 5                                  |
| 1,3,5-Trimethylbenzene | 30                              | 44                           | 31                            | 5                                  |
| 1,2,4-Trimethylbenzene | 30                              | 160                          | 120                           | 5                                  |

**Table 2**  
**Summary of Environmental Toxicity Scores**

| OHM                    | Environmental<br>Toxicity Value | Concentration<br>(Soil-ug/g) | Concentration<br>(Water-ug/l) | Environmental<br>Toxicity<br>Score |
|------------------------|---------------------------------|------------------------------|-------------------------------|------------------------------------|
| Trichlorofluoromethane | 30                              | ND                           | 5.8                           | 5                                  |
| Tetrachloroethene      | 10                              | NA                           | 39                            | 1                                  |
| Trichloroethene        | 10                              | NA                           | 560                           | 5                                  |
| 1,1,1 Trichloroethane  | 10                              | NA                           | 160                           | 5                                  |
| 1,1 Dichloroethane     | 30                              | NA                           | 1.2                           | 5                                  |
| 1,1 Dichloroethene     | 10                              | NA                           | 8.6                           | 1                                  |
| cis-1,2 Dichloroethene | 10                              | NA                           | 35                            | 1                                  |
| 1,2,3 Trichlorobenzene | 30                              | NA                           | 130                           | 15                                 |
| Chlorobenzene          | 30                              | NA                           | 2.1                           | 5                                  |
| 1,2 Dichlorobenzene    | 10                              | NA                           | 14                            | 1                                  |
| 1,3 Dichlorobenzene    | 10                              | NA                           | 3.4                           | 1                                  |
| 1,4 Dichlorobenzene    | 10                              | NA                           | 4                             | 1                                  |

NOTE:

NA = Not Analyzed

ND = Not Detected

40.1511 (Continued)

VI. MITIGATING DISPOSAL SITE-SPECIFIC CONDITIONS

VI. MITIGATING DISPOSAL SITE-SPECIFIC CONDITIONS

Disposal site-specific conditions that warrant amending the site score. Changes directly related to NRS Sections or Subsection scores may not reduce the score more than the relevant subsection value assigned for the disposal site in that subsection. Section VI must reference specific pages of the Phase I. Section VI may not exceed  $\pm 50$  Points and may be scored only in 5-point increments. Attach additional pages as necessary.

Disposal Site Score Amendment (Not to Exceed  $\pm 50$  Points)

Score



Enter Your Transmittal Number →

W012110

Your unique Transmittal Number can be accessed through DEP's web site or by calling the DEP InfoLine as listed on the last page of this document

## Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

### Instructions

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Your check should be made payable to the Commonwealth of Massachusetts. Please mail your check along with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three (3) copies of this form will be needed.

Copy 1 (the original) must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records.

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to DEP, P.O. Box 4062, Boston, MA 02211

### For DEP Use Only

Permit No. \_\_\_\_\_  
Rec'd Date \_\_\_\_\_  
Reviewer \_\_\_\_\_

### A. Application Information

DEP Permit Code (the 7 or 8 character code from first page of permit application instructions):  
BSWC01

Name of Permit Category:  
Permit For Response Action Tier IA

Type of Project or Activity:  
Major Permit Modification and Site Reclassification

### B. Applicant Information (Firm or Individual)

Name of Firm:  
Raytheon Company

Or, if party needing this approval is clearly an individual:

Individual's Last Name: \_\_\_\_\_ First Name \_\_\_\_\_ MI \_\_\_\_\_

Street Address  
1001 Boston Post Road

City/Town: Marlborough State: MA Zip Code: 01752 Telephone Number: (508) 490-1770 ext. \_\_\_\_\_

Contact: Ronald C. Slager e-mail address (optional) \_\_\_\_\_

### C. Facility, Site or Individual Requiring Approval

Name of Facility, Site or Individual: Raytheon Company DEP Facility Number (if Known) \_\_\_\_\_

Street Address: 430 Boston Post Road e-mail address (optional) \_\_\_\_\_

City/Town: Wayland State: MA Zip Code: 01778 Telephone Number: (508) 490-1707 ext. \_\_\_\_\_

### D. Application Prepared By (if different from Section B)

Name of Individual or Firm:  
Environmental Resources Management

Address:  
399 Boylston Street, 6th Floor

City/Town: Boston State: MA Zip Code: 02116 Telephone Number: (617) 267-8377 ext. \_\_\_\_\_

Contact: John C. Drobinski, P.G. LSP Number (21E only) 2196

### E. Permit - Project Coordination

Is this project subject to MEPA review? ☐ yes ☐ no  
If yes, indicate the project's EOE file number (assigned when an Environmental Notification Form is submitted to the MEPA unit)  
EOEA # \_\_\_\_\_ Is an Environmental Impact Report Required? ☐ yes ☐ no  
Is this application part of a larger project for which two or more DEP permits are being or will be sought? ☐ yes ☐ no  
Are there any other DEP permits that apply to this project? ☐ yes ☐ no

| Permit Category           | Date of Submission (tentative or actual) | Transmittal Number (if application already submitted) |
|---------------------------|--|---|
| Tier 1B Permit No. 133939 | January 1997                             |   |
|                           |  |   |
|                           |  |   |

### F. Amount Due

#### Special Provisions:

- ☐ Fee Exempt\* (city, town or municipal housing authority) (state agency if fee is \$100 or less)  
☐ Hardship Request [payment extensions according to 310 CMR 4.04(3)(c)]  
☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10)

\*There are no fee exemptions for 21E, regardless of applicant status

ERM00111

Check #: \_\_\_\_\_ Dollar Amount: \$1,200 Date: \_\_\_\_\_

Please make check payable to the Commonwealth of Massachusetts and mail check and one copy of this form to DEP, P.O. Box 4062, Boston, MA 02211



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## A Disposal Site Information

☐ Check here if there is more than one applicant.

1. Current permit category:

- ☐ Initial Tier IA (Permit Category BWSC 01)
- ☒ Initial Tier IB (Permit Category BWSC 02)
- ☐ Initial Tier IC (Permit Category BWSC 03)
- ☐ Transition Tier IA (Permit Category BWSC 04)
- ☐ Transition Tier IB (Permit Category BWSC 05)

Permit number: 133939

2. Former Raytheon Facility

Disposal Site Name

430 Boston Post Road

Street

Wayland

City/Town

01778

Zip code

3. Description of Major Permit Modification being sought (check appropriate boxes):

☒ Request for change in permit category:

Attach a completed, revised NRS Form and an LSP Tier Classification Opinion prepared in accordance with 310 CMR 40.0510(3).

Revised Numerical Ranking Score: \_\_\_\_\_

- ☐ upgrade Tier IC to Tier IA
- ☐ upgrade Tier IC to Tier IB
- ☒ upgrade Tier IB to Tier IA
- ☐ downgrade Tier IA to Tier IB
- ☐ downgrade Tier IA to Tier IC
- ☐ downgrade Tier IB to Tier IC
- ☐ reclassify as Tier II

☐ Request modification to terms or conditions of permit:

Attach an LSP Opinion as to why specific permit terms or conditions are no longer necessary or appropriate. Include reports, as appropriate, detailing any new or additional information to justify the modification(s) to the permit terms or conditions being sought.

☐ Conduct Response Actions at a Tier I site with an RAO:

- ☐ Implement a Permanent Solution at disposal site for which an RAO has been filed
- ☐ Maintain a Temporary Solution at disposal site for which an RAO has been filed

Attach a description of those response actions which will be conducted in accordance with the Phase III and Phase IV reports and Completion Statements which are the basis for the existing RAO, as well as all response actions that are significantly different from those that are the basis for the RAO.

ERM00113





# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## A Disposal Site Information (cont.)

4. List each release tracking number and date of release notification for each release or threat of release that is the subject of this major permit modification application. For those sites identified on the 1993 Transition List of Disposal Sites and Locations To Be Investigated (the 1993 Transition List) and any addendum thereto (pursuant to 310 CMR 40.0600) provide the Disposal Site Number in place of the Release Tracking Number (attach additional pages if needed):

Release Tracking Number

Date of Notification

See Attachment A

5. If the applicant is adding new parcels to the permit, list the map(s) and parcel number(s) of each new lot that you are seeking to add to this permit. Attach a copy of each tax assessor's map(s) showing these parcels. For those applicants seeking to modify their transition permit category (issued by the Department as permit category BWSC 04 or BWSC 05), provide all of the information shown below:

Municipal Tax Assessor's Map(s)

Parcel Number(s)

## B Primary Representative Information

### Note:

Complete this section only if there is a change in the Primary Representative or if you have not previously furnished this information to DEP.

If there is only one applicant, you do not need to complete this section.

If there is more than one applicant, then the Primary Representative should complete this page.

### 1. Primary Representative:

Is the Primary Representative also an applicant?

☒ Yes

☐ No

Raytheon Company

Name of Organization

Ronald C. Slager Jr.

Name

Restoration Project Manager

Title

1001 Boston Post Road

Street

Marlborough

MA

01752

City/Town

State

Zip code

(508) 490-1707

Telephone

Contact Name (if different)

Contact Telephone

ERM00114



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

**Note:**

The Primary Representative for multiple applicants will receive the annual compliance assurance fee statement for the disposal site.

## B Primary Representative Information (cont.)

### 2. Primary Representative Certification

"I certify under the penalties of law that I am fully authorized to act on behalf of all persons submitting this permit application for the following purposes:

- to receive oral and written correspondence from DEP with respect to this application;
- to receive oral and written correspondence from DEP with respect to the performance of response actions upon issuance of a Tier I permit; and
- to receive any statement of fee required by 310 CMR 4.03(3) upon issuance of a Tier I permit."

"I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate or incomplete information."

Ronald C. Slager Jr.

Name (Print)

Restoration Project Manager

Position or title

*Ronald C. Slager Jr.*

Signature

25 May 2000

Date

**Note:**

ALL applicants must complete this section. Where there is more than one APPLICANT, make copies of this page, have each applicant provide this information, and then attach all copies to this application for Major Permit Modification.

## C Applicant Information

### 1. Applicant:

Raytheon Company

Name of Organization

Ronald C. Slager Jr.

Applicant Name

Restoration Project Manager

Title

1001 Boston Post Road

Street

Marlborough

MA

01752

City/Town

State

Zip code

(508) 490-1707

Telephone

Contact Name (if different)

Contact Telephone

### 2. Type of applicant (check one):

- ☐ individual
- ☐ sole proprietorship
- ☐ partnership
- ☒ corporation
- ☐ realty trust
- ☐ state authority
- ☐ municipality
- ☐ state agency
- ☐ federal agency
- ☐ other, please specify:

### 3. Relationship of applicant to disposal site (check all that apply):

- ☐ current owner (as defined in Section 5(a)(1) of M.G.L. c 21E)
- ☐ current operator (as defined in Section 5(a)(1) of M.G.L. c 21E)
- ☐ past owner (as defined in Section 5(a)(2) of M.G.L. c 21E)
- ☒ past operator (as defined in Section 5(a)(2) of M.G.L. c 21E)
- ☐ generator (as defined in Section 5(a)(3) of M.G.L. c 21E)
- ☐ transporter (as defined in Section 5(a)(4) of M.G.L. c 21E)
- ☐ other legally responsible party (as defined in Section 5(a)(5) of M.G.L. c 21E)
- ☐ other person (as defined in 310 CMR 40.0006(10))

ERM00115



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## D Parcel Information

Complete this section only if the current owner(s) or operator(s) information is different from that provided in the initial permit application. For applicants having received either a BWSC 04 or BWSC 05 Transition Permit and Acceptance Statement, you must complete this section if the current owner(s) or operator(s) as defined in Section 5(a)(1) of M.G.L. c. 21E is not an applicant. Provide information about the owner(s) or operator(s) for each parcel(s) that is (are) the subject of this application. Attach additional copies of this page as necessary.

**Parcel:**

Map Number: 23 Parcel Number: 52

Current Owner (if different from the applicant):

Christopher J. Lane

Name

Manager

Position or title

Wayland Business Center LLC, c/o Congress Group Ventures

Company or organization

1 Memorial Drive

Street

Cambridge

MA

02142

City/Town

State

Zip Code

(617) 494-1111

Telephone number

Current Operator (if different from the owner):

Name

Position or title

Company or organization

Street

City/Town

State

Zip Code

Telephone number

ERM00116



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## E Applicant's Compliance History

Each applicant must complete this section. For disposal sites with more than one APPLICANT, make copies of this section, have each applicant complete this information, and then attach all copies to this Permit Application. For applicants having a BWSC 01, BWSC 02 or BWSC 03 Permit, provide only the information which has changed since the effective date of the initial permit. For applicants having received a BWSC 04 or BWSC 05 Transition Permit and Acceptance Statement complete all of the information in this section.

1. List each Tier I permit held by the applicant for other disposal sites:

| <u>Disposal Site Name</u>    | <u>BWSC Permit Number</u> | <u>Release Tracking Number(s) *</u> |
|------------------------------|---------------------------|-------------------------------------|
| Raytheon - Bedford, MA       | 83061                     | 3-0588                              |
| Former Raytheon - Lowell, MA | P23671                    | 3-0035                              |
|                              |                           |                                     |
|                              |                           |                                     |

2. List each Tier II disposal site where the applicant is conducting response actions (Note: Waivered sites are considered categorically to be Tier II Disposal Sites):

| <u>Disposal Site Name</u> | <u>Release Tracking Number(s) *</u> |
|---------------------------|-------------------------------------|
| Raytheon - Waltham, MA    | 3-0449                              |
| Raytheon - Quincy, MA     | 3-0872, 3-19403                     |
|                           |                                     |
|                           |                                     |

\*For those sites identified on the 1993 Transition List of Disposal Sites and Locations to be Investigated (the 1993 Transition List) and any addendum thereto (pursuant to 310 CMR 40.0600) provide the Disposal Site Number in place of the Release Tracking Number.

3. List all other permits or licenses issued by the Department and held by the applicant that are material to this disposal site:

| <u>Program</u>                     | <u>Permit Code</u> | <u>Permit Category</u> | <u>Facility ID</u> |
|------------------------------------|--------------------|------------------------|--------------------|
| • Air Quality                      |                    |                        |                    |
| • Hazardous Waste (M.G.L. c. 21C)  |                    |                        |                    |
| • Solid Waste                      |                    |                        |                    |
| • Industrial Wastewater Management |                    |                        |                    |
| • Water Supply                     |                    |                        |                    |
| • Water Pollution Control:         |                    |                        |                    |
| Surface Water                      |                    |                        |                    |
| Groundwater                        |                    |                        |                    |
| Sewer Connection                   |                    |                        |                    |
| • Wetland & Waterways              |                    |                        |                    |



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## **E** Applicant's Compliance History (cont.)

4. List all other permits, licenses, certifications, registrations, variances, or other approvals issued by other federal, state, or local authorities and held by applicant that are material to this disposal site:

Issuing  
Authority

Identification  
Number

Date  
Issued

5. Attach a statement which details the applicant's history of compliance with the Department's requirements, *since the effective date of the applicant's permit*, including, but not limited to, M.G.L. c. 21E, 310 CMR 40.0000, and other laws for the protection of health, safety, public welfare and the environment administered or enforced by federal, state and local government agencies, that are material to the disposal site. Such statement should identify information such as: action(s) material to the disposal site taken by the Department to enforce its requirements including, but not limited to Notice of Non-compliance (NON), Notice of Intent to Assess Civil Administrative Penalty (PAN), administrative enforcement order, Notice of Responsibility (NOR), Notice of Intent to Take Response Action (NORA); Administrative Consent Order; Judicial Consent Judgment; similar administrative actions taken by other states, federal, or local agencies; and/or civil or criminal actions material to the disposal site brought on behalf of the Department or other federal, state, or local agencies and any additional information relevant to the applicant's history of compliance. For each action identified, give the name of the issuing authority and identification number, if available, and a description of the noncompliance cited, the current status of the matter, and final disposition, if any, using the sample format below.

### Notice of Responsibility

Action

Department of Environmental Protection

9 May 2000

Issuing Authority

Date

RTN 3-19482

ID Number

### Notice of Responsibility issued in response to the reporting and implementation of an Immediate

Description of Non-compliance

Response Action Plan due to a potential imminent hazard condition at the site.

Current Status

Final Disposition

(Make additional copies of this page as needed.)



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## F Applicant Certifications

**Note:**

Each applicant must complete this section. For disposal sites with more than one APPLICANT, make copies of this page, have each applicant complete this information, and then attach all copies to this Permit Application.

1. Certification of Submittal

"I certify under the penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate or incomplete information."

Ronald C. Slager, Jr.

Name (Print)

Restoration Project Manager

Position or title

*Ronald C. Slager, Jr.*

Signature

5-24-00

Date

2. Certification of Ability and Willingness

"I certify under the penalties of law that I have personally examined and am familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000 and, based upon my inquiry of those Licensed Site Professionals employed or engaged to render Professional Services at the disposal site that is the subject of this permit application and my understanding as to the likely costs and necessary response actions at this site, I believe that I have the technical, financial and legal ability to proceed with response actions at this site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements. I am aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I am unable to proceed with such response actions."

Ronald C. Slager, Jr.

Name (Print)

Restoration Project Manager

Position or title

*Ronald C. Slager, Jr.*

Signature

5-24-00

Date



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## 6 Required Technical Submittals with Application for Major Permit Application

1. Please indicate which of the following response actions (conducted pursuant to 310 CMR 40.000, the 1988 MCP, or 310 CMR 40.0000, the 1993 MCP) are in progress or have been completed at the time of this major permit modification application.

| <u>Response Actions</u>   | <u>Completed</u>                    | <u>In Progress</u>                  |
|---|-------------------------------------|-------------------------------------|
| <i>Preliminary Response Actions</i>   |                                     |                                     |
| Short Term Measure  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Interim Measure   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Limited Removal Action  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Immediate Response Action (IRA)   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Release Abatement Measure (RAM)   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Utility Related Abatement Measures (URAM)   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Phase I Initial Site Investigation  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Other: .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <i>Comprehensive Response Actions</i>   |                                     |                                     |
| Phase II - Comprehensive Site Assessment  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Phase III - Identification, Evaluation and Selection of Comprehensive Remedial Action Alternatives      | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Phase IV - Implementation of the Selected Remedial Action Alternative (Remedy Implementation Plan only) | <input type="checkbox"/>            | <input type="checkbox"/>            |

2. Please indicate which of the following Status Reports, Phase Reports, or Completion Statements have been prepared for response actions that are in progress or have been completed at the disposal site and are being relied upon to document the permit modifications being sought under this Major Permit Modification application. These reports shall be submitted as part of this Major Permit Modification application. Persons who received a Transition Permit and Acceptance Statement should check "not applicable" in the far right column since an initial Permit Application was not required.

| <u>Document</u>                           | <u>Submitted with this application</u>  |  | <u>Submitted with initial application</u> |  |                               |
|---|---|--|---|--|-------------------------------|
| Short Term Measure documentation          | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A* |
| Interim Measure documentation             | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Limited Removal Action documentation      | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Yes   | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| Immediate Response Action (IRA) Plan(s)   | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| IR Status Report(s)                       | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| IRA Completion Report(s)                  | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Yes   | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| Release Abatement Measure (RAM) Plan(s)   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> Yes   | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| RAM Status Report(s)                      | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| RAM Completion Report(s)                  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Yes              | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| Utility Related Abatement Measures (URAM) | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| URAM Status Report(s)                     | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| URAM Completion Report(s)                 | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Phase I Report                            | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Yes   | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| Phase I Report Completion Statement       | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Yes   | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |
| Phase II Scope of Work                    | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Phase II Report                           | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Phase II Completion Statement             | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Remedial Action Plan                      | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Phase III Completion Statement            | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Remedy Implementation Plan (RIP)          | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A  |
| Other: Phase II SOW Addendums             | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Yes              | <input type="checkbox"/> No            | <input type="checkbox"/> N/A  |

\*N/A = "Not Applicable" to persons who received a Transition Permit and Acceptance Statement since an Initial Permit application was not required.



# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## G Required Technical Submittals with Application for Major Permit Application (cont.)

3. Attach an LSP Opinion regarding proposed or continuing response actions which describes all response actions that, in the opinion of the LSP, should continue, or which have Department approval, during the DEP's review of this Major Permit Modification application. Use the following format:

- Description of the response action:
- Current status of the response action:
- Rationale for continuance of the response action:

## H Licensed Site Professional Opinion

"I attest that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this attestation, and in my professional judgment, the material facts and data that are the subject of this permit application are true and accurate and comply with the provisions of M.G.L. c. 21A, §§ 19-19J, 309 CMR, M.G.L. c. 21E, 310 CMR 40.0000, and all other laws, regulations, orders, permits, and approvals applicable to such response action(s). I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I willfully submit information which I know to be false, inaccurate or incomplete."

John C. Drobinski, P.G.

Name (Print)

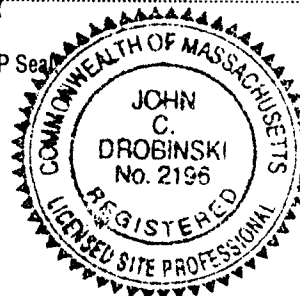
2196

License Number

LSP Signature

Date

LSP Seal







# BWSC 10 - Major Permit Modification

Application for Major Permit Modification

## **I** Application Completeness Checklist

- ☒ The DEP Transmittal Form is properly completed.

### **Certifications/Signatures/LSP Opinions**

- ☒ Certification of submittal has been signed by ALL applicants and attached.
- ☒ Certification of ability and willingness has been signed by ALL applicants and attached.
- ☐ If applicable, the certification of the Primary Representative has been signed.
- ☒ A signed LSP opinion regarding the information contained in this application is included.
- ☐ If applicable, a signed LSP Opinion regarding proposed or continuing response actions pursuant to 310 CMR 40.0707(3)(e).
- ☐ If applicable, a signed LSP opinion regarding requested change(s) in permit terms or conditions is included.

### **Reports and other submittals**

- ☒ Copies of all Status Reports, Phase Reports, or Completion Statements pursuant to 310 CMR 40.0703(1)(j).
- ☒ If applicable, the Tier Classification Submittal has been submitted (pursuant to 310 CMR 40.0510).
- ☒ Compliance history of each applicant as described in Part E of this application has been completed by ALL applicants and attached.
- ☒ If applicable, description of all response actions that are significantly different from those that are the basis of the RAO is attached.

### **Maps, letters, and affidavits**

- ☐ A copy of the tax assessor's map(s) showing each new parcel that is being added to the disposal site has (have) been attached.
- ☒ Affidavit of publication of the legal notice required by 310 CMR 40.0703(8)(a)(1), and a copy of such notice is included.
- ☒ Copy of the cover letters and notices submitted to the Chief Municipal Officer(s) and Board(s) of Health in the community(ies) in which the disposal site is located or in any other community(ies) which is, or is likely to be affected by the disposal site as required by 310 CMR 40.0703(8)(a)(2) are included.

### **To submit the application package:**

- ☒ The Application Checklist has been completed.
- ☐ The **white copy** of the Transmittal Form along with the **original** and **one copy** of the Major Permit Modification Application have been sent to the "DEP Permit Administrator" in the applicable DEP Regional office. (*See the back cover of the Permit Application Kit for the addresses of DEP regional offices*).
- ☒ The **yellow copy** of the Transmittal Form and the **Major Permit Modification Application Fee** of \$1,200 payable to the **Commonwealth of Massachusetts** have been sent to:

Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

## **ATTACHMENT A**

### **A. 4 DISPOSAL SITE INFORMATION**

| <i>Release Tracking Number</i> | <i>Date of Notification</i> |
|--------------------------------|-----------------------------|
| 3-1783                         | 15 January 1987             |
| ERB-N-92-1340                  | October 1992                |
| 3-13302                        | 2 January 1996              |
| 3-13574                        | 28 March 1996               |
| 3-14042                        | 25 July 1996                |
| 3-19482                        | 9 May 2000                  |



**ERM**

399 BOYLSTON STREET 6TH FLOOR  
BOSTON, MA 02116  
PH. (617) 267-8377

CITIZENS BANK  
MASSACHUSETTS  
5-7017-2110

CHECK DATE May 18, 2000

15357

PAY One Thousand Two Hundred and 00/100 Dollars

AMOUNT \$1,200.00

TO Commonwealth of Massachusetts  
Department of Environmental Protection  
PO Box 4062  
Boston MA 02211

AUTHORIZED SIGNATURE

⑈015357⑈ ⑆211070175⑆ 1130150116⑈

ERM

15357

| Invoice Number                | Date       | Voucher | Amount   | Discounts | Previous Pay | Net Amount |
|-------------------------------|------------|---------|----------|-----------|--------------|------------|
| Permit Application            | 05/22/2000 | 0107280 | 1,200.00 |           |              | 1,200.00   |
| Commonwealth of Massachusetts |            | Totals  | 1,200.00 |           |              | 1,200.00   |
| 1                             | 7          |         |          |           |              |            |

ERM00125