



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NAS BRUNSWICK
5090.3a

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

March 22, 2005

Mr. Orlando Monaco
Department of Navy
Engineering Field Activity-Northeast
Code 1823/OM
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

Re: Site 9-Engineering Evaluation and Cost Analysis
Naval Air Station, Brunswick, Maine

Dear Mr. Monaco:

The Maine Department of Environmental Protection (MEDEP) has reviewed the draft "Engineering Evaluation and Cost Analysis, Site 9, dated January 26, 2005 (received February 22, 2005), prepared by Frank Cellucci of the Engineering Facilities Activity Northeast. Based on that review MEDEP has the following comments and issues.

General Comments:

1. The Engineering Evaluation and Cost Analysis (EECA) should include a brief description of the approved remedy, list of contaminants of concern (COCs) and the requirement in the Record of Decision to evaluate the feasibility of removing the landfill if the barracks were ever demolished.
2. The EECA should include a figure of Site 9 showing the pertinent features (i.e., the site boundary, the existing buildings and the boundary of the ash landfill/dump area, as determined by the direct push soil borings in 2003.

Specific comments:

3. Page 1, Executive Summary, para 1:

"The COCs identified for Site 9 are trichloroethene and vinyl Chloride as referenced in the EA Nov 2004 Direct Push Final Investigation Summary Report."

The COCs for Site 9 per the 1999 ROD are vinyl chloride, 1,2-dichloroethylene, and 1,2-dichloroethane for groundwater. These should be listed plus any other compounds found during the direct push investigation of the ash landfill/dump area. The EECA should also include the inorganics and compounds, etc. found in the landfill as part of the draft final Direct-Push Groundwater & Ash Landfill/Dump Area Delineation Investigation Summary Report (Nov 2004).

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: 764-1507

4. Page 2, Section 1.2, Site Description and Background:

Please add information on the Record of Decision (ROD) regarding the dates of the two RODs, contaminants of concern (COCs) and the selected remedy. This would also be a good place to discuss the requirement in the ROD to reassess the remedy for the landfill if the exterior walls or foundations were disturbed.

5. Page 2, Section 1.2, Site Description and Background, para 4:

"There are 3 barracks buildings on the site that are currently being demolished."

This sentence contradicts the information in Section 1.2.1 which states four buildings are to be demolished. For clarity MEDEP suggests the following language: "*There are four barracks (Building 217, 218, 219, and 220) on site currently proposed for demolition, three of which (Buildings 217, 218, and 219) cover the former ash landfill.*"

6. Page 3, Section 1.2.1, Site Operations:

"Barrack Buildings 217, 218, 219, 220 are currently being demolished."

See comment 5 above regarding confirming how many barracks are proposed for demolition. MEDEP suggests the following language: "*Buildings 217, 218, 219, 220 are currently proposed for demolition.*"

7. Page 5, Section 1.2.2 Site Chronology:

To strengthen this section MEDEP suggests that the three bullets on page 20 of the draft final "Direct Push Groundwater and Ash Landfill/Dump Area Delineation Investigation Summary Report for Site 9" (Nov 2004) be inserted into bullet 10 on page 5 of this document.

8. Page 5, Section 1.2.2 Site Chronology, bullet 5:

MEDEP suggests the following language: "In September 1999, the final ROD was signed for Site 9 and the selected remedy was natural attenuation with long-term monitoring and institutional controls."

9. Section 1.2.3.2, Site Hydrogeology and Groundwater Flow Patterns:

It is unclear to MEDEP why this section is included. MEDEP suggests removing this discussion and inserting a discussion of the past investigations looking for the source(s) of the groundwater plume which will reinforce the discussion in section 1.3 and the potential for the ash landfill to be a key source.

10. Page 9, Section 1.3, Source of Chemicals of Concern (COCs):

MEDEP suggests deleting paragraphs 2, 3, and 4 on this page since they are not pertinent to the EECA.

11. Page 9, Section 1.3, Source of Chemicals of Concern (COCs), para 1:

Soil samples were sent to Kathadin Analytical Laboratories of Westport, Maine..."

Please change Westport to Westbrook.

12. Page 9, Section 1.3, Sources of Chemicals of Concern (COCs), para 5:

MEDEP suggests the following language: "~~Soil boring locations were backfilled via natural collapse and bentonite pellets. The COC identified in the Remedial Investigation for groundwater are 1,2-dichloroethylene, and 1,2-dichloroethane and vinyl chloride. The draft final Direct Push report dated November 2004 includes tables...~~

MEDEP also suggests the summarizing the soil results information on page 15 (bullets 1-4) of the draft final "Direct Push Groundwater and Ash Landfill/Dump Area Delineation Investigation Summary Report for Site 9" (Nov 2004) and paragraph 3 on page 17 regarding dioxin ash sample results.

13. Table 3:

Table 3 is a copy of the one found in the draft final "Direct Push Groundwater and Ash Landfill/Dump Area Delineation Investigation Summary Report for Site 9" (Nov 2004), however table 3 in that document is 3 pages long. Please insert all the pages of analytical results.

14. Table 4:

Table 4 appears to be a copy of Table 5 , (2 pages) found in the draft final "Direct Push Groundwater and Ash Landfill/Dump Area Delineation Investigation Summary Report for Site 9" (Nov 2004). Please try to reproduce the tables as shown in the summary report.

15. Page 13, Section 2. Statutory Framework:

Please correct the typo in paragraph 2.

16. Page 13, Section 2.1, Determination of Removal Scope:

MEDEP suggests the following language: The scope of this removal action is to *remove the former ash landfill and* contaminated soil to an acceptable cleanup level. ~~above acceptable cleanup levels at Site 9.~~ The aim of the removal action is to prevent COCs from leaching *from the former ash landfill* to groundwater above acceptable levels and to prevent unacceptable risk to human or ecological receptors from direct exposure to impacted soil.

17. Page 15, Table 2:

(Please note that the table numbers are out of order.) The ARARs should mimic the ones listed in the ROD for Site 9. Also the ones below should be added or confirmed to be in the 1999 ROD.

Maine Standards for Hazardous Waste Facilities, 06-096 CMR Chapter 854

- Remedial Action-clean up levels for groundwater and surface water
- Status Relevant and Appropriate
- Summary of Requirement-These rules establish performance standards for hazardous waste management units. No hazardous waste or constituent or derivative thereof shall appear in ground or surface waters at levels above current public health drinking water standards for Maine, including the Maximum Exposure Guidelines or standards for aquatic toxicity, whichever is more stringent.
- Consideration in the Removal/Remedial Action- MEGs and AWQCs are target clean up levels for the groundwater and surface waters.

Maine Hazardous Waste, Solid Waste and Septage Management Act-38 M.R.S.A., Section 1301 et seq; 06-096 CMR Chapters 850-857

- Remedial Action-disposal of contaminated media
- Status-relevant and appropriate
- Summary of Requirement-These rules establish performance standards for treatment, disposal, and/or storage of medial contaminated with hazardous waste
- Consideration in the Removal/Remedial Action-Contaminated media shall be disposed in accordance with these rules”

Maine Solid Waste Management Rules, 06-096 CMR, Chapter 400

- Remedial Action-disposal of non hazardous wastes
- Status- relevant and appropriate
- Summary of Requirement-These rules establish performance standards for treatment, disposal, and/or storage of non hazardous wastes
- Consideration in the Removal/Remedial Action-Non hazardous wastes shall be disposed in accordance with these rules.

Maine Natural Resources Protection Act MRSA Section 408A-S; 06-096 CMR Chapter 310

- Remedial Action-soil disturbance in, on, over or adjacent to wetland and water bodies
- Status-- relevant and appropriate
- Summary of Requirement-This rule prescribes standards for specific activities that may take place in or adjacent to wetland and water bodies. The standards are designed to ensure that the disturbed soil material is stabilized to prevent erosion and siltation of the water. This act outlines requirements and performance standards for certain activities adjacent to any freshwater wetland or with an associated stream, pond or brook.

Maine DEP Draft Remedial Action Guidelines for Hazardous Substances in Soil

- Remedial Action-These guidelines establish clean up goals in soils.
- Summary of Requirement-These guidelines were set for chemical specific concentrations of hazardous substances in soil for protection of human health through direct contact and leaching from soil to groundwater
- Consideration in the Removal/Remedial Action-can be useful as presumptive remediation goals (PRG);may be considered as clean up levels in accordance with guidance. Not suitable as screening levels.
- Status-To be considered.

18. Page 20, Section 2.3.2, Potential ARARs Affecting the Removal Action Objective, para3:

“The state [sic] ARAR from the Maine Department of Human Services pertains to protection of groundwater and relates to the proposed removal alternatives in regards to the potential for runoff or leachate from impacted soil.”

It is not just the Maine Department of Human Services ARAR but MEDEP’s Hazardous Waste law that adopted the MEG’s by reference for clean up standards. MEDEP suggests the following language: *“The ARARS, Maine Standards for Hazardous Waste Facilities and the Maine Department of Human Services Rules for Drinking Water, pertain to protection of groundwater and relates to the proposed removal alternatives in regards to the potential for runoff or leachate from impacted soil.”*

This section must also address federal laws for groundwater and surface water contamination.

19. Page 20, Section 2.4, Removal Objective:

It is unclear what is meant by "MEDEP Cleanup Goals for Contaminated Sites"; this is not a title of a law or guideline. This section must also address federal laws for soil contamination.

20. Page 21, Section 3.1.1.1, Description, para 1:

It should also be noted that No Action will have no impact on reducing or eliminating a source of groundwater contamination at Site 9 would reduce not the timeframe close out the site.

21. Page 21, Section 3.1.1.1, Description, para 2:

"Under the No action alternative, existing action such as groundwater monitoring may continue as part of other ongoing site activities."

Since the remedy is natural attenuation with long term monitoring is will be necessary to continue groundwater monitoring. Therefore please change the verb from "may" to "will".

22. Page 21, Section 3.1.1.2, Effectiveness:

To strengthen this section MEDEP suggests the following language: The No Action alternative does not achieve long-term effectiveness and permanence nor does it achieve reduction in toxicity, mobility, or volume.

23. Page 22, section 3.1.1.4, Cost, para 1:

In addition to the current statement MEDEP suggests that this issue of the cost of continuing long term monitoring will be necessary.

24. Page 22, section 3.1.1.4, Cost, para 2:

"The No Action alternative does not meet the RAO for Site 9 because it does nothing to remove contaminated soil that exceeds cleanup levels established by the MEDEP..."

It is unclear what is meant by "cleanup levels established by MEDEP". It appears this statement refers to the ARARs for soil and should include both State and Federal ARARs. Please clarify.

25. Page 23, Section 3.1.3.1, Description:

For consistency with the other two descriptions, MEDEP suggests the following language: *Alternative 3 involves the construction of a soil cap. The soil cap will would...*

26. Page 24, Section 3.1.3.2, Effectiveness, top para:

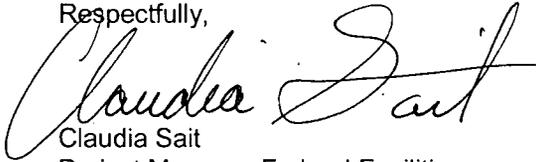
"The COCs will probably leach from Site 9."

To strength this section MEDEP suggests the following language: *Contaminants will continue to leach from the former ash landfill requiring continued long term monitoring to evaluate natural attenuation and institution controls will remain on soil in perpetuity and on groundwater until it meets ARARs.*

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Thank you for the opportunity to review this report. If you have any questions or comments please call me at (207) 287-7713 or email me at claudia.b.sait@maine.gov.

Respectfully,

A handwritten signature in cursive script that reads "Claudia Sait". The signature is written in black ink and is positioned above the printed name.

Claudia Sait
Project Manager-Federal Facilities
Bureau of Remediation & Waste Management

Cf: File
Lisa Joy-BNAS
Christine Williams-EPA
Carolyn Lepage-Lepage Environmental
Al Easterday-EA (email only)
Darren Gainer -ECC
Ed Benedikt