

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

September 22, 1994

Commander, Atlantic Division
 Naval Facilities Engineering Command
 Code 1823-1

Attention: MCB Camp Lejeune, RPM
 Ms. Linda Saksvig, 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 RI/FS Project Plans and Health & Safety Plan
 for Operable Unit 9.

Dear Ms. Saksvig:

The referenced documents have been received and reviewed by the North Carolina Superfund Section. Our comments are attached. Comments on the Health & Safety Plan are attached as a memo from our Industrial Hygienist to myself. 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 Plans and Health & Safety Plan
Camp Lejeune Operable Unit 9

RI/FS Work Plan

1. General

Suspected metals contamination in the groundwater at other areas of Camp Lejeune had created a need to include Total Dissolved Solids (TDS) and Total Suspended Solids (TSS) analyses as part of the normal groundwater investigation procedure. However, recent revelations about a low-flow groundwater sampling technique may make these analyses unnecessary. If the TSS and TDS analyses are to be used, consider the following comments:

- Only one groundwater sample is to be analyzed for TSS and TDS. One TSS and TDS analysis may not provide the objective evidence necessary to demonstrate that the metals contamination in the groundwater is not a problem. See Section 4.4.1.3.2 of the Work Plan and Section 3.1.3.2 of the Sampling & Analysis Plan.
- Please explain why TSS and TDS analyses are being performed for Site 65 but not for Site 73. See Section 4.4.2.3.1 of the Work Plan and Section 3.2.3.1 of the Sampling & Analysis Plan.
- Table 4-1 does not show TSS and TDS analyses for either of the OU 9 sites. This comment also applies to Table 6-1 in the Sampling and Analysis Plan.

2. Page 2-7, Section 2.1.10

This section estimates the area of MCB Camp Lejeune at 170 square miles whereas section 2.1.1 uses a value of 236 square miles.

3. Page 2-9, Section 2.2.3

The last sentence of this section needs to be revised for clarity.

4. Page 2-11, Section 2.2.5

It would be helpful to include copies of some or all of these photographs in the Work Plan or the Sampling & Analysis Plan.

5. Page 2-12, Section 2.3.1

Aboveground storage tanks (ASTs) and underground storage tanks (USTs) are a significant factor at Site 73. It would be helpful to include a separate figure dedicated to showing the locations of these tanks.

6. Page 2-12, Section 2.3.3
If possible, please identify the locations of the USTs noted in the last paragraph of this section.
7. Page 2-13, Section 2.3.4.1
The "GW" well locations in this section are identified as "MW" on Figure 2-11.
8. Page 2-13, Section 2.3.4.2
It would be helpful to identify the locations of the TPH and BTEX contamination noted in the second paragraph of this section.
9. Page 2-14, Section 2.3.4.3
It would be helpful to identify the locations of the BTEX contamination noted in the first paragraph of this section.
10. Page 2-15, Section 2.3.4.4
It would be helpful to include copies of some or all of these photographs in the Work Plan or the Sampling & Analysis Plan.
11. Page 4-4, Section 4.4.1.3 and Page 4-7, Section 4.4.2.3
Please indicate if there are any plans to sample any of the supply wells in the vicinity of the OU 9 sites or if existing data is available.
12. Page 4-2, Section 4.4.1.2.1 and Figure 4-1
The are two soil boring locations on Figure 4-1 identified as 65SB05.
13. Page 4-6, Section 4.4.2.2.1
This section has a minor discrepancy in the number of soil borings proposed for Site 73. The first sentence indicates 43 borings while the description later in the paragraph discusses only 40. This was corrected in Section 3.2.2.1 of the Sampling & Analysis Plan.
14. Table 4-4
This table shows the groundwater remediation goal for copper as 7 ug/L. The NC groundwater standard for copper is 1000 ug/L.
15. Table 4-5
The following remediation goals should be revised to reflect NC environmental standards.

- Ethylbenzene	29 ug/L	NC groundwater std.
- Xylenes (total)	530 ug/L	NC groundwater std.
- Lead	15 ug/L	NC groundwater std.
- Chromium	50 ug/L	NC groundwater std.
- Lead	25 ug/L	NC surface water std.

Sampling and Analysis Plan

16. Page 3-7, Section 3.2.3

This section states that 27 soil borings are anticipated to be completed as Type II monitoring wells for Site 73. Section 4.4.2.3 of the Work Plan indicates 24.

September 13, 1994

TO: Patrick Watters
FROM: David Lilley *DBL*
RE: Comments prepared on the Draft Remedial
Investigation/Feasibility Study Health and Safety Plan for
Operable Unit 9 (Sites 65 and 73), MCB Camp Lejeune, NC

After reviewing the above mentioned document, I offer the following comments:

1. Page 3-3, section 3.2.2.3: It is recommended that the noise levels in high noise areas be measured and the appropriate action as per 29 CFR 1910.95 be taken.
2. Table 3-1: The exposure limit for the DDT Series is given as 1 mg/kg; it should be 1 mg/m³.

The groundwater concentration for benzene is given as 17 ug/kg; it should be 17 ug/L.

3. Page 5-1: According to the manufacturer's literature, air purifying respirators should not be used to protect against vinyl chloride. Therefore, level C should not be used in areas where vinyl chloride may be present.
4. Page 8-3, phone number for ambulance (off base): The area code for the 455 exchange is now 910.