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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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May 9, 2003

Mrs. Dawn M. Hayes, P.E.
Code EV22DH
1510 Gilbert Street
Norfolk, Virginia 23511-2699

Subject: Naval Amphibious Base Little Creek
Draft Remedial Investigation/Human Health Risk Assessment
IR Site 7

Dear Mrs. Hayes:

The Virginia Department of Environmental Quality (VDEQ), Office of Federal Facilities Restoration has reviewed the *Draft Remedial Investigation/Human Health Risk Assessment (RI/HHRA) for IR Site 7* dated February 2003. Based on the VDEQ review we offer the following comments:

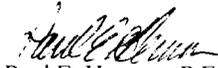
1. Section 2.1, page 2-2, last paragraph: The remedial action discussed in this paragraph was performed as directed by the Decision Document developed for this site prior to its placement on the NPL. Please provide this clarification and explain why parts of the landfill were covered with 6 inches of topsoil in 1994.
2. Section 2.1.2, General Comment: The assertion that groundwater flows north to Little Creek Cove may not be entirely correct. The presence of the perennial canal along the western edge of site 7 provides a conduit for groundwater, as does the small pond in the northeast portion of the site. In the vicinity of the canal and the pond, groundwater would be expected to flow toward these water bodies unless there is an impermeable barrier along the canal and pond's side slope and bottom. Absent such a barrier, there is an interface between the groundwater and the surface water in the vicinity these water bodies. In fact, a tidal wedge (that may project from the canal) has been observed at other coastal NPL facilities where tidal fluctuations were documented in water table wells as far as 200 feet inland. Tidal fluctuations in the pond are acknowledged elsewhere in this report. Please amend the report, and Figure 2-2 in particular, to address this concern or provide additional data showing that this type of groundwater movement is not happening at site 7.
3. Section 3.2, General Comment: All monitoring data should be compared to the background 95% upper tolerance level (UTL). Those parameters whose concentrations exceed the background 95% UTL should have their cell outlined in the table (Tables 3-1 through 3-5). Please amend the tables and the summary of the analytical results accordingly.
4. Section 4.2.2, page 4-6, first bullet: Please explain why surface water data were not compared to the applicable Virginia Water Quality Standard for Human Health (Standard). Please include this explanation in this bullet or include the appropriate Standard in the selection of COPC process.
5. Appendix E, Table 1, pages 2 and 3 of 7: Please delete the phrase "(only by boat)" from the "Rationale for Selection or Exclusion of Exposure Pathway" column for the portions of the Table addressing surface water and sediment. If the trespasser/visitor can gain access to the site and be exposed to surface soils they could also enter the pond or either canal without using a boat. On page 3 of 7, the word wading is misspelled in the "Rationale" column.

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6. Section 4.2.1.1: The text references Figures 3-4 and 3-5 as containing the sample locations for surface and sub-surface soil; however, these figures show exceedances only. Figure 2-3 shows all soil sample locations.
7. General Comment: Locating the data for each subsection was difficult. In the future, a summary table for each area (i.e. weigh station area, perimeter of the site) would be helpful in reviewing the risk assessment portion of the report.
8. Section 4.5.7, Future Resident Adult: Note the HQ for the target organs CNS and GI tract were greater than one for this receptor. Future Resident Child: The target organs CNS, skin, vascular and GI tract had HQs greater than one. The text should be amended to include a discussion of the exceedances rather than stating that there are no unacceptable health risks to this receptor.

If you have any questions concerning these comments, please give me a call at (804) 698-4464.

Sincerely,



Paul E. Herman, P.E.
Remediation Project Manager

cc: NABLC Tier 1 (electronic copy)
Jennifer Jones, VDEQ
Durwood Willis, VDEQ

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