04.01-02/13/97-01860

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

February 13, 1997

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
Phase I Treatability Study Report
Operable Unit 14 - Site 69

Dear Ms. Landman:

The Environmental Protection Agency (EPA) 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: Dave Lown, NCDEHNR
Neal Paul, MCB Camp Lejeune

1.0 GENERAL COMMENTS

1 Section 5, Page 21, presents the conclusions regarding the operation of both the UVB and the KGB systems. A number of issues such as the removal rates are addressed; however, the most important conclusion on the Treatability Study objectives is not given. This section should be revised to state that both systems failed to achieve the objectives of the Treatability Study.

2 Section 5, Page 21, states that a 15% reduction was observed in the KGB. However, the text does not address the significance of the 15% reduction or its applicability to the future operation of both systems. The Treatability Study should address these issues accordingly.

In addition, the text should present the comparison of analytical results from samples obtained outside the treatability study areas and concentrations obtained during the RI while the study is in progress. This comparison will enable the efficiency and effectiveness of the system to be more accurately determined.

3 Section 5, Page 21, Paragraph 3, Bullet 4, indicates that the increase of DCE and VC is a typical trend for chlorinated solvent contaminated sites due to the break down of PCE and TCE. However, this conclusion raises serious questions regarding the application of the KGB system at the site. Any remedial technology designed for a contaminated site should not result in an increase of another contaminant of concern at the site. Such a trend will not serve the purpose of the remediation. The text should address this issue for the KGB system.

4 Section 6.0, Page 22, Paragraph 1, Sentence 3, states that there is evidence a circulation cell exists, although the KGB system's zone of influence is not known. However, this statement contradicts paragraph 3, sentence 1, which states that the test to determine the presence of a KGB circulation cell was inconclusive. The discrepancy should be resolved accordingly.

2.0 Specific Comments

1. **Section 3.3.1, Page 9, Paragraph 1, Sentence 7.** The text states that the double cased screen was located such that the top of the screen was 6-9 inches below the water table. However, this statement contradicts the depiction on Figure 3-4 which shows the top of the screen above the water table. The discrepancy should be resolved.

2. **Section 3.10.1, Page 14, Paragraph 3 Sentence 2.**
The text mentions the UXO clearance subcontractor. However, UXO is not included in the acronym list. UXO should be added to the acronym list.

3. **Section 5, Page 21, Paragraph 3, Bullet 5.**
The text states the VOC removal rate is 10.10 kg for the KGB system operation. However, the text does not discuss the significance of such a removal rate. Therefore, it is unclear whether the 10.10 kg removal rate is high or low. The text should address the significance of the VOC removal rate.

4. **Figure 2-2**
Figure 2-2 shows the Rifle Range Chemical Dump. However, the boundaries of the subject site are not clearly depicted and labeled. The figure should be revised accordingly.

5. **Figure 4-2.**
Figure 4-2 shows water levels in Deep UVB monitoring wells. However, the figure does not have a legend. A legend should be added to the figure.

This comment applies to all figures in the document.

6. **Figure 4-3.**
Figure 4-3 depicts the travel time for dye in deep monitoring wells. However, the figure is difficult to interpret after reading Section 4.2 which states that the dye travels from monitoring well 18IW to the UVB well in 24 days. It would appear that the node point for the contour lines should be monitoring well 18IW. The node point on the figure appears to be between 3 to 6 days. The figure should be clarified accordingly.

7. **Figure 4-7.**
This figure shows a high increase of TCE in UVB shallow wells. However, this high TCE increase is not discussed. Due to the high level of TCE after the treatment, a discussion should be presented.

8. **Tables 4-16 and 4-20.**
The two tables show the total COIs per well and the total average COIs. However, the rationale of showing the total COIs per well and the total average COIs is not clear. The target VOCs before and after the treatment normally are compared compound-by-compound. The text should present the rationale accordingly. In addition, the term COI should be added to the list of acronyms.