



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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December 30, 1997

ANGUS S. KING, JR.
GOVERNOR

EDWARD O. SULLIVAN
COMMISSIONER

Mr. Emil Klawitter
Code 1823 EK
Department of the Navy, Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, PA 19112-2090

Re: Revised Draft Final Record of Decision for No Further Action at Sites 4, 11, & 13 and a Remedial Action for the Eastern Plume

Dear Emil;

The Department of Environmental Protection (DEP or Department) has received and reviewed the Revised Draft Final Record of Decision for No Further Action at Sites 4, 11, & 13 and a Remedial Action for the Eastern Plume. After reviewing the document the Department was dismayed to see that some of the issues we had thought had been resolved still have not been corrected. This is the third time that the State has reiterated these issues and the State can not concur with this Record of Decision until these matters are resolved to the Department's satisfaction. The remaining issues and concerns are outlined below in the same numeric order as the previous letters. New issues are at the end and are designated by Roman numerals.

5. Site Name, Location and Description, page 10, paragraph 3:

"The Eastern Plume is the groundwater contamination resulting from Sites 4, 11, and 13. The 1990 estimated boundaries of the Eastern Plume groundwater contamination and current boundaries exceeding federal maximum contaminant levels (MCLs) or State of Maine maximum exposure guidelines MEGs) are shown on Figure 2."

The Navy only supplied part of the information requested by the State. The following additional information must still be added. *The boundaries of the exceedances are based on the current distribution of the monitoring wells and may not be the actual distribution of contamination. The installation of additional monitoring wells based on a reevaluation of the monitoring network could modify the areas inferred to be above the State MEG's /federal MCL groundwater concentrations.*

7.a. Land Use and Response History, page 14, para.1:

"The most prevalent contamination in groundwater (i.e., 1,1,1-trichloroethane [TCA] and TCE) are consistent with the wastes used at the Fire Training Area. Soil from the ground surface down to the groundwater table also contained these contaminants; however, the Navy removed these soils from Site 11 in two separate removal actions. This eliminated the direct exposure risks (i.e. dermal contact, inhalation, and ingestion). There is the potential that contamination soil still exist below the groundwater table, with a continuing impact to groundwater. The groundwater exposure pathway will be monitored in the groundwater monitoring program."

The Navy still must add: *The groundwater exposure pathway will be assessed under the groundwater monitoring program and additional investigation of the contamination source at Site 11.*

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-1507

8.a Scope and Role of Response Action, page 21 para 2:

"Because the CERCLA contaminants have been removed to acceptable risk levels or are at levels that do not pose a risk, No Further Action is required for Soils at sites 4, 11, and 13. The No Further Action decision can be revisited if future conditions indicate that an unacceptable risk to human health or the environment would result from exposure to contaminants at these sites or there is a change in land use. The No Further Action Decision for Site 11 may be revisited if groundwater monitoring shows the soils below the water table are a continuing source of contamination to the Eastern Plume."

The Navy still needs to modify this section to include: "*However, while the direct contact pathways have been eliminated, there may be residual contamination in the subsurface soils contributing to the Eastern Plume.* The No Further Action Decision for Site 11 may be revisited if groundwater monitoring *or further site investigation* shows the soils below the water table are a continuing source of contamination to the Eastern Plume.

17.e. Summary of Site Characteristics, pages 25 to 28, Fire Training Area:

In a comment letter (July 24, 1996) on the draft Sites 4, 11, 13 Proposed Plan, the DEP requested that test borings and monitoring wells be conducted at Site 11 because DEP suspected residual contamination in subsurface soils. This issue was raised again in DEP letters (4/4/97 and 8/25/97), that the confining layer at Site 11 has not been completely characterized. The Department contends that further site characterization is necessary to assess for the presence or absence of residual contamination beneath the water table. If additional subsurface investigations and/or the LTMP indicate that the soil at Site 11 is continuing to contribute to the Eastern Plume it may be necessary to remove additional soil.

At the October 08, 1997, Restoration Advisory Board (RAB) meeting the Navy stated its intention of conducting cone penetrometer testing at site 11 towards MW-311. The Navy also stated that it would provide a site map with the proposed sampling points for RAB review within the next few weeks. The Navy asked the DEP for their input on what characterization was needed; the Department responded with a letter (October 22, 1997). To the Department's knowledge this work has never been performed. The Navy must commit to this characterization of Site 11 in the ROD before the State can concur.

19. Summary of Site Characteristics, Page 27 para 1 and Page 27 para 2:

a. "It was assumed that contamination extended to the groundwater table approximately 10 feet below the ground surface (bgs)."

The Navy must add: "*However, because the primary contaminants are dense non aqueous phase liquids (DNAPL) there is a potential for the source to remain at depth.*"

b. "Groundwater sampling results demonstrated that concentrations of total TCL VOCs increased in MW-1103, a shallow well, from 500 to 2,900 µg/L over the period from fall 1989 to fall 1990, and low levels of total VOCs (18 µg/l) were reported in the deeper groundwater (MW-304). This increase in VOCs is also correlated with a 2-foot increase in water level, and groundwater upgradient of Site 11 does not contain VOC contamination. These observations indicate that the source of groundwater contamination at Site 11 is the contaminated soils at the site. The correlation of increasing water level with increasing groundwater contamination observed at Site 11 implies that the capillary fringe
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region of the subsurface soils acts as a source of groundwater contamination (E.C. Jordan Co., 1991)."

The Navy must add: *"However, because the primary contaminants are dense non aqueous phase liquids (DNAPL) there is a potential for the source to remain at depth."*

New Items:

I. Development and Screening of Alternatives. Page 42 para. 1:

"Since the issuance of the Interim ROD, it has been determined that Sites 4, 11, and 13 are no longer source areas for the contamination of the plume.

Since a complete characterization of Site 11 has not been performed this statement is incorrect and must be corrected. Also see comment 17.e..

II. Technology and Alternative Development and Screening. Page 45, para 2:

"In the time since the Interim ROD, the Navy conducted two removal actions at Site 11 under their removal authority and it was determined that Site 11, as well as Sites 4 and 13, are no longer source areas.

This cannot be assumed. Also see comment 17.e.

III. Selected Remedy, page 56 & 57, para 2:

The goals of the plan are as follows:...

As agreed upon at our August 14, 1997, meeting the Navy must include: *Monitor changes in the groundwater contamination.*

IV. Site Name, Location, and Description, page 10, para 3.

"The likely future discharge point of the plume was projected to be Harpswell Cove, potentially affecting many ecological receptors. Because the Navy implemented a groundwater extraction and treatment system, the plume is not longer expected to reach Harpswell Cove.

Since Harpswell Cove is not the only surface water body that is potentially threatened the Navy must add: Because the Navy has implemented a groundwater extraction and treatment system, the plume is no longer expected to reach Harpswell Cove *or any other surface water body.*

Editing Notes:

V. Selected Remedy, page 56:

Natural attenuation may play a vital role in achieving the final increment of cleanup once the groundwater extraction and treatment system reaches the point of diminishing returns USEPA, MEDEP, and the public ...

Is there supposed to be a period after returns and a beginning of a new sentence?

Summary: Until the above comments are fully addressed the State cannot concur the Revised Draft Final Record of Decision for No Further Action at Sites 4, 11, & 13 and a Remedial Action for the Eastern Plume. We need to resolve these remaining issues either over the phone or at a meeting. I am willing to discuss, and/or pre review any changes proposed by the Navy in order to finalize this ROD. Please call me at (207) 287-7713 to discuss these comments.

Respectfully,



Claudia Sait
Project Manager
Bureau of Remediation & Waste Management

cf: file
Richard Heath
Robert Lim
Carolyn Lepage
Capt. E. F. Carter-BNAS
Jim Caruthers
Susan Weddle
Peter Nimmer
Steven Mierzykowski
Jeffrey Brandow
Rene Bernier
Jeff Dale
Ken Finkelstein
Don Gerrish
Alan Frazier
Thomas Fusco
David Gleason
Richard Sobocinski