

08/12/93

10:43

US EPA BOSTON, MA REGION 1

001



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

August 11, 1993

Mr. James Shafer
North rn Division
Naval Facilities Engineering Command
Code 1821/JS
10 Industrial Hwy., Mail Stop #82
Lester, PA 19113-2090

Re: Draft Technical Memorandum
Site 9
Neptune Drive Disposal Site
June 1993

Dear Jim:

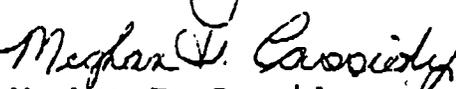
The United States Environmental Protection Agency (EPA) has reviewed the document entitled "Draft Technical Memorandum, Site 9, Neptune Drive Disposal Site" dated June 1993. The report was submitted by the Department of the Navy for Naval Air Station Brunswick in Brunswick, Maine.

EPA's comments regarding this document are provided in Attachment I to this letter.

As discussed during a conference call held on July 27, 1993, EPA recommends that either ~~a meeting or second conference call be convened~~ following the Navy's review of comments on this document. The purpose of such a meeting or call would be to discuss the follow-up actions for Site 9.

Please contact me at (617)573-5785 to schedule a meeting or conference call, or if you have any questions regarding EPA's comments.

Sincerely,


Meghan F. Cassidy
Remedial Project Manager

Enclosures



cc: Nancy Beardsley/ME DEP
Jim Caruthers/NASB
Bob McGirr/ABB
Susan Weddle/BASCE
Carolyn LePage/Gerber, Inc.
Sam Butcher/Harpswell Community Rep.
Rene Bernier/Topsham Community Rep.
Bob Lim/EPA

ATTACHMENT I

The following are EPA's comments pertaining to the document entitled "Draft Technical Memorandum, Site 9, Neptune Drive Disposal Site" dated June 1993. The document was submitted by the Department of the Navy for Naval Air Station Brunswick in Brunswick, Maine.

1. General: In reviewing the information presented in this document, it appears that there are still some outstanding issues regarding the area north of Neptune Drive. For instance, whether ~~inorganics present in groundwater~~ are really representative of background or are a result of leaching from the ash. For this reason it may be premature to be considering remedy selection for this area. The need for additional studies should be discussed.
2. General: The analytical results of soil samples from the cesspool area south of Neptune Drive indicate that the ~~septic system is not a current source of VOC contamination.~~ However, it cannot be determined whether the septic system may have been a ~~past source.~~ ~~Since the levels of VOC contamination in this area continue to be low,~~ EPA believes that a long-term monitoring program should be implemented in the near future. Once a long-term monitoring program is in place more information will be available regarding contamination trends, groundwater flow directions, changes in flow directions, etc. EPA recommends that the Navy consider, and discuss with the regulatory agencies, implementing an interim action for the area south of Neptune Drive.
3. General: More discussion regarding the period of operation of the incinerator, type of material burned, etc. is needed to evaluate whether any further investigation should include sampling of the ash for dioxins.
4. Page 2-7, Section 2.1.4: Lead was not discussed in the Surface Water and Sediment section. However, Figure 2-3 shows some elevated concentrations. Compare the lead concentrations to background levels and provide an explanation.
5. Page 2-8, Figure 2-3: Note #7 in general notes incorrectly defines PAHs as polycarbonate aromatic hydrocarbons. Correct this reference.
6. Page 2-10, ¶ 2, last sentence: This sentence must be revised to indicate that only that no site-related organics have been detected in groundwater. The presence of inorganics may be related to the ash contamination.

7. Page 2-14, Table 2-2: Clarify whether the maximum concentrations presented in this table represent a compilation of data from both north and south of Neptune Drive.
8. Page 2-20, ¶ 2: At what depths were pesticides detected in B-912 and B-913? This information is critical to determining whether the presence of pesticide is a remnant of surface applications in ash. If pesticides were detected at any appreciable depth it is doubtful whether they can be related to basewide use.
9. Page 2-20, ¶ 1: The text indicates that VOCs were detected only at values below Contract Required Quantitation Limits (CRQLs). The VOCs were estimated values here because the CRQLs tend to be higher than the PQLs due to different laboratory analysis performance. However, the statement as presented in the text gives a false impression that the contaminant concentrations are not of concern because of the CRQL. The text should explain that in some cases, the CRQL is higher than the MCL or other regulatory standard and that the CRQL cannot be used to assess risk in any case.
10. Page 2-24, Table 2-6: Clarify what sample LF-901 represents. Is this a leachate sample? If so clarify this in the table so that the reader does not assume it represents groundwater conditions.
11. Page 2-25 through 2-26, Table 2-7: Results of groundwater inorganic analysis need to be compared to MCLs where they exist.

The sodium and calcium levels at MW-916 appear high. All inorganic concentrations for MW-916 should be compared to other background well data at NASB before conclusions can be made regarding whether MW-916 is representative of background conditions.

12. Page 2-27, ¶ 1: Provide the total depth of the TerraProbe borings.
13. Page 2-28, ¶ 2: According to the text MW-916 is being considered to represent background conditions since it is upgradient of the ash disposal area. Use of this well alone is not acceptable for establishing background conditions. The data from MW-916 must be compared to data used to establish "background" levels during previous studies at NASB.
14. Page 2-29, ¶ 1: Background levels from monitoring well MW-916 cannot be used for comparison to leachate samples. Base-wide background levels (in leachate if applicable) must be used for comparison.

15. Page 2-32, ¶ The text indicates that five soil samples were collected from the borings in the cesspool area and analyzed for TCL VOCs. Indicate at what depth these samples were taken and the nature of the material (i.e., organic mat, fill, native soils, etc.).
16. Page 3-1, ¶ 1: Indicate why there is still some uncertainty regarding the vertical extent of ash in the former ash disposal area.
17. Page 3-2, 1st sentence: As stated previously, inorganic background values must be compared to base-wide background values previously established, not just to values from MW-916.
18. Page 3-2, ¶ 2: This paragraph indicates that the septic system was not the original source of contaminants in groundwater south of Neptune Drive. While it is clear that the septic system is not a current source, the conclusion regarding a past source cannot be substantiated. The text should explain this further.
19. Page 3-2, ¶ 3: The text indicates that VOC contamination in groundwater is at concentrations below CRQLs. While this may be true, the text should also indicate that there have been groundwater hits of VOCs above the MCLs.

The text states that "no VOC, SVOC, or pesticide/PCB contaminants of concern" were observed in the groundwater. This is inaccurate since VOCs (specifically vinyl chloride) was detected. Clarify this statement.

20. Page 3-3, ¶ 2: Briefly summarize the contaminants found in leachate and sediment. Also, indicate whether these results are indicative of elevated contaminant levels, source, etc.
21. Section 4.0: This section must include a summary of ecological risks associated with exposure to the seep area at location LT-901.
22. Page 4-3, ¶ 1: The last sentence in this paragraph states that the risk estimates presented (i.e., 7.8×10^{-5} and 1.4×10^{-5}) are at the upper end of EPA's risk range. Since the EPA risk range is 10^{-4} to 10^{-6} , these values are in the middle of the risk range. Clarify the text.
23. Page 4-4, last ¶: The text indicates that in some cases the average concentration was greater than the maximum concentration. Provide specific examples where this occurred.

24. Page 4-5, ¶ 1: The text indicates that the elevated HI is due to the presence of manganese at concentrations that exceed the proposed MCL of 200 ug/L. The text should clarify that the 200 ug/L level is the MCLG rather than the proposed MCL. Also, the HI is based on Reference Dose (RfD) rather than the MCL as indicated.
25. Page 5-2, ¶ 1: This paragraph should include a discussion of the detection of low levels of VOCs (vinyl chloride) in groundwater north of Neptune Drive.
26. Page 5-2, ¶ 2: The text states that no current or future risks are associated with leachate or sediment. Clarify whether this includes both ecological and human health risks.
27. Page 5-4, ¶ 1, 1st sentence: The text states that there is no continuing source of contamination causing environmental impact at Site 9. This is not accurate. The ash is most likely a continuing source of inorganics in groundwater. This statement should be clarified.
28. Page 5-4, ¶ 1, 2nd sentence: While EPA is not ready to concur that only monitoring is necessary at Site 9, any future monitoring proposed for the site must include leachate and leachate sediment. This should be reflected in the text.