03.01-12/12/95-01614

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

December 12, 1995

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 Remedial Investigation
Operable Unit No. 11 - Site 80

Dear Ms. Landman:

The Environmental Protection Agency (EPA) has completed its review of the above subject document. Enclosed are comments.

If you have any questions or comments, please call me at (404) 347-3016 or voice mail, (404) 347-3555, x-6459.

Sincerely,

Gena D. Townsend

Gena D. Townsend
Senior Project Manager

cc: Patrick Waters, NCDEHNR
Neal Paul, MCB Camp Lejeune

1.0 General Comments

1. Section 4.2.1, Page 4-2, Paragraph 3, indicates that, as a common laboratory contaminant, maximum concentration of acetone was 780 µg/L at a location of 80-TK-01 (rinsate blank). However, according to the data summary in Appendix J, except for the location of 80-TK-01, other locations show a concentration range from 5 to 13 µg/L. This significant difference may suggest a laboratory error. The text does not provide any explanation; consequently, the data (780 µg/L) was used throughout the report as the level of laboratory contaminant and QA/QC blank to eliminate detected acetone in soil samples (see Section 8.0). The text should present the explanation regarding unusually high acetone in the rinsate blank at one location.

2. Section 4.2.2.2, Pages 4-2 through 4-5, discusses naturally-occurring inorganic elements in groundwater, indicating that Camp Lejeune background groundwater samples were used as guidelines. In a later summary (Section 4.6), the text concludes that some metals occur naturally in shallow groundwater at Camp Lejeune. However, this report does not present a summary of site background and MCB background inorganic levels in groundwater. The text should provide information regarding site background and base background inorganic levels in groundwater. (A Table showing concentrations)

2.0 Specific Comments

1. **Section 1.5, Page 1-4, Paragraph 3.**

   The text contains a typographical error. Whether is misspelled as "wether". This misspelling should be corrected.

2. **Section 2.3, Page 2-6, Paragraph 1, Sentence 10.**

   The text states that existing and newly installed monitoring well locations are provided on Figure 2-2. However, Figure 2-2 presents soil sampling locations. The text should be revised to refer to Figure 2-3 for monitoring well locations.

3. **Figure 2-1.**

   Figure 2-1 identifies soil sampling locations; however, the figure shows other sampling media such as monitoring well locations. As a result of combining sampling activities, the map is too congested. The title of the map should be

changed, or the text should be revised to show only soil sampling locations.

4. **Figures 2-1 and 2-2.**

Figures 2-1 and 2-2 illustrate the soil sampling locations for Site 80. However, background sample locations are not identified. These background sampling locations should be presented, in order to determine the validity of their placement.

5. **Figure 2-3.**

Figure 2-3 shows monitoring well sample locations. However, the figure fails to identify the symbols west of Brewster Road. The figure should be revised accordingly.

6. **Section 3.1, Page 3-1, Paragraph 2, Sentence 2.**

The text states that the site has a slight slope to the southwest. However, the contour lines on Figure 3 show that the site slopes northeast, and the flow direction in the drainage ditch is to the northeast. The text should clarify the topographical description by stating that the site slopes upward to the southwest or downward to the northeast.

7. **Section 3.4.1, Page 3-3, Paragraph 2, Sentence 1.**

The text states that the aquifers of interest include the surficial and Castle Hayne aquifers. However, the text does not explain why the lower aquifers are not of concern.

8. **Section 3.4.2, Page 3-6, Paragraph 2, Sentence 7.**

The text states that the calculated transmissivity value from the slug tests is two orders of magnitude higher than the past average pump test value. However, the text does not explain the significance of this discrepancy. The text should add an explanation for the difference between the transmissivity values of the slug tests and the pump tests.

9. **Section 4.1, Page 4-1, Paragraph 4, Sentence 3.**

The text states that in this report compounds which were not detected and had inaccurate or imprecise quantitation limits were assigned the "UJ" qualifier. According to the Appendices (data summaries), there are many data qualified as "U" instead of "UJ". However, a definition of "U" qualifier is not provided in this report. The text should be revised to give the definition of the "U" qualifier.

10. **Section 4.3, Page 4-5, Paragraph 3, Sentence 4.**

The text indicates that organic contaminants were detected in the surface and subsurface soil within OU12. However, the surface and subsurface soil should be within OU11 Site 80. The text should be revised accordingly.

11. **Section 4.4.1.1, Page 4-6, Paragraph 5, Sentence 1.**

The text indicates that the predominant semivolatiles detected in the surface soil at Site 80 were polynuclear aromatic hydrocarbons (PAH) constituents. However, the text does not list each individual constituent in PAH. Since PAH represents a group of chemicals, without listing all detected constituents in the PAH group, it is difficult to verify the data presented in this report. The constituents in the PAH group should be listed in this section.

12. **Section 4.6, Page 4-12, Paragraph 5, Sentence 5.**

The text states that lead and chromium in groundwater, which were found above Federal and/or State standards, occur naturally in shallow groundwater at Camp Lejeune. However, the text does not present references about those naturally occurring contaminants. The references should be presented in the summary.

13. **Section 8.0, Pages 8-1 and 8-2.**

The text presents conclusions of the investigation. However, among the 14 conclusions, the text only mentions that dieldrin is the COPC contributing to the greatest percentage of the risk. The text does not address other COPCs identified by this investigation. All COPCs identified by this investigation should be addressed in the final conclusions.