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NSY PORTSMOUTH  
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LETTER AND U S NAVY RESPONSE TO U S EPA REGION I AND MAINE DEPARTMENT OF  
ENVIRONMENTAL PROTECTION COMMENTS REGARDING CORRECTIVE MEASURES  
STUDY PROPOSAL NSY PORTSMOUTH ME  
3/7/1994  
NAVFAC NORTHERN



DEPARTMENT OF THE NAVY

NORTHERN DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
10 INDUSTRIAL HIGHWAY  
MAIL STOP, #82  
LESTER, PA 19113-2090

IN REPLY REFER TO

5090  
Ser 2052/1823/JMC  
MAR 07 1994

Mr. Ernest Waterman  
U.S. Environmental Protection Agency  
Region I  
JFK Federal Building  
Boston, MA 02203-2211

Re: RCRA CORRECTIVE ACTION PROGRAM AT PORTSMOUTH NAVAL SHIPYARD;  
RESPONSE TO COMMENTS ON THE **CORRECTIVE MEASURES STUDY PROPOSAL**

Dear Mr. Waterman:

Enclosed are the Navy's responses to your comment letter dated September 30, 1993 and Maine Department of Environmental Protection comment letter dated October 18, 1993 regarding the Corrective Measures Study Proposal dated August 1993.

Sincerely,

*Jim Conroy*

J. M. CONROY, PE  
LT, CEC, USN  
Remedial Project Manager  
By direction of the Commanding Officer

Copy to:  
MEDEP (N. Beardsley)  
PNS (Code 121.5) ✓  
Halliburton NUS (Linda Klink)

\* FWD TO HARRISON BISPHAM / ME DEP

8/11/94

10 PAGES

~~\* NOTE TO JIM CONROY \*~~

**EPA COMMENTS ON THE CMS PROPOSAL  
(NAVY'S RESPONSE TO COMMENTS IN BOLD)**

1. Expand the CMS Proposal to include the Navy plans to fulfill conditions set on the CMS in EPA's March 31, 1993 "Approval with Conditions" of the RCRA Facility Investigation Report.

**This condition is being fulfilled under the Navy's CLEAN Contract with the development of the RFI "Data Gap" Work Plan. To meet this condition, the RFI "Data Gap" Work Plan will be submitted as a separate document and appropriate references within the revised CMS Proposal will be included.**

2. Eliminate references in the CMS Proposal which state that hazardous constituents which exceed risk goals but have high site background values or do not exceed Maximum Contaminant Levels (MCLS) do not require Media Protection Standards.

High natural background values or groundwater values below MCLs may preclude corrective measures but media protection standards set at background or MCLs are still needed.

**This condition will be met by editorial revisions to CMS Proposal and review of the revised on-shore MPS Proposal for consistency.**

3. Complete and incorporate sampling and analysis related to the question of the current day impact of groundwater seepage, surface runoff and other pathways of hazardous waste or hazardous constituent export on the Piscataqua River.

An analysis of whether or not current day export of hazardous waste or hazardous constituents is significantly impacting the estuary is critical to the evaluation and selection of remedies for the Solid Waste Management Units (SWMUs) at Portsmouth Naval Shipyard.

**The Navy anticipates this condition to be met through a report being developed by NCCOSC (off-shore contractor) to address the seep sampling and results. Incorporation can be into the CMS Proposal if required (i.e. Appendix) and reviewed to ensure it does not change results of proposed corrective measures.**

4. Expand the CMS Proposal to address SWMUs 9, 11, 21, & 27 (Mercury Burial Sites, Waste Oil Tanks, Building 75 acid/alkaline drain tank (Tank No. 28), and Fuel oil Spillage area).

**This will be done.**

5. Strike the sentence on page 2-4 which reads "Due to the fact that the site groundwater is not used for drinking water currently, and is unlikely to be used as such in the future, no corrective measures were recommended".

The Navy may regard future use of groundwater as unlikely, however no controls exist to prevent its use in the future and corrective measures for groundwater need to be evaluated.

**The condition to be met by an editorial revision to statement such as: "Currently site groundwater is not used for drinking water and is unlikely to be used as such in the future, however, no future land use restrictions are in place and corrective measures will be evaluated."**

6. Expand the CMS Proposal to include corrective measures for groundwater. As noted above no controls exist to prevent the use of groundwater therefore groundwater risks must be addressed in the CMS.

**Corrective measures for the groundwater will be evaluated and presented in the revised CMS Proposal.**

7. Strike the sentences on page 2-5 which reads "In addition, the source of the mercury has not been identified. Therefore, a media protection standard for mercury in air is not required."

The Shipyard has not yet been ruled out as the source of volatile mercury so a media protection standard may still be required.

**Condition to be met by an editorial revision to CMS Proposal and review of the revised MPS Proposal for consistency.**

8. Expand the CMS Proposal to note that a supplemental air monitoring study is being developed to track the source of volatile mercury detected at the Shipyard and that volatile mercury will be addressed in the CMS as needed following the conclusion of that air monitoring study.

**This condition is being fulfilled under the CLEAN Contract with the development of the Confirmation Air Monitoring Work Plan. To meet this condition, the Confirmation Air Monitoring Work Plan will be submitted as a separate document and appropriate references within the revised CMS Proposal will be included.**

9. Revise Table 2-3 and 2-4 to reflect a Media Protection Standard of 500 mg/kg for lead for SWMU #6 (DRMO).

The physical setting and lack of future use restrictions suggest that the DRMO should be considered as subject to future residential use. This difference in standard does not affect the corrective measures to be considered for this area.

**Editorial revision to statement will be incorporated such as:  
"However, due to the physical setting and lack of future land  
use restrictions, a corrective measure object of 500 ppm is  
required for lead in surface soils at SWMU #6."**

10. Retain stabilization/fixation as a corrective measures technology.

Stabilization/fixation may be a necessary component if transport of hazardous constituents to the estuary remains a concern and is identified as a possible component of alternative II in section IV of the CMS Proposal.

**The CMS Proposal will be re-evaluated and revised to include stabilization/fixation as a corrective measure technology.**

11. Expand the CMS Proposal to include institutional controls as a corrective measure.

Several alternatives may require institutional controls on future use of areas within the Shipyard as part of controlling exposure to hazardous waste or hazardous constituents.

**The CMS Proposal will be revised for institutional controls to be evaluated and incorporated where appropriate.**

MEDEP COMMENTS ON THE CMS PROPOSAL  
(NAVY'S RESPONSE TO COMMENTS IN BOLD)

1. Section 1.3, first paragraph.  
Please correct the sentence that refers to PNS as an island. PNS is located on Seavey Island, PNS is not an island.

**Editorial revision to statement that says "... the PNS is located on an island in the Piscataqua River ..."**

2. Section 1.4 Summary of RFI Results for each SWNW, page 1-2.  
Please include in the text a discussion of the sampling locations where poor subsurface soil recovery occurred during subsurface sampling. The poor sampling recovery may have a direct effect on the results listed in Tables 2-1 and 2-3.

**We will review the recovery of soil samples for the affected SWMUs from the RFI report and determine whether adequate data exists to support the tables.**

This section should also discuss the data gaps identified at each SWMU and the work that is planned to fill the data gaps.

**This condition is being fulfilled under the Navy's CLEAN Contract with the development of the RFI "Data Gap" Work Plan. To meet this condition, the RFI "Data Gap" Work Plan will be submitted as a separate document and appropriate references within the revised CMS Proposal will be included.**

3. Page 1-9, second paragraph:  
Include the maximum contaminant levels for surface and subsurface lead levels found at the DRMO.

**Maximum, minimum and average contaminant levels are provided in Table 1-2 and 1-3. Editorial revision to text to include both the maximum and average levels.**

4. SWMU #8, Unit Name: JILF, page 1-9, second sentence.  
The sentence must state that an open channel existed between Jamaica and Seavey Islands prior to landfilling.

**Reference will be added to the drainage channels which existed in the tidal flats.**

5. Page 1-10, first paragraph:  
Please clarify in the text that the clay barrier wall was constructed at the same time that the "cap" was placed over the dredge spoils. Does the lining follow the entire length of the rock dike as this sentence implies?

**Editorial revision to report that states: "In 1978, a 2-foot clay cap and clay barrier wall was constructed around the portion of the landfill that accepted dredge spoils. Portions of the JILF are now covered with topsoil, pavement**

or rock and used as recreational, parking and equipment laydown areas respectively."

6. Figure 14  
JW-15, JW-16, JW-16B, do not appear to be shown on this Figure. Please include these wells on this Figure.

Figure will be revised to show location of wells JW-15, JW-16 and JW-16B in addition to JW-17B.

7. SWMU #11, Unit Name: Waste Oil Tanks (2) No. 12, page 1-14. Please clarify in the text that only a small amount of contaminated soil was taken offsite for disposal. The remaining contaminated soil must be considered for remediation. Please submit the results of the soil sampling that PNS staff performed on the contaminated soils. Please include in the text a statement that the monitoring wells installed in the SWMU # 11 area were not sampled during the RFI.

Editorial revision to statement that says "... 664,000 pounds of excavated soil was disposed of in an off-site RCRA permitted land disposal facility." Copies of the manifests and sample results will be sent to MEDEP.

Response to comment as it pertains to the CMS Proposal will be incorporated as necessary.

Monitoring wells installed around SWMU #11 were sampled and results provided in RFI Report. MEDEP method 4.1.1 for total petroleum hydrocarbon will be compared against work planned in the RFI Data Gap workplan and incorporated if necessary, particularly for wells 16, 16b, 15, 15b.

8. Section 2

Include in this section and in all appropriate subsequent sections, the State of Maine Incremental Lifetime Cancer Risk Guideline of  $1E-05$  for all media. Exceedances of Maine's Guideline should be noted in Section 2.1.2.

Editorial revision to state the State of Maine Guidelines.

9. Page 2-3  
Eliminate all references to compounds that exceed risk goals but do not require corrective measures because of high background concentrations. Corrective measures may not be required, but media protection standards must still be set either at background levels or at MCLs

Duplicate of EPA Condition #2.

10. Page 2-3, Section 2.1.2.2.1:  
Rewrite this entire Section to Include MAXIMUM contaminant

concentrations when discussing carcinogenic risks, not just average concentrations. This comment has been made in previous comments. Do maximum contaminant concentrations for arsenic and 1,4-Dichlorobenzene exceed risk goals or MCLS? Remove the sentence "Therefore, arsenic and 1,4-Dichlorobenzene do not require media protection standards."

**Section 2.1.2.2.1 will be revised to evaluate freshwater wells based on maximum contaminant concentrations when discussing carcinogenic risks. Maximum contaminant concentrations for arsenic and 1,4-Dichlorobenzene will be reviewed to determine if they exceed risk goals or MCLS? Based on the revised MPS Proposal, media protection standards have been proposed for all contaminants which exceed the risk goals/MCL and CMS Proposal will be revised accordingly.**

11. Page 2-4, first paragraph:  
Again, remove the sentence, "Therefore, it is not necessary to propose media protection standards for arsenic or copper in groundwater. " It is not appropriate to state that groundwater is unlikely to be used in the future, therefore no corrective measures were recommended.

**Duplicate of EPA Conditions 5 and 6**

12. Page 2-4, Section 2.1.2.2.2:  
This section should include a discussion concerning potential groundwater impacts to the offshore environment, including all seep sampling procedures used to date, all results, and future sampling dates.

**Duplicate of EPA Condition 3**

13. Page 2-5, Section 2.1.2.3:  
Consider including a discussion of surface water runoff impacts to the offshore environment in this Section.

**A comment will be added stating that the only area with exposed contaminated surface soils has been capped.**

14. Page 2-5, Section 2.1.2.5:  
Include maximum air concentrations in this discussion and change text as required. Remove the sentence, "Therefore, a media protection standard for mercury in air is not required." It seems obvious that just because a source for the volatile mercury has not been found, that doesn't remove the requirement for setting a media protection standard. Table 2-2 should be amended for SWMU #9.

**Some duplication of EPA Condition 8. Review of revised Media Protection Standards for air to ensure consistent with State of Maine guidelines. CMS Proposal will also be reviewed**

**against revised media protection standards and Table 2-2 will be revised accordingly.**

15. Page 2-6, Table 2-2:  
It has not been fully established what site-specific background levels are. Additional sampling was performed late this summer, but those results have not been submitted. It is premature to suggest that some media may not require media protection standards when site-specific background levels have not been established. Previous comments have already stated that site specific background levels should be used, not regional background levels.

**Review of the revised MPS Proposal for consistency is required to ensure that the additional background samples collected did not change the need to propose additional corrective measures.**

16. Page 2-7, Section 2.2.1:  
Clarify in the text that the onshore portion of the PHERE does not indicate unacceptable risks to human health associated with the JILF. The offshore impacts of the JILF have not been assessed.

**Editorial revision to state "The offshore impacts of the JILF have not yet been fully assessed."**

17. Page 2-8, third paragraph:  
Clarify in the text that a portion of the JILF was capped, to cover contaminated dredge spoils disposed of in the landfill in 1978. The existing partial "cap" covering the dredge spoils is not an engineered cap design.

**Editorial revision to statement such as "The Jamaica Island Landfill has been capped to cover the dredge spoils deposited at the landfill with site soil and vegetation."**

18. Page 3-4, Section 3.2.1.1:  
The State of Maine does not classify the JILF as an attenuation landfill, therefore the closure requirements for an attenuation landfill do not apply. The JILF does meet the definition of an "Open Dump", as defined in the State of Maine Solid Waste Regulations Chapter 400.1(LL). If the remedial action pursued at the JILF is closure only, the closure will meet the requirements described in the State of Maine Solid Waste Regulations, Chapter 401.7, Solid Waste Landfill Facility Closure.

**These regulations will be reviewed and the CMS Proposal will be revised as necessary regarding the proposed classification of the landfill and expand the possible types of closure.**

19. Section 5.0 Summary of Data Requirements for evaluation of Corrective Measures, page 5-1.

The use of augers and split spoon sampling, may not be appropriate sampling methods to use in all sampling situations. Alternative methods may be required in areas of poor sample recovery.

**We will review review Section 5 data requirements and revise as necessary.**

20. Additional data is required to characterize the small landfill reported to be near the DRMO. Corrective actions for this area of the DRMO, may be more intensive than the rest of the DRMO.

**Historical records search is underway by NSY Portsmouth and NorthDiv personnel to determine past practices at this site. Additional investigations proposed for that area are groundwater monitoring as part of a longterm groundwater monitoring program being developed by the Navy.**