

CMG ENVIRONMENTAL, INC.

November 5, 2004

Mr. Edwin P. Madera
Raytheon Integrated Defense Systems
528 Boston Post Road
Mail Stop 1880
Sudbury, MA 01776

**Re: Public Commentary on October 6, 2004 Draft Phase IV Completion Report
Former Raytheon Facility, 430 Boston Post Road, Wayland MA
DEP RTN 3-13302, Tier IB Permit No. 133939
CMG ID 2002-003**

Dear Mr. Madera:

The following are my public comments on the October 6, 2004 Draft Phase IV Completion Report (Phase IV) for the former Raytheon facility in Wayland, Massachusetts (the Site) prepared by Environmental Resources Management (ERM). For the record, the Wayland Board of Selectmen has retained me to provide technical review of document submittals and other activities at the Site on behalf of the Town of Wayland, especially those that pertain to satisfying requirements of the Massachusetts Department of Environmental Protection (DEP) and the Massachusetts Contingency Plan ("MCP," 310 CMR 40.0000).

As in past document reviews, I have prefaced my comments according to ERM's heading designations for ease of comparison (where appropriate), and used uppercase roman numerals to identify each comment.

1.2 PURPOSE & SCOPE

I) On Page 10, ERM indicates this Draft Phase IV comprises an As-Built Construction Report per 310 CMR 40.0875, a Final Inspection Report per 40.0878, and a Completion Statement per 40.0879. One of the requirements of a Phase IV As-Built Construction Report [cf. 40.0875(2)(c)] is to document "any significant modifications ... of the Comprehensive Remedial Action."

Wayland Conservation Commission records indicate they believe Raytheon and ERM made several 'significant modifications' to the wetland remediation conducted at the Site, including:

- As of February 2004 some 3,500 square feet of an area outside the approved work area for construction of the 'Limited Project' for remediation. Raytheon had excavated these wetland soils to construct an earthen berm for flood control. The Order of Conditions for this project specifically authorized flood control using a water-filled berm. Furthermore, ERM had in previous permitting applications stated that "Traditional flood protection methods such as earthen berms will be avoided, as they would require extensive construction to build and dismantle, creating additional adverse environmental impacts" (May 2003 Single Environmental Impact Report and Notice of Intent).

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Section 2.3.2 of the draft Phase IV report (page 9) provides a summary description of earthen berm construction and does indicate that this activity was a modification of the Remedy Implementation Plan. Although ERM indicates this modification is acceptable to the DEP Water Quality Certification, they do not mention discussions on this topic in March 2004 with the Wayland Conservation Commission (who did not agree on its acceptability with respect to the September 26, 2003 Order of Conditions, as amended February 10, 2004). In light of this disagreement, Wayland questions whether Raytheon has yet achieved “appropriate modifications” to the remedial plan in accordance with 310 CMR 40.0878(2)(a).

Most seriously, the Town is concerned that the following statement recorded in Section 3.0 of the draft Phase IV Report (page 27) may be misleading:

In the opinion of the LSP, the wetland remediation was implemented in accordance with the Phase IV RIP (ERM, 2002b) and the federal, state, and local permits. Some modifications were required to assure that the Comprehensive Remedial Action met the project design standards.

Since it is not evident that the Wayland Conservation Commission agrees that Raytheon has satisfied all the Order of Conditions, as amended and applicable to date, the Town of Wayland does not believe Raytheon has fully ‘implemented the wetland remediation in accordance with local permits.’ We urge that Raytheon continue discussions with the Wayland Conservation Commission to reach concurrence with this objective.

II) Another (less egregious) modification to Site wetlands remediation involved replacement of an approximately 110-foot section of corroded stormwater discharge pipe that led from the wastewater treatment facility at the property to outfall OF-1 in the remediation area. Raytheon replaced the corroded stormwater discharge pipe due to an emergency situation in November 2003. The Wayland Conservation Commission issued their February 10, 2004 Amendment to the September 26, 2003 Order of Conditions to retroactively approve these activities, with conditions. Wayland believes that for completeness, the Phase IV As-Built Construction Report should discuss this process per 310 CMR 40.0875(2)(c) and (d).

A third (relatively minor) wetlands remediation modification was removal of ice from the remediation area in January 2004 using several track-mounted excavators. Section 2.4.1 of the draft Phase IV report (page 11) provides a summary description of ice removal operations, but does not identify these as a ‘significant modification’ to Site remediation activities. The Town requests that Raytheon note this as a ‘significant modification’ in the final Phase IV report.

2.4 EXCAVATION ACTIVITIES

III) On Page 10, the Draft Phase IV presents three statements as fact:

- Figure 3 depicts the actual area of wetland excavation,
- Raytheon had each of the three areas excavated to between 1.5 and 2 feet in depth, and
- There was a total of 7,955 cubic yards of wetland soil/sediment removed.

Based on the excavation area as depicted on Figure 5 (which appears to depict exactly the same excavation areas as Figure 3, but at an expanded scale), I measure the excavated Area A as comprising 2,528± square feet, Area B as 9,286± square feet, and Area C as 69,691± square feet. This totals approximately 81,505 square feet (about 1.871 acres). Multiplying this area by 1½

feet yields 4,528± cubic yards; multiplying by 2 feet yields 6,037± cubic yards. The stated volume excavated is 76% and 32% greater than these two calculated values, respectively.

Thus it seems there is a significant inaccuracy in one of the statements presented as fact in this paragraph of the draft Phase IV. Either Raytheon excavated a substantially larger area than mapped in Figures 3 and 5, or you excavated on average over 2.6 feet deep, or ERM has included material in the total volume removed that did not come from the three wetland areas. The first of these three possibilities is potentially the most troublesome. The U.S. Army Corps of Engineers wetland permit for the Site (Permit No. 200300294, issued on September 19, 2003 pursuant to Section 404 of the Clean Water Act) authorized “placement of fill within approximately 1.7 acres of wetlands.” As you will recall, the Army Corps indicated that a ‘significant’ increase in the area addressed would require Raytheon to submit an amended Section 404 permit application, and they subsequently defined ‘significant’ as a 0.5 acre increase (i.e., to 2.2 acres or more). Should the total volume value be correct and the wetlands excavated to an average of 2 feet, then the actual area excavated would be 2.46 acres, well above the Army Corps’ ‘significant’ threshold.

Wayland realizes that ERM intends the figures presented in the draft Phase IV to be illustrations rather than engineered plans. We also realize that surficial relief in the wetlands (both prior to and following excavation) varied by at least one foot. The Town also observed some excavation in the southeast portion of Area C to extend substantially deeper than two feet below the original grade. Wayland requests that Raytheon have ERM re-examine their field measurement notes and revise this section of the Phase IV for accuracy.

2.6 MANAGEMENT OF REMEDIAL WASTE

2.8.2 Closure Sampling

Staging Area and Access Roads

IV) On page 16, the draft Phase IV indicates that “Management of ... remedial waste ... will be concluded with the last wetland soil/sediment that will be removed from the staging area in Fall 2004.” Page 25 of the draft Phase IV provides further details: “An additional six inches of soil was excavated from these cells on 26 August 2004. The excavated soil was stockpiled and covered with plastic and will be transported off-site and disposed of in Fall 2004.” Wayland understands that the referenced soil consists of less than 15 cubic yards of material removed from the access road post-excavation sample GRA-5 area and the remediation waste staging post-excavation sample SPA-2 area.

The MCP does allow submittal of a Phase IV Completion Statement when remediation waste remains at the disposal site [provided that the Potentially Responsible Party indicates that Phase V will include proper disposition of this remediation waste; see 310 CMR 40.0879(2)(c)]. However, given that ERM has documented off-Site transport of 10,039 cubic yards of soil/sediment, asphalt, gravel sub-base, and haul road gravel from the Site in the draft Phase IV, cannot Raytheon wait long enough to include documentation of the last ~15 cubic yards in the final Phase IV? The Town believes that this represents a more defensible endpoint for the Phase IV Completion Statement.

As always, I thank you in advance for your timely response to this commentary on behalf of the Town of Wayland.

Sincerely,
CMG ENVIRONMENTAL, INC.



Benson R., Gould, LSP, LEP
Principal

cc: Environmental Resources Management (John C. Drobinski, P.G., LSP)
Mr. Devins Hamlen, Wayland
Mr. J. Andrew Irwin, Wayland
Ms. Anette Lewis, Wayland
Massachusetts DEP (Pat Donahue, Larry Immerman, Karen Stromberg)
National Parks Service (% Jamie Fosberg)
Mr. Lewis Russell, Wayland
Mr. Harvey and Ms. Linda Segal, Wayland
Ms. Kimberly Tisa, U.S. EPA Region I
Wayland Board of Health PIP Repository (% Steve Calichman, Health Director)
Wayland Board of Selectmen (% Executive Secretary Jeff Ritter)
Wayland Business Center, LLC (% Paula Phillips, Congress Group Ventures)
Wayland Conservation Commission (% Brian Monahan)
Wayland Public Library PIP Repository (% Ann Knight)