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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

August 3, 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: Final Remedial Investigation Report for Operable Unit No. 1 (Sites 21, 24, and 78), MCB Camp Lejeune.

Dear Ms. Berry:

The referenced document has 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
Final Remedial Investigation Report for
Camp Lejeune Operable Unit 1 (Sites 21, 24, and 78)

General

We reviewed the responses to our comments on the draft version of the RI Report for Operable Unit 1 and would like to reiterate a few concerns. Note that we have not received a response to our comments on the draft final version of the RI Report therefore some of those comments are included here as well.

1. Deep Aquifer

Our questions regarding the deep aquifer (as expressed for both the draft and draft final RI Report) are concerned with having adequate data or rationale to support conclusions on the extent of groundwater contamination. In the context of providing adequate data or rationale, please consider the following.

With regard to Site 21, we agree that the contamination seen in the groundwater at Site 21 is from Site 78. The concern here is having enough data to estimate the horizontal and vertical extent of that contamination. For example, supply wells 601 and 602 are on the western boundary of OU1 and have shown elevated levels of TCE, PCE, Benzene, 1,2-Dichloroethane, Toluene, and Vinyl Chloride (Table 1-4 of the RI Report) possibly related to Site 78, yet the closest deep monitoring well (78GW31-3) is over 1000 feet away (Figure 1-5). It appears likely that the deep groundwater has been impacted downgradient from the western boundary of Site 78 however this has not been fully investigated or explained. Please provide adequate basis and rationale for not investigating the deep aquifer in this area.

With regard to Site 24, the concern here is having enough data or rationale to clearly show if the deep groundwater has or has not been impacted. The response to the original question indicated that the deep groundwater at Site 24 is not impacted based on site history and recent groundwater sampling results for deep supply wells in the area. Please explain how the site history helps to show that the deep groundwater has not been impacted.

With regard to the deep supply wells in the area, there is only one supply well (HP-630) near Site 24 and the sample results for this well are not included in Table 1-4. This supply well is upgradient of Site 24 and does not appear to be useful for demonstrating if any Site 24 contaminants are in both the shallow and deep aquifers. Please provide appropriate rationale in the RI report to show that the intermediate and deep groundwater at Site 24 has not been impacted by metals or pesticide contamination.

2. Page 2-12, Section 2.3.1
(Originally comment #12 on the Draft RI Report). The response to the comment indicated that building 1480 was not part of the soil gas survey. Section 2.3.1 still references building 1480 as being part of that survey.

3. Figure 2-3
(Originally comment #13 on the Draft RI Report). Regarding the "probable refuse" area located on Site 21, please provide adequate basis and rationale to support the assumptions and conclusions expressed in the response to the original comment. Our concern here is that this area is immediately adjacent to the pesticide disposal area and is being dismissed without any soil samples being taken.

4. Page 2-10, Section 2.2.1.1
(Originally comment #6 on the Draft Final RI Report). Since the vegetation and understory restricted the geophysical coverage for Site 24, it would seem appropriate to survey these areas during the winter months when the vegetation is less dense.

The areas with a conductivity greater than 10 mmhos/m are not legible on our copies of the figures in Appendix C.

5. Page 2-38, Section 2.3.3.3
(Originally comment #7 on the Draft Final RI Report).
The paragraph on soil sample locations states that there are five main areas of concern associated with Site 78. Page 2-37 lists only three areas of concern.

6. Page 4-53, Section 4.2.3.3
(Originally comment #10 on the Draft Final RI Report).
The draft RI report stated in this section that the contamination seen at sample location 78-BD-SW07 may be due to activities along an access road near Beaver Dam Creek. A comment was made about the nature of the activities along this access road. The draft final and final RI reports both indicate that stormwater runoff from Site 78 or Holcomb Blvd. may be the cause for the contamination. Please provide some insights as to why the explanation changed. The concern here is if there was inadequate basis for stating the first reason then it should not have been included in the RI report to begin with.

7. Table 6-16
(Originally comment #18 on the Draft Final RI Report).
Our copy of the RI report included two copies of Table 6-16. The listed contaminants appear to be the same however the order is different for each table.