03.01/09/28/94-01289

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

September 28, 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4WD-FFB

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

SUBJ: MCB Camp Lejeune - OU9
Draft RI/FS Work Plan

Dear Ms. Saksvig:

The Environmental Protection Agency has partially completed its review of the above subject document, dated July 29, 1994. Comments are enclosed.

If there are any questions or comments, please call me at (404) 347-3016 or 347-3555, vmx-6459.

Sincerely,

Gena D. Townsend

Gena D. Townsend
Senior Project Manager

Enclosure

cc: Mr. Neal Paul, MCB Camp Lejeune
Mr. Patrick Watters, NCDEHNR

1.0 GENERAL COMMENTS

Draft RI/FS Work Plan

1. The location and identification of Site 73 - have not been clearly defined in the Draft RI/FS Work Plan. Section 2.3 of the Draft RI/FS Work Plan identifies Site 73 as the Courthouse Bay Disposal Area, which is consistent with the site identification in the Final Site Management Plan for Camp Lejeune. However, in Figure 3-2 of the Draft RI/FS Work Plan, Site 73 is identified as the Amphibious Vehicle Maintenance Area which includes numerous above- and below-ground storage tanks, oil/water separators and vehicle wash racks.

Draft RI/FS Sampling and Analysis Plan

2. There are numerous inconsistencies between Section 5 which presents investigative procedures and Appendices A through S which outline standard operating procedures. For example, in Section 5.2 the text states that the bentonite seal will be allowed to hydrate for at least 8 hours before the completion of the well. However in Appendix D, Section 5.1, the text states that the bentonite seal will be allowed to hydrate for at least 20 minutes before the completion of the well, which is not in compliance with the Region IV ECB SOPQAM. These inconsistencies should be resolved.

2.0 SPECIFIC COMMENTS

Draft RI/FS Work Plan

1. Pages 2-13, 2-14, 2-15, Section 2.3.4:
As part of the summary of previous site investigations at Site 73, please indicate the suites of parameters that were analyzed for during each study. The text lists the contaminants that were detected in samples collected during these investigations. However, no mention is made of whether other chemical parameter groups that could have been present at site were also analyzed for.

2. Figure 2-5:
In order to evaluate possible groundwater and surface water migration pathways, topographic contour lines should be shown on this figure.

3. Figure 2-10:

The boundaries for Site 73 should be shown on this map. It is not clear if Site 73 incorporates the entire Amphibious Vehicle Maintenance Area which includes numerous above- and below-ground storage tanks or only incorporates the area of suspected waste oil and battery acid disposal. (See General Comment No. 1)

4. Figure 2-10:
In order to evaluate groundwater flow direction beneath Site 73, potentiometric contour lines should be shown on this figure.

5. Page 4-2, Section 4.4.1.2.1:
The text provides the soil sampling scheme for Site 65. However, background samples have not been designated. Please identify which background samples will be used for comparison to samples collected at Site 65.

Draft RI/FS Sampling and Analysis Plan

6. Page 3-2, Section 3.1.2.1, Paragraph 5:
The text states that the soil investigation at Site 65 includes seven proposed soil borings. However, paragraph 1 of the same section states that 13 soil borings will be drilled. Please correct this inconsistency.

7. Page 3-2, Section 3.1.2.1:
The text provides the locations of proposed soil borings at Site 65. However, the text does not indicate which of these locations are upgradient of Site 65. Please provide this information.

8. Page 3-8, Section 3.3:
The text states that analyte-free water will be used for both the trip blanks and the equipment rinsate blanks. Analyte-free/organic-free water is the accepted type of water for the preparation of these blanks.

9. Page 3-9, Section 3.3:
The text states that the two field blanks, collected to check ambient conditions, will be prepared using potable water for one set and deionized water for another set. Analyte-free/organic-free water should be used for the preparation of these blanks.

10. Page 3-10, Section 3.4.2:
The text states that groundwater generated during well development and purging of the upgradient wells will be discharged onto the ground. Since there is a possibility that this water may have been contaminated by other sources located upgradient from Sites 65 and 73, all water generated

during well development should be containerized and tested. All investigation- derived waste water determined to be hazardous should be appropriately transported and disposed of in a approved landfill as outlined in EPA's "Guide to Management of Investigation-Derived Wastes."

11. Table 3-2:
This table lists the investigation-derived waste management options for sites 65 and 73. The analytical results of samples previously collected at these sites indicated the presence of contaminated soils and groundwater. Therefore, all investigation-derived soil and groundwater waste should be containerized and labeled pending analytical results. Materials removed from test pits should not placed back into the pits until the material has been tested and determined to be non-hazardous. This material can be temporarily stockpiled on plastic sheeting and covered until the material has been adequately tested. See Specific Comment No. 10.

12. Figure 3-1:
To evaluate possible surface water and groundwater contaminant pathways, topographic contour lines should be shown on this figure.

13. Page 5-10, Section 5.3.1:
The text refers to the procedure for filtering groundwater samples, but there is no indication that unfiltered groundwater samples will also be obtained. EPA Region IV requires that unfiltered groundwater samples be obtained for risk assessment purposes.

14. Page 5-10, Section 5.4:
Regarding the collection of surface water samples, the text should state that sampling personnel will stand downstream of the sample location in order to minimize the effects of disturbed sediment on the sample.

15. Page 5-10, Section 5.4:
It is not clear in the text if the Volatile Organic Analyses (VOA) sample bottles will be prepreserved. Please clarify.

16. Appendix A, SOP F102, Section 5.2:
The text states that surface soil samples can be collected with either plastic or stainless steel scoops or trowels. According to the Region IV ECB SOPQAM, all soil samples should be collected with stainless steel scoops or trowels.

17. Appendix D, SOP F103, Section 5.1:
The text states that the sodium bentonite seal will be allow to hydrate for at last 20 minutes before further completion of the well. The Region IV ECB SOPQAM states that the

bentonite seal should be allowed to hydrate for 8 hours before further completion of the well.

18. Appendix D, SOP F103, Figure A-1:
This figure shows a monitoring well construction detail. In the figure, the bentonite seal is detailed to be 1 foot thick. However, in Section 5.1, the text states that the bentonite seal will be at least two to three feet thick. Please correct this inconsistency.

19. Appendix F, SOP F105, Section 5.3.2:
The text should state that, with the exception of samples that will be analyzed for volatile organic compounds, all soil samples will be thoroughly mixed before being transferred to the appropriate sample containers.

20. Appendix N, SOP F502, Section 5.1:
The text should list the specific step-by-step Region IV decontamination procedures for field sampling equipment.