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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-3104

January 30, 1998

4WD-FFB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Katherine Landman
Department of the Navy - Atlantic Division
Naval Facilities Engineering Command
Code 1823
Norfolk, Virginia 23511-6287

SUBJ: MCB Camp Lejeune
Draft Focused Remedial Investigation
Operable Unit No.15-Site 88

Dear Ms. Landman:

The Environmental Protection Agency has completed its review of the above subject document. Comments are enclosed.

If you have any questions or comments, please call me at (404) 562-8538

Sincerely,

Gena D. Townsend
Senior Project Manager

Enclosure

cc: David Lown, NCDEHNR
Neal Paul, MCB Camp Lejeune

1.0 GENERAL COMMENTS

1. Section 1.4.3, Page 1-4, Paragraph 1, Sentence 2 states that there was a presence of free phase PCE observed in a localized area on the north side of Building 25. However, the text does not specify whether an emergency interview work plan was initiated to remove the phase PCE. The text should state whether the free phase solvent found near Building 25 was removed. If not, emergency removal action should be conducted at this time.

2. Section 1.0, Pages 1-1 through 1-4 presents an introduction of the Focused Remedial Investigation Report. This section does not have a discussion on differences between "Focused RI" and RI. If the "Focused RI" means less work is conducted than with a RI, such as the risk assessment in this document, this section should make a clear statement on the work effort. This section should be revised to address the above concerns.

3. Section 2.2.2, Page 2-2, Paragraph 5 discusses analytical parameters for the subsurface soil collected during the Phase II investigation. However, the paragraph omits sampling for iron and nickel although they were found to be high in previous sampling events per Bullet 1, Page 1-3. The text should give the rationale for not sampling for iron and nickel during the Phase II investigation.

4. Section 2.5, Page 2-10, Paragraph 5 states that sample collection equipment was rinsed with isopropyl alcohol before finally being air dried. However, distilled water should be the final rinse before air drying, per EPA SOPQAM. The text should give the rationale for using isopropyl alcohol as the final rinse before air drying.

5. Table 2-1 summarizes soil sampling at OU No. 15. However, not all samples were analyzed for TCL volatiles. The text should give the rationale for not analyzing all soil samples for volatiles.

6. Figures 3-3 through 3-5 depict hydrogeologic cross-sections. However, some of the monitoring wells shown on the figures are below the water table. For example, on Figure 3-3, monitoring well 88-MW05, the shallow monitoring well is below the water table. EPA SOPQAM recommends that shallow monitoring wells be installed 2 to 3 feet above the water table to monitor NAPL constituents and allow for seasonal variations. The figures should be revised accordingly.

7. Section 4.5.1, Page 4-4, Paragraph 4, Sentence 1 states that acetone appears to be a soil contaminant, but it is not likely related to activity conducted at Site 88. However, because acetone is a VOC and not inherent to the soil, concentrations should be compared with equipment rinsates and laboratory blanks. This procedure should help determine if acetone is a positive detection. The text should be revised accordingly. This comment also applies to the compounds 1,1,1-trichloroethane and toluene on page 4-6, paragraph 1.

8. Section 4.5.2, Page 4-5, Paragraph 5, Sentence 1 discusses DNAPL investigation at Site 88. Three groundwater samples were collected as part of the DNAPL investigation. The concentration in groundwater ranged from 1500 ppb (cis-1,2-DCE) to 170,000 ppb (PCE). However, in Section 7 the text does not present in the conclusion section a discussion of DNAPL present in the deep aquifer, nor does it recommend remedial action objectives to address DNAPL in the deep aquifer. The text should be revised accordingly.

9. Section 4.6.2, Page 4-7, Paragraph 1, Sentences 1 and 2 states that VOCs have traveled downward and the deep groundwater has not been impacted. Also, no VOCs were detected in samples from the four deep monitoring wells. However, Appendix H, page 18 of 22, shows that tetrachloroethene (4J µg/l), trans-1-2-dichloroethene (2J µg/l) and trichloroethene (4J µg/l) were detected at monitoring well IR88-MW05DW-01. The discrepancy should be resolved accordingly.

10. Section 7.0, Page 7-1, Paragraph 1, Conclusion No. 7 concludes that it is unlikely that the presence of VOCs in the groundwater, even at concentrations that exceed federal and state standards, could currently present a potential for adverse human health effects. This conclusion should emphasize the current land use and identify that there is potential future risk.

2.0 SPECIFIC COMMENTS

1.Section 1.5, Page 1-4, Paragraph 2, Sentence 3.
The text states that sampling was done of groundwater and subsurface soil. However, the text does not give the rationale for omitting surface soil from the sampling plan. Although it is assumed that surface soil samples were not taken because suspected contaminants were from USTs, the text should so state. The text should be revised accordingly.

2.Table 2-4.
Table 2-4 summarizes temporary monitoring well water quality parameters. However, there is no explanation given for the dashes in the table. The table notes should explain the meaning of the dashes. This comment also applies to Table 2-6.

3.Figure 2-1.
Figure 2-1 depicts soil sample locations at OU 15 (Site 88). However, the boundary of the site is missing from the figure. The boundary should be included on the figure. This comment applies to all the figures showing sampling locations.

4.Table 3-2.
Table 3-2 summarizes static water elevations at the shallow wells. However, units for the data are missing and the dashes in the table are not defined in the notes. The table should be revised accordingly.

5.Figure 3-9.
Figure 3-9 depicts a groundwater potentiometric surface map for deep monitoring wells. However, the contour lines are inadequately drawn. The lines should be drawn so that they clearly depict groundwater movement.