03.01-04/12/96-01656

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

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

April 12, 1996

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. 6 - Site 36

Dear Ms. Landman:

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

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

Enclosure

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

## 1.0 General Comments

1. Section 3.3.1, Page 3-7, states that Portland cement was used to backfill the annular space in the moderately to strongly acidic soil on site. However, over a period of time the acidic environment of the soil will eventually lead to the deterioration of the grout. ECB recommends that monitoring wells used for prolonged monitoring should be grouted with pure gold bentonite to prevent deterioration of the well.

2. Table 4-2 states that metals in surface and subsurface soils were compared to twice the average base background positive concentrations for priority pollutant metals. However, Table 4-2 defines the detections as base background concentrations (see column 5). In addition, the distribution column notes that some detections exceeded the base background (BB). Appendix P shows that, in fact, base background concentrations listed in Table 4-2 are two times the average base background levels. The text and the table should consistently label base background comparison data as twice the average base background concentrations.

3. Table 4-2 states that total metals in surface water and sediment were compared to the range of positive detections in upgradient samples at MCB, Camp Lejeune. However, a positive detection can not be compared to a range of values. It appears that maximum metal detections in surface water and sediment were compared to the maximum background concentrations. The text should state that total metals in surface water and sediment were compared to maximum positive detections in upgradient samples.

4. Figure 4-1 and 4-2 identifies an area in the NW corner where pesticides mixed with PCBs may have been disposed. Samples taken from this area contain low levels of pesticides and PCBs. Presently, there is one only sample (SB-01I) that exceeds the industrial cleanup level of 10ppm of PCBs. Although, there is not an exceedance of the risk levels, there are numerous hits in the vicinity. If this site warrants a no action (no monitoring) recommendation, the option of a soil removal should be evaluated.

## 2.0 Specific Comments

1. **Section 1.4.4, Page 1-15, Paragraph 4, Sentence 6.**
The text states that aerial photographic figures are provided on Figures 1-7 through 1-11. However, the aerial photographic figures are Figures 1-8 through 1-12. The text should be revised accordingly.

2. **Table 1-9.**
Table 1-9 shows units of concentration of the contaminants in sediment as $\mu$g/L. However, for sediment, the unit of

concentration should be µg/kg or ppb. The text should be corrected accordingly.

3. **Table 1-11**.
The note on Table 1-11 indicates units of concentration as milligrams per kilogram or parts per billion (ppb). However, ppb is not used in the table. The text should be revised accordingly.

4. **Figure 2-2**.
Figure 2-2 depicts water table elevations. However, the water table elevations measured on May 9 are missing on several monitoring wells including 36-GW08 and 36-GW04. The figures should be revised.

5. **Figure 2-6**.
Figure 2-6 shows potable supply wells within a one-mile radius of Site 36. The one-mile radius, however, is mislabeled as the boundary for Site 36. The circle around Site 36 on Figure 2-6 should be labeled as the one-mile radius around Site 36.

6. **Section 3.2.2, Page 3-3, Paragraph 4**.
The text states that three additional borings to the west of the study area were advanced to assess background conditions (36-BB-SB01, SB02, SB03) and refers to Figure 3-1. However, 36-BB-SB03 is not located on Figure 3-1. Soil boring 36-BB-SB03 should be added to Figure 3.1. If the boring is located off of the map, this fact should be noted in the text.

7. **Section 5.2.1, Page 5-3, Paragraph 4, Sentence 1**.
The text states that contaminants "is surface soils with high vapor pressures"; however, the word "is" should be "in", to make the sentence grammatically correct.

8. **Section 5.2.4, Page 5-5, Paragraph 1, Sentence 10**.
The text states that contaminants have not been detected in the Castle Hayne aquifer at Site 36. However, in Section 4.3.2.2, the text states that manganese was detected in well 36-GW11DW at a concentration that exceeds the NCWQS. The text should be revised to state that manganese was detected above the NCWQS at one well in the Castle Hayne aquifer at Site 36.