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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

November 27, 1995

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1823
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 Proposed Remedial Action Plans and Record of Decision for Operable Unit 8 (Site 16), MCB Camp Lejeune.

Dear Ms. Landman:

The referenced documents have been received and reviewed by the North Carolina Superfund Section. Our comments are attached. Also, comments on the Baseline Human Health Risk Assessment from the RI Report are attached as a memo from Mr. David Lilley, 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 Parris, DEHNR - Wilmington Regional Office

Draft Proposed Remedial Action Plan
Draft Record of Decision
Operable Unit 8, Site 16
MCB Camp Lejeune
Jacksonville, NC

1. **General**

The proposed plan for this site is one of no action. The State agrees with this assessment except for one area of concern at Site 16. Soil sampling point SB05 showed elevated levels of inorganics in the surface soil sample. Of particular concern is the lead value of 5210J mg/Kg which is over a factor of 10 above EPA recommended residential cleanup levels.

We recognize that these elevated levels of inorganics were only seen in this one surface soil sample however the State believes further investigation is warranted due to the magnitude of the lead in this soil sample. This conclusion was also expressed by our Industrial Hygienist in his comments on the risk assessment performed for this site.

Location SB05 needs to be resampled for inorganics and additional surface and subsurface soil samples need to be taken between SB02 and MW05 (north-south direction) and between SB04 and SB06 (east-west direction) to determine the extent of this hot spot. This additional sampling (with the possibility of a limited removal action) will need to be performed before the State can be comfortable with a no action ROD for this site.

November 17, 1995

TO: Patrick Watters

FROM: David Lilley DBL

RE: Comments prepared on the Baseline Human Health Risk Assessment, OU 8 (Site 16), MCB Camp Lejeune, NC

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

1. Page 6-4, Section 6.2.1.5, second sentence: It is unclear to the reader what this sentence means. Please explain.

2. Page 6-10, Section 6.3.1: It is unclear to the reader why a trespasser scenario was not evaluated. Please explain.

3. Table 6-10: It is unclear to the reader how the future construction worker will be exposed to the subsurface soil without being exposed to the surface soil. Please explain.

4. Pages 6-18 (Section 6.3.4.5) and 6-19 (Section 6.3.4.6): It is recommended the current EPA Region IV guidance on exposure to VOCs during showering be followed. This guidance states that it should be assumed that showering exposure is equivalent to exposure from ingestion of two liters of contaminated water per day. This method includes exposures via inhalation and dermal routes and is applied to adults and children.

5. Appendix N, soil ingestion and surface water ingestion calculations: The Reference Dose for manganese is listed in IRIS as 1.4×10^{-1}, not 5.00×10^{-3} as listed in the referenced table.

6. Appendix N, dermal CDI calculations: It appears as though oral CSFs and RfDs were used instead of dermal CSFs and Rfds. To convert an oral RfD to a dermal Rfd:

$$\text{Dermal RfD} = \text{Oral RfD} \times \begin{cases} 0.8 \text{ (for VOCs)} \\ 0.5 \text{ (for SVOCs)} \\ 0.2 \text{ (for Inorganics)} \end{cases}$$

To convert an oral CSF to a dermal CSF:

$$\text{Dermal CSF} = \text{Oral CSF} / \begin{cases} 0.8 \text{ (for VOCs)} \\ 0.5 \text{ (for SVOCs)} \\ 0.2 \text{ (for Inorganics)} \end{cases}$$

Please recalculate the dermal risks using the above methodology.

7. Page 6-27, Sections 6.5.1.1, 6.5.1.2, and 6.5.1.3: The sentence reading: "These receptors are then not at risk from carcinogens in Site 16 (media)" should be removed. The receptors **are** at risk from contaminants in these media, however, it has been determined that the risks posed are within acceptable limits.

8. Page 6-30, Section 6.6.5: It is true lead does not have any toxicity information promulgated by EPA, however, OSWER Directive # 9355.4-12 recommends screening levels for lead in soil for residential land use of 400 mg/kg. This is below the maximum concentration for lead of 5,210 mg/kg found in sample 16-BD-SB05-00. It is recommended this hot spot be addressed.

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