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October 10, 2007

Mr. Jeffrey Boylan
NPL/BRAC
Federal Facilities Branch (3HS11)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Subject: Response to Comments, *Draft Site Management Plan, FY2008 through FY2012*, Naval Amphibious Base Little Creek, Virginia Beach, Virginia

Dear Mr. Boylan:

On behalf of the Navy, CH2M HILL has prepared the following responses to comments received via .pdf mark-up from USEPA on the *Draft Site Management Plan for FY2008 through FY2012* at Naval Amphibious Base Little Creek, Virginia Beach, Virginia:

General Comments:

1. Check all acronyms and abbreviations to be sure they appear in the document and are defined with first appearance.
Response: All acronyms and abbreviations have been cross-checked throughout the document and revised as necessary.
2. References throughout the document are defined using different methods. Suggest using one method of referencing documents in Section 4.
Response: References in the document were revised to following the "Harvard" reference format.
3. Please update pullouts accordingly to match changes made in Section 2.
Response: Pullouts have been rearranged to follow new order of Section 2 and include additional planned activities identified in the mark-up.

Specific Comments:

1. Section 1, 2nd sentence – Remove "Mid" from "NAVFAC Mid-Atlantic".
Response: Comment noted, however Scott Park's office is the Mid-Atlantic Division of the Naval Facilities Engineering Command. Reference to the "Atlantic" Division was changed to "Mid-Atlantic" on the title page.
2. Section 2.1, 3rd paragraph, 1st sentence – FFA was signed by EPA in November 2003.
Response: The 1st sentence has been revised to read "The FFA, negotiated between the Navy, EPA, and VDEQ, was finalized in November 2003".

3. Section 2.3.3, 1st paragraph, 3rd sentence – Change “Twenty-two” to numeral “22”.
Response: Twenty-two is the first word in the 3rd sentence. According to technical writing guidelines, numbers appearing as the first word in a sentence should be spelled out.
4. Section 2.3.6, title – Change “Inspection” to “Investigation”.
Response: Title has been revised accordingly.
5. Section 2.4, 1st paragraph, 2nd sentence – Add “FFA” to sentence prior to “process”.
Response: Text has been revised accordingly.
6. Section 2.4.1, Site 7, 13th paragraph – Add “LUC” before “RD”.
Response: Text has been revised accordingly in this section and throughout the document.
7. Section 2.4.1, Site 11, - Site 11 ROD was signed in July 2007, move discussion to Section 2.4.2 and update accordingly.
Response: Site 11 has been moved to Section 2.4.2 and updated to reflect signature of the ROD. Additionally, Tables 2-1, 2-2, and Figure 2-1 have been updated and schedule Tables have been reorganized accordingly.
8. Section 2.4.1, Site 11, 12th paragraph, last sentence – Change “will” to “was”.
Response: Text has been revised accordingly.
9. Section 2.4.1, Site 11, 16th paragraph, last sentence – In the PP we say DNAPL source was never identified as part of investigation.
Response: Last sentence was revised to reflect conclusion drawn in PP and read: “The results indicated there had not been significant degradation of TCE (CH2M HILL, 2003j)”.
10. Section 2.4.1, Site 11a – Change site name to “Building 3033 Former Waste Oil Tank”.
Response: Text was revised accordingly.
11. Section 2.4.1, Site 11a, – Work in language for Building 3033 former waste oil tank identification.
Response: Paragraph was added that reads “Research of historical land use of this area indicates the presence of a former underground waste oil tank associated with former Building 3033. The tank was identified as SWMU 60 in the FFA and SWMU/IR Summary report and was closed out with no further action following a desktop audit prior to the NAB Little Creek’s placement on the National Priorities List (NPL). Contents of the tank were not documented in these reports. However, groundwater analytical data and membrane interface probe (MIP) results show VOC concentrations are high in the shallow portion of the aquifer near the area of the former waste oil tank”.
12. Section 2.4.1, Site 11a, last paragraph – Include remedial action work plan in list of planned activities.
Response: Remedial action work plan has been included in the list of planned activities for Sites 11a and 13, and SWMU 3.
13. Section 2.4.1, Site 13, 12th paragraph, 2nd sentence – Clarify this sentence.
Response: The sentence was revised to read “The FS indicated that enhanced anaerobic bioremediation and enhanced aerobic bioremediation rank relatively higher than the other alternatives for short-term effectiveness”.
14. Section 2.4.1, SWMU 3, 4th paragraph, last sentence – Is this “high” as in very close to the surface? See SWMU 7b, page 2-20.
Response: Groundwater is shallow at the site. The sentence has been revised to read “The low groundwater gradient and shallow groundwater table at SWMU 3 indicate the Columbia Aquifer is directly connected to the surface water in Little Creek Channel”.

15. Section 2.4.1, SWMU 3, 6th paragraph, 3rd sentence – Is this sentence correct as described? I thought there were inconsistencies.
Response: DPT samples were collected to verify MIP results and monitoring wells were installed according to the DPT results. Generally, MIP and DPT results correlated, the inconsistencies were noted between monitoring well data and DPT/MIP results. The paragraph was revised to read “A supplemental investigation was conducted during February and March 2007 to delineate the extent to VOCs in groundwater, reevaluate human health risk associated with VOCs and metals in groundwater, and delineate the lateral and vertical extent of abrasive blast material (ABM) in sediment. MIP technology was used to delineate the extent of VOCs in groundwater at SWMU 3 and DPT groundwater samples were collected to verify the MIP results. Seven new monitoring wells were installed (5 boundary wells and 2 high concentrations wells) according to DPT results. Groundwater samples were collected from new and existing monitoring wells and analyzed for VOCs and metals; additionally, subsurface soil samples were collected to aid in the evaluation of remedial alternatives. Following receipt of monitoring well data, inconsistencies were noted between MIP/DPT and monitoring well sample results. During the June 2007 Partnering Meeting, the Navy, in partnership with the EPA and VDEQ agreed an additional round of groundwater monitoring well sampling was necessary to fully characterize the extent of VOCs in groundwater. The lateral and vertical extent of ABM in sediment was delineated. Select sediment samples were collected and analyzed for metals in order to conduct a comparative analysis of percent ABM and metals concentrations”.
16. Section 2.4.1, SWMU 7b, 1st paragraph, 4th sentence – Change “EP” to “EPA”.
Response: Text has been revised accordingly.
17. Section 2.4.1, SWMU 7b, 3rd paragraph, 5th sentence – Change “EP Tox” to “EPA toxicity”.
Response: Text has been revised accordingly.
18. Section 2.4.1, SWMU 7b, 4th paragraph, 7th sentence – Change “compounds” to “carbon”.
Response: Text has been revised accordingly.
19. Section 2.4.1, SWMU 7b, 5th paragraph, 7th sentence – Add “and” following “SWMU 7”.
Response: Text has been revised accordingly.
20. Section 2.4.2, Site 12, 9th paragraph – Do we add the additional monitoring well that we are going to be installing?
Response: The following sentences were added to the end of the paragraph: “RA construction was completed in March-April 2007. Baseline sampling results indicated potential movement of contaminants west following repair of the storm sewer. Additional DPT sampling was conducted to verify the western and southwestern plume boundary. Sampling results were documented in an addendum to the RA Work Plan and indicated the southwestern plume boundary was adequately defined and recommended installation of one additional well pair outside of the western boundary to monitoring for contaminant migration towards the drainage canal”.
21. Section 2.4.3, Sites 9 and 10, 12th paragraph – Clarify how we went from A (risk) to B (IC and LTM).
Response: The paragraph has been revised to read: “A Revised RI/HHRA/FFS was completed for Sites 9 and 10 in February 2001 by CH2M HILL. The HHRA identified potential RME risks from the potable use of groundwater at the sites, based on cadmium, manganese, thallium, and zinc concentrations. Because potable use of groundwater is an unlikely scenario, the FS recommended LUCs and LTM at the sites”.
22. Section 2.5, 2nd paragraph – Update the five site PA.
Response: The third sentence of the 2nd paragraph was revised to reflect finalization of the five site PA and reads: “Additionally, a five site PA was finalized in September 2007 for the remaining

areas identified as potentially impacted by MMRP activities (Malcom Pirnie, 2007).” Additionally, a reference to the PA was added to Section 4.

23. Table 2-10 – Delete ROD as it was signed 7/2/07.
Response: The ROD was deleted from the Site 11 schedule.
24. Table 2-11 – Change “TCE Plume Adjacent to Site 11” to “Building 3033 Former Waste Oil Tank”
Response: Site 11a title was changed as recommended.
25. Table 2-12 – LUC, Where is RAWP? This is different than Sites 11 and 12.
Response: RAWP was added to Table 2-12.
26. Table 2-13 – Add (include LUC) Remedial Design and RA Workplan.
Response: LUC RD and RAWP were added to Table 2-13.
27. Table 2-17 - Is this a schedule?
Response: Table 2-17 was removed. A schedule will be generated when a path forward has been developed for the Site.

If you have any questions concerning these comments, please give me a call at (757) 671-6266.

Sincerely,



Cecilia White,
Project Manager

cc: Mr. Paul Herman/VDEQ
Mr. Scott Park/NAVFAC Mid Atlantic
Ms. Jamie Butler/CH2M HILL
Ms. Bonnie Capito/NAVFAC Atlantic