



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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ANGUS S. KING, JR.

GOVERNOR

August 25, 1997

EDWARD O. SULLIVAN

COMMISSIONER

Mr. Fred Evans  
Project Manager, Code 1821  
Department of the Navy, Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mailstop 82  
Lester, PA 19112-2090

Re: Draft Final Record of Decision for Remedial Action  
at Sites 4, 11, & 13 (July 1997)

Dear Mr. Evans:

Thank you for the Navy's response to the Department of Environmental Protection's (DEP or Department) letter of April 4, 1997, regarding the Draft Record of Decision for Remedial Action at Sites 4, 11, & 13 (March 1997). The Navy's responses resolved most of the issues. However in reviewing the Draft Final Record of Decision for Remedial Action at Sites 4, 11, & 13 (July 1997) the Department has identified the following unresolved issues. (For your convenience the comments are numbered the same as the our original letter.)

Specific Comments:

1. Title and Cover Page:

The title page has been corrected regarding the No Action for sites 4, 11, & 13 and Remedial Action for the Eastern Plume, however the cover page still needs to be corrected.

2. Scope and Role of Response Action (Page 21, Para 1):

Language has been added to the ROD indicating effluent from the groundwater treatment plant will be "discharged to the Publicly Owned Treatment Works (POTW)". The Navy has previously indicated interest in installing an on-site infiltration gallery for the discharge of plant effluent. If there is a continued interest in pursuing this as a treatment process, additional language is needed in the ROD specifying this as an option. Language should also be included regarding requirements (e.g. effluent chemical concentration restrictions) associated with an infiltration gallery.

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

3. Summary of Site Characteristics (Page 29, Para 1):

Language has been added to the ROD indicating "Samples were collected from the bottom of the excavation area to document the condition of the soils left in place". Please provide a brief summary of the results of this confirmation sampling in the ROD.

5. Site Name, Location and Description, (page 10, para 3):

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

As discussed in our August 14th meeting the Department feels that the areas of contamination exceeding the MCLs and MEGs do not accurately depict the Eastern Plume. The Department recommends the following language "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 boundaries of areas currently exceeding federal maximum contamination levels (MCLs) or State of Maine maximum exposure guidelines (MEGs) are shown on Figure 2. The boundaries of the exceedances are based on the 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 MEGs/federal MCL groundwater concentrations."

Figure 2, page 12:

This issue was resolved at our August 14th meeting. The Navy has agreed to include the source areas, the 1990 plume boundary (which will clearly labeled as such), the areas currently exceeding the MCLs and MEGS, and both the shallow and deep ground water flow direction. The Department also suggests including the two cross sections showing stratigraphy that were included in the Record of Decision for an Interim Remedial Action at the Eastern Plume Groundwater Operable Unit, June 1992.

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

"The most prevalent contaminants 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."

The Navy needs to add *"Thereby eliminating direct exposure risks (ie dermal contact, inhalation, and ingestion). The groundwater exposure pathway will be assessed under the LTMP and additional investigation of Site 11.*

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. For example,..."

The Navy needs to modify this section as follows: "Because the CERCLA contaminants have been removed to an acceptable risk levels or are levels that do not pose a risk for direct exposure, No Further Action is required for soil at 4, 11, & 13. 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 can be revisited if it is shown through further site investigation or LTMP that residual contamination is contributing to the Eastern Plume. Also, if Building 584 is removed, the Navy, with input from USEPA, MEDEP and the public will evaluate whether additional investigation are appropriate.

17.b. Summary of Site, page 27, para 1:

"These calculations suggested that concentrations of TCE in soils beneath the concrete pad may be on the order of 16 milligrams per kilogram (mg/kg)."

This sentence is confusing to the reader. Please consider "These calculations ~~suggested~~ *estimated* that concentrations of TCE in soils beneath the concrete pad may be on the order of 16 milligrams per kilogram (mg/kg)."

17.e. Summary of Site Characteristics, pages 26 to 29, Fire Training Area

DEP's 7/24/96 letter on the draft proposed plan asked that test borings and monitoring wells be included at Site 11 because DEP suspected residual contamination in subsurface soils.

In previous letters (7/24/96 and 4/4/97) the Department has stated 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. The Department would like to see additional testing of this site as soon as possible so that remedial action may be undertaken, if necessary.

19. Summary of Site Characteristics, Pages 27 & 28:

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

The Navy needs to 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 region of the subsurface soils acts as a source of groundwater contamination (E.C. Jordan Co., 1991)."

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

22. Summary of Site Characteristics, Page 32 para 1:

The lateral, vertical, and distal plume boundaries have been characterized."

b. The above sentence is misleading and the Navy needs to remove it from the ROD. The State recommends replacing it with "Monitoring has shown that the contamination concentrations within the Eastern Plume have changed since the Remedial Investigation. However, to date, no evidence of contamination from the Eastern Plume has been found in any surface water bodies. The LTMP will track changes in contamination concentrations and potential migration. As new risks are identified the Navy will implement remedial action."

33. Groundwater Extraction and Treatment, page 55, paragraph 1

"The system, which began operation in May 1995, was designed to: prevent further movement of contaminants toward Harpswell Cove; reduce concentrations of contaminants in the portions of the plume with the highest levels: and, together with natural degradation, result in the attainment of cleanup levels throughout the plume over a time period estimated to between 13 and 71 years."

The text should note that the clean up levels will relate to the ARARs.

37. Currently under discussion.

New Items:

Statutory Requirements/Response Objectives, Page 42 para 1:

In the August 14th meeting the Navy indicated that the following sentence would be changed to "To minimize any future negative impact to ~~the Harpswell Cove estuary~~ surface water resulting from discharge of contaminated groundwater."

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Following up on the other potential discharge areas, on a number of pages (32, 39 & 55) it is noted that Mere Brook estuary or Harpswill Cove are potential discharge areas. These references need to be changed and it needs to be clear in the ROD that other surface water bodies may also be potential discharge areas.

The objectives for the Long Term Monitoring Plan to included in the ROD were discussed at the August 14th meeting as outlined below.

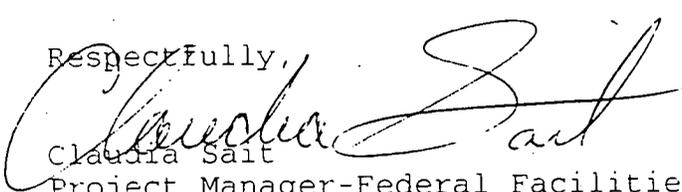
- Monitor changes in the plume boundaries & potential migration pathways.
- Monitor changes in the groundwater contamination.
- Monitor the effectiveness of the remedial action for the protection of human health and the environment.
- Monitor the treatment plant effluent.

Summary:

Most of the above comments are minor, however they reflect a need to clarify points within the ROD which continue to be a concern to the State. At this point, other than the ARAR issue, if there is continued disagreement on the recommended changes the agencies should arrange a meeting to discuss them. (While the Department will not insist that any recommended language be used verbatim, any replacement language should be very similar in content and clarity.) Therefore, the State does not concur with the Draft Final Record of Decision for No Further Action at Sites 4, 11, & 13 and a Remedial Action for the Eastern Plume (July 1997).

If you have any questions or comments please call me at 207 287-7713.

Respectfully,



Claudia Sait

Project Manager-Federal Facilities  
Bureau of Remediation & Waste Management

cc:

file

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cc: Richard Heath  
Robert Lim  
Emil Klawitter  
Carolyn Lepage  
Capt. D.J. Nelson  
Jim Caruthers  
Susan Weddle  
Michael Battle  
Steven Mierzykowski  
~~Jeffrey Brandow~~  
Rene Bernier  
Mary Sanderson  
Jack Dunleavy  
LCDR R. J. Dieffenbach  
Lt. D. Small  
Ken Finkelstein  
Don Gerrish  
Alan Frazier  
Thomas Fusco  
John James  
David Gleason  
Richard Sobocinski  
James MacLeod