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State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

DEHNR

May 20, 1994

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1823-1
Attention: MCB Camp Lejeune, RPM
Ms. Linda Berry, P. E.
Norfolk, Virginia 23511-6287

Commanding General
Attention: AC/S, EMD/IRD
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004

RE: Draft Final Feasibility Study, Draft Final Proposed Remedial Action Plan and Draft Final Record of Decision for Operable Unit #5 (site 2)

Dear Ms. Berry:

The referenced documents have been received and reviewed by the North Carolina Superfund Section. Our comments are attached. Please call me at (919) 733-2801 if you have any questions about this.

Sincerely,

Patrick Watters

Patrick Watters
Environmental Engineer
Superfund Section

Attachment

cc: Gena Townsend, US EPA Region IV
Neal Paul, MCB Camp Lejeune
Bruce Reed, DEHNR - Wilmington Regional Office

North Carolina Superfund Comments
Camp Lejeune MCB Operable Unit 5
Draft Final Feasibility Study
Draft Final Proposed Remedial Action Plan
Draft Final Record of Decision

Draft Final Feasibility Study

1. Page ES-8, Table ES-2
This table indicates that the groundwater remediation level for lead is 15.5 µg/L. The Federal MCL and North Carolina groundwater standard for lead is 15.0 µg/L.

2. Page 1-17 to 1-23, Tables 1-2, 1-4, 1-6, 1-8
These tables include a column for Base-Specific Background. The text does not provide any information on how this concentration range was established. This comment was also noted with regard to the Draft Remedial Investigation Report for OU 5.

3. Page 2-9, Section 2.1.7
This section is concerned with the uncertainties associated with the RGO calculations yet it provides only a general discussion of the types of uncertainties associated with calculating risk based RGOs. There is no quantitative uncertainty analysis provided in this section or in Appendix B (RGO Calculations) to assess the accuracy of the input values.

4. Page 2-11, Section 2.3
This section states that the TCE level seen in well 2GW3D would be expected to decrease to potable levels within a reasonable time period through natural dispersion. Please indicate what characteristics of the site support this expectation and define what is meant by a reasonable time period.

5. Page 4-2, Section 4.1.2
This section indicates that the groundwater monitoring program associated with RAA No. 2 includes only TCL volatiles as the analytical requirements. Since there are elevated metals in the groundwater which will probably be part of a requested state variance it would be appropriate to include metals as part of the groundwater monitoring program.

6. Page 5-4, Section 5.1.2
This section states that the analytical requirements for the long-term groundwater monitoring required under RAA No. 2 would be TCL volatile organics and TAL inorganics. This is appropriate but is not consistent with the analytical requirements indicated in Section 4.1.2 (Page 4-2). See also comment number 5.

7. Page 5-7, Section 5.1.3
The analytical requirements for RAA No. 3 should include TAL inorganics. See also comments 5 and 6.

8. Page 5-17, Section 5.1.6
The third and fourth sentences of the "Compliance with ARARs" paragraph needs to be revised for clarity.

9. Page 5-18, Section 5.1.6
The paragraph on "Short-Term Effectiveness" incorrectly indicates that aquifer drawdown is a potential environmental impact of the air sparging and soil venting remedial action alternative (RAA No. 6).

10. Page 5-19, Section 5.2.2
This section indicates that RAA Nos. 1 and 2 will "potentially" exceed Federal and State ARARs. It is incorrect to indicate this as a "potential" given that Federal and State ARARs have already been exceeded for this site and that RAA Nos. 1 and 2 would allow the continued contamination of groundwater.

Draft Final Proposed Remedial Action Plan

11. Page 10
The last bullet on the page indicates in part that the groundwater remedial alternative will help to mitigate future contamination of Overs Creek. While it is conceivable that the Time Critical Removal Action will help Overs Creek it is unclear how the proposed limited action groundwater alternative will help Overs Creek other than from a monitoring perspective.

12. Page 13
The last paragraph on this page indicates that after the TCRA there will be no risks associated with soil, sediment or surface water at OU 5. It is inappropriate to state that there are no risks associated with a site regardless of the degree of corrective or remedial action taken.

Draft Final Record of Decision

13. General
The NC State regulations for Hazardous and Solid Waste (15A NCAC 13A and 13B respectively) should be included as ARARs.