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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

June 27, 1994

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

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

RE: Draft RI/FS Project Plans and Health & Safety Plan for Operable Unit 8, (Site 16); Operable Unit 11, (Sites 7 and 80) and; Operable Unit 12, (Site 3).

Dear Ms. Landman:

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
Draft RI/FS Project Plan and Health & Safety Plan
Camp Lejeune Operable Units 8, 11 and 12

RI/FS Project Plan

General Comments

1. In light of the recent discussions of metals in groundwater, it would seem appropriate to take additional samples for TSS, TDS, etc. as proposed for Operable Unit 5.

2. As a reminder, the North Carolina Solid Waste regulations require the proper disposal of solid waste "generated" from trenching activities.

Specific Comments

3. Page 2-19, Table 2-3
The table does not include the North Carolina groundwater standard values for copper (1000 µg/L) and chromium (50 µg/L). The table also indicates that the USEPA MCL for chromium is for trivalent chromium but it is not clear if the "Range of Positive Detections" column from Table 2-3 includes values only for chromium (III). The North Carolina standard for chromium is total and does not differentiate between the trivalent and hexavalent forms. Note also that the NC groundwater standard for lead is 15 µg/L instead of 50 µg/L.

4. Page 4-21, Table 4-2
The Preliminary Remediation Goal for chromium in groundwater is shown as 1000 µg/L (MCL value). Other Camp Lejeune reports use 100µg/L as the MCL. NC groundwater standard for chromium is more restrictive (50 µg/L) and therefore should be the remediation goal.

5. Page 4-23, Table 4-4
Several groundwater contaminants from Table 2-8 are not included as potential contaminants of concern in Table 4-4. Please explain the rationale for excluding these compounds.
- 2-methylnaphthalene (max value = 1,500 µg/l)
- phenanthrene (max value = 1,600 µg/l)
- dibenzofuran (max value = 1,100 µg/l)

Also, the USEPA MCL for chrysene is 2 µg/l in Table 2-8 and 0.2 µg/l in Table 4-4.

Several soil contaminants from Table 2-9 are not included as potential contaminants of concern in Table 4-4. Please explain the rationale for excluding these compounds.
- acenaphthene (max value = 37,000 µg/kg)
- anthracene (max value = 8,600 µg/kg)
- 2-methylnaphthalene (max value = 26,000 µg/kg)
- phenanthrene (max value = 81,000 µg/kg)
- dibenzofuran (max value = 35,000 µg/kg)

6. Page 3-3, Section 3.1.2.1
The fourth paragraph indicates that soil samples are not scheduled to be pulled from the Site 16 trenches. The soil excavated from the trenches should be sampled to verify that it is nonhazardous prior to being backfilled.

7. Page 3-3, Section 3.1.3
This section states that 4 shallow wells are proposed for the groundwater investigation. Figure 3-3 shows 6 shallow wells.

8. Page 3-7, Section 3.2.2.1
The second paragraph in this section states that the subsurface soil samples for site 7 will be taken just above the groundwater table, which is estimated to be ~ 5 feet bgs. Table 2-4 on page 2-21 indicates there are elevated concentrations of several contaminants at a depth between 3 and 12 feet bgs. It is not clear if the proposed subsurface sampling scheme will be deep enough to adequately characterize the suspected areas of contamination identified from previous investigations.

9. Page 3-14, Section 3.3.3
This section states that one intermediate well will be placed near well 80MW02. Figure 3-8 shows the intermediate well near 80MW03.

10. Page 3-17, Section 3.4.2.1
The description of the subsurface soil sampling scheme for site 3 indicates that subsurface soil samples will be taken from just above the water table and at "mid-depth". Table 2-9 on page 2-35 indicates there are elevated concentrations of several contaminants at depths greater than 12 feet. It is not clear if the proposed subsurface sampling scheme will be deep enough to adequately characterize the suspected areas of contamination identified from previous investigations.

Health & Safety Plan (H&SP)

11. Page 4-1, Section 4.3
This section mentions the use of an unexploded ordnance (UXO) contractor in the discussion of Work Zones however this is not mentioned anywhere else in the H&SP. Please clarify if a UXO contractor is needed for these sites.