UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

February 17, 1993

Carol Diamond-Hossom, Health Assessor
Agency of Toxic Substances and Disease Registry
Division of Health Assessment and Consultation (E-32)
1600 Clifton Road, NE
Atlanta, GA 30333

RE: Public Health Assessment for US Naval Submarine Base - New London, Groton, New London County, Connecticut, CERCLIS No. CTD980906515, dated December 21, 1992.

Dear Ms. Diamond-Hossom:

The purpose of this letter is to transmit comments on the Public Health Assessment for US Naval Submarine Base - New London at Groton, CT.

Attached you will find comments from the US Environmental Protection Agency - Region I (EPA). EPA's comments consist of both general and specific comments; these comments have been numbered for future reference.

It appears that the sources of information for the development of this report did not always include the results of EPA's evaluation and identification of deficiencies. The reliance on the Navy's draft documents may not have provided a complete understanding of all issues associated with the base investigation and extent of contamination.

If there are any questions regarding any of these comments, you should feel free to call me at 617/573-9614.

Sincerely,

Andrew F. Miniuks, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc. Paul Jameson, CTDEP
Deborah Stockdale, NORTHDIV
William Mansfield, NSBNLON
Ted Bazenas, ATSDR

General Comments

1. ATSDR should revise the Public Health Assessment to reference the difficulties associated with the analysis of the surface and groundwater samples for boron. More specifically, the analytical results are considered invalid due to laboratory error (i.e., analytical interference by sulfur compounds). Additional sampling by the Connecticut Department of Environmental Protection (CTDEP) and the US Navy (Navy) for boron concentrations in surface water and groundwater indicated boron concentrations significantly below the initial values.

2. Revise the document to ensure consistent use of the Defense Reutilization and Marketing Office (DRMO). This area is inconsistently described as the DRMO and the Defense Property Disposal Operation Area (DPDO).

3. EPA and the Navy have not yet agreed upon background concentrations or rather the naturally occurring concentrations of contaminants within the area of the sub base. Any reference to background concentrations should either be deleted or modified to "proposed background concentrations". In addition, this report often references both "background" levels and comparison values which causes some confusion on the source and importance of these values.

Specific Comments

4. Page 6, ¶3 - Revise this paragraph to include the statement that each of the Step I sites that are recommended for Step II Remedial Investigations will be evaluated for the most appropriate remedial alternative(s).

5. Page 10, ¶3 - Revise this portion of the report to include the planned action to remove lead-contaminated soils from beneath Building 31; located within the Lower Sub Base. EPA has received a proposed "time-critical" action memorandum from the Navy. This "time-critical" action memo proposes to sample and possibly excavate highly contaminated areas of soils prior to capping.

6. Page 12, ¶4 - The Phase II Remedial investigation includes the collection of additional sediment samples from North Lake.

7. Page 14, ¶1 - Revise this portion of the report and any other references to the Area A Wetland within this report to include a description of the development of this wetland. As described in the Phase I Remedial Investigation (RI) Report, the Area A Wetland was created due to the placement of dredge spoils from the Thames River in the late 1950s. These dredge spoils were contained within an earthen dike that extended from the Area A landfill to the south side of the Weapons Storage Area.

8. Page 14, ¶6 - ATSDR should consider the possible harvesting of shellfish from the Thames River in spite of the existing ban on such harvesting.

9. Page 15, ¶1/2/3/4 - Revise this page of the report to include the fact that groundwater from beneath the sub base is discharging into the Thames River. Groundwater elevation data, as described in the Phase I RI Report, indicates that the groundwater is flowing from beneath the base and discharging into the Thames River.

10. Page 21, ¶7 - The sources of information for the development of this section of the report did not include the results of EPA's evaluation and identification of deficiencies. The reliance on the Navy's draft documents may not have provided a complete understanding of all issues associated with the base investigation and extent of contamination.

11. Page 22, Table 1 - Revise this table to include the detection of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and pesticides in the subsurface soils of the Overbank Disposal Area (OBDA). Additional information is provided on page 4-90 of the Phase I RI Report.

12. Page 22, Table 1 - Revise this table to include the detection, albeit through a limited analysis, of VOCs and PAHs in the subsurface soils beneath the Spent Acid Storage and Disposal Area. It is believed that further investigation(s) in this area will identify additional contamination, including pesticides. These results are described on page 4-52 of the Phase I RI Report.

13. Page 23, Table 2 - Revise this table to include the collection, analysis and non-detection of contaminants within the groundwater samples from the overburden and bedrock aquifers at the Overbank Disposal Area (OBDA). Additional information is provided on page 4-106 of the Phase I RI Report.

14. Page 23, Table 2 - Revise this table to include the collection, analysis and detection of contaminants within the groundwater samples from the overburden aquifer at the Defense Reutilization and Marketing Office (DRMO). Additional information is provided on page 4-146 of the Phase I RI Report.

15. Page 24, Table 3 - Revise this table to include the collection, analysis and detection of contaminants within the sediments at the Overbank Disposal Area (OBDA). Additional information is provided on page 4-96 of the Phase I RI Report.

16. Page 24, Table 3 - Revise this table to include the collection, analysis and detection of contaminants within the sediments at the Torpedo Shops. Sediment sample 7SW/SD1 is located at the Torpedo Shop area, but the discussion of the results was included in another area. Additional information is provided on pages 4-88 and 4-92 of the Phase I RI Report.

17. Page 25, ¶2 - The collection and analysis of frog and bird tissues will be supplemented with additional sampling during the Phase II RI. Therefore, it would appear to be inappropriate to state at this time that there was no contaminants detected in the tissue samples.

18. Page 32, ¶2 - This paragraph references the collection and analysis of surface water samples, yet incompletely describes the resulting analysis. It is recommended that the results from this analysis be presented in a tabular form.

19. Page 36, Table 11 - There appears to be a typographical error in this table. Is the comparison value of DDT actually 21,000 ppb?

20. Page 46, ¶4 - The collection and analysis of surface water samples from Rock Lake was not reported as part of the Phase I RI reports. This paragraph of the report should be revised accordingly.

21. Page 56, ¶3 - Revise this section of the report to include the detection of contaminated subsurface soils at the Spent Acid Disposal Area. These results are described on page 4-52 of the Phase I RI Report.

22. Page 58, ¶3 - Revise this section to include the detection of contaminants within the riverbed sediments. Additional sampling results should be able to determine the extent and concentration of these contaminants. See attachment 1 for additional information.

Conclusions

23. Page 81, ¶2 - Revise this paragraph to reflect the man-made construction of the Area A Wetland. See Comment #7 for additional information.

Recommendations

24. Recommendation 1 - ATSDR has recommended that the Navy restrict access to the Area A Downstream Watercourses due to the high concentrations of DDT and lead in soils and sediments. Based on written reports and visual inspections, the Navy has already constructed a fence restricting access to portions of the watercourse.

25. Recommendation 2 - One of the main objectives of the Phase II Remedial Investigation will be focusing on determining the source and extent of groundwater contamination caused by base operations.

Attachment I.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
Environmental Services Division
60 Westview Street, Lexington, MA 02173-3185

MEMORANDUM
DATE: December 5, 1991

SUBJ: U.S. Naval Submarine base data

FROM: Daniel S. Granz DSG
Environmental Studies Section

TO: Mike Fedack
Compliance Section

Enclosed are the data from the sampling inspection (6/3-5/91) at the U.S. Naval Submarine Base New London facility in Groton, CT. There are two tables that summarize all the raw data which are also attached.

The sediment data from samples collected below the drydock indicate contamination. The sediment below the forward port side of the drydock was visually contaminated with a thin layer of oil and paint chips about 1/2 inch below the sediment surface. The sample from this location was a mixture of the top 2 inches of the sediment. The analytical results found approximately 1.4 % copper and low ppm range of organics in the sample.

The donut #1 discharge contained numerous contaminants including O&G (23.2,13.1,16.1 ppm), TSS (20 ppm), copper (109 ppb), nickel (84ppb), zinc (394 ppb), naphthalene (60 ppb), and numerous other organics at low ppb levels.

Attach 1

U.S. Naval Submarine Base New London
Groton, CT
Sampling Data from Inspection on 6/3-5/91

parameter (units)	Date Time	Drydock ARDM 4 sediment below Aft center	Drydock ARDM 4 sediment below For port	Drydock ARDM 4 sediment below For starboard
cadmium (mg/kg -ppm)	6/5/91 1445	5.98	-	-
	1515	-	13.0	-
	1540	-	-	6.21
chromium (mg/kg -ppm)	6/5/91 1445	103	-	-
	1515	-	145	
	1540	-	-	76.8
copper (mg/kg - ppm)	6/5/91 1445	284	-	-
	1515	-	13,975	-
	1540	-	-	714
nickel (mg/kg -ppm)	6/5/91 1445	41.0	-	-
	1515	-	310	-
	1540	-	-	32.3
lead (mg/kg -ppm)	6/5/91 1445	98.2	-	-
	1515	-	201	-
	1540	-	-	115
zinc (mg/kg -ppm)	6/5/91 1445	396	-	-
	1515	-	3,170	-
	1540	-	-	502
bromine (ppm)	6/5/91 1445	-30	-	-
	1515	-	-30	-
	1540	-	-	-30
1,3,5-trimethyl-benzene (ug/gm -ppm)	6/5/91 1515	-	0.78	-
1,2,4-trimethyl-benzene (ug/gm -ppm)	6/5/91 1515	-	1.4	-
Napthalene (ug/gm -ppm)	6/5/91 1515	-	0.45	-
petroleum oils by GC	6/5/91	none detected	none detected	none detected