04.01 - 06/25/97-01878

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

IN REPLY REFER TO:
6286
BEMD

25 JUN 1997

From: Commanding General, Marine Corps Base, Camp Lejeune
To: Commander, Atlantic Division, Naval Facilities Engineering Command, (Code 1823), 1510 Gilbert Street, Norfolk, Virginia 23511-2699

Subj: DRAFT-FINAL FEASIBILITY STUDY, OPERABLE UNIT NO. 6, SITE 54

Encl: (1) Comments on the Draft-Final Feasibility Study, Operable Unit No. 6, Site 54, Marine Corps Base, Camp Lejeune

1. The subject document has been reviewed by the Installation Restoration Division. Our comments are contained in the enclosure.

2. It is requested that the Installation Restoration Division, Environmental Management Department, Marine Corps Base, Camp Lejeune be notified of the actions taken to accommodate the comments.

3. If you have any questions or comments, please contact Mr. Brian Marshburn, Installation Restoration Division, Environmental Management Department, at DSN 484-5068, or commercial (910) 451-5068.

Scott A Brewer

SCOTT A. BREWER, PE
By direction

Comments on the Feasibility Study Unit No. 6, Site 54, Marine Corps Base, Camp Lejeune

General Comments

1. Sections 1 and 2 of the Feasibility Study appear to be very lengthy information that has been covered by past documentation (i.e., the Remedial Investigation). Therefore, these sections could be abridged.

2. Four of the remedial action alternatives incorporate operational controls that would transform the current fire training pit accelerant JP-type fuel to propane. Please note that any conversion of accelerants or any augmentation of the fire training pit should have the concurrence of the MCAS fire and safety officials.

3. Please provide a more detailed explanation of how the net present worth (NPW) values are obtained for the remedial alternative actions (RAA) selected during the final screening.

4. Briefly explain what will be involved in the 5-year reviews to ensure adequate protection of human health and the environment should the selected remedial action alternative be a "no action plan".

Specific Comments

5. §4.1.3 RAA 3: Natural Attenuation with Operational Controls, Page 4-3, Paragraph 3. Are the benefits of the microcosm study worth the costs incurred? A breakdown of these costs would be appreciated.

6. §4.1.3 RAA 3: Natural Attenuation with Operational Controls, Page 4-3, Paragraph 4. Is it necessary to incorporate aquifer use restrictions to prohibit future use of the surficial aquifer within a 1-mile radius of the site? Could this radius length be reduced and still maintain adequate protection of human health?

7. §4.1.4 RAA 4: Extraction and On-Site Treatment with Operational Controls, Page 4-4, Paragraph 7. Change "collected" to "collect" in the first sentence.

8. §4.0 Figures Section, Figure 4-1 through 4-4 and 4-6. Please modify this drawing to include the location of future wells as discussed during the 5/28/97 meeting with representives of the North Carolina Department of Environment, Health, and Natural Resources at the Wilmington Regional Office.

9. §5.0 Table 5-3: Direct and Indirect Capital Costs. Please explain why the installation of two shallow wells under RAA 3 is more expensive than installing the same number of wells under RAA 2.

10. § 5.0 Table 5-3: Direct and Indirect Capital Expenses, Well replacement costs for RAA 3 are for a one-time replacement of nine wells. If the one-time replacement is appropriate under this remedial action alternative, why is the frequency of replacing a variable number of wells every 5 years necessary under RAA 2, RAA 4, and RAA 5 (Tables 5-2, 5-4, and 5-5, respectively). Do the well replacement costs include well abandonment costs?

11. § 5.0 Tables 5-2, 5-3, 5-4 and 5-5: Annual O&M Costs, RAAs 2 through 5 require 3 days at 10 hours per day for two people (this includes four hours per person for travel) to purge and sample, at the most, 11 wells. Can these actions not be accomplished in a lesser amount of time?

12. § 5.0 Tables 5-2, 5-3, 5-4 and 5-5: Annual O&M Costs, For shipping costs, please clarify why the costs will be incurred on a daily basis, when the samples could be sent off to the analytical laboratory on the final day of sample collection.

13. § 5.0 Tables 5-2, 5-3, 5-4, and 5-5: Annual O&M Costs, The estimated costs for reporting of laboratory results are $3000 per sampling event. This cost seems expensive for simply reporting analytical data. Please explain the basis of this estimate.

14. § 5.0 Tables 5-3: Annual O&M Costs, "Groundwater Monitoring O&M" indicates that a total of 88 hours will be required for labor per sampling event. This quantity should be 60 hours (3 days/event, 10 hrs/day, 2 people) which would bring the subtotal cost to $1,920 per sampling event.

15. § 5.0 Tables 5-3 and 5-4: Direct and Indirect Capital Expenses, Groundwater modeling is proposed for RAAs 3 and 4a, but not for RAAs 4b and 5. Please explain. Also, a breakdown of the costs to be incurred for groundwater modeling and data evaluation would be appreciated.

16. § 5.0 Cost Estimate Assumptions for RAAs 2 and 3, The unit costs listed in these tables for linear footage per well installation, 2" PVC schedule 40 screen, and protective cover are high compared to local rates charged for these items. Can you please justify the costs and explain the type of miscellaneous expenses that might be incurred during well installation. Also, the format of the Cost Estimate Assumptions for RAA 2 should be in the same format as those for RAA 3.