

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

April 21, 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 Remedial Investigation Report for  
 Operable Unit #5 (site 2)

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  
 Jack Butler, NC Superfund Section

North Carolina Superfund Comments  
Camp Lejeune MCB Operable Unit 5  
Draft Final Remedial Investigation Report

GENERAL

1. The North Carolina Groundwater Standard (Title 15, Subchapter 2L) for lead is 15  $\mu\text{g/L}$ . There were several places where the incorrect value was cited. For example, Table 1-5 indicates 5.0  $\mu\text{g/L}$  as the North Carolina lead standard, the table on page 4-19 used 50  $\mu\text{g/L}$ , and Figure 4-10 does not indicate that the State groundwater standard for lead is exceeded for those sample results above 15  $\mu\text{g/L}$ .
2. References are made in this and other reports to using base specific background values as a means to help determine the significance of contaminant concentrations identified on the various sites. Table 6-2 provides concentration ranges for various elements but there was no information provided on how this range was developed or of the source and/or quality of the data. If this data is to be used as points of comparison, it would be beneficial to provide information on how, where and when this data was obtained.

As a suggestion, it may be worthwhile to compile this background data in a separate report that could be referenced as needed. This report could include information on where and when the samples were taken in addition to details on sample integrity and other QA/QC concerns. It is conceivable that such a report would be useful in addressing regulatory compliance issues as well as identifying potential contaminants of concern.

3. Page 2-16, Section 2.6  
The last sentence of this section states that none of the listed parameters (Vinyl Chloride, BTEX) were detected in any of the soil gas samples for Site 2. Tables 1 through 4 of Appendix E (Soil Gas Survey Report) show numerous gas sample analytical results above the indicated reporting limit. Please explain this apparent discrepancy.
4. Page 4-37, Section 4.3.4  
The first paragraph discussing the source of carbon disulfide contamination in the surface water at the Overs Creek Area is confusing. The first two sentences state the source is unknown and that there is no indication this is associated with activities at Site 2. The third sentence indicates that it was not detected in the railroad drainage ditches however the next sentence states that it may be attributable to this discharge.

5. Page 6-7, Section 6.2.1.1  
The first paragraph on this page includes some discussion of toluene and xylene as naturally occurring compounds. If this claim is to be used it needs to be supported by appropriate background samples.
6. Page 6-32, Section 6.3.4.2  
The conversion factor (CF) for the dermal contact CDI equation should be  $1.0E-06$  kg/mg instead of  $10E-6$  kg/mg.
7. Pages 6-51 through 6-58, Sections 6.5.1 and 6.6  
These sections provide summaries of the quantitative results of the human health baseline risk assessment for Site 2. The terminology (i.e. above, below, within) used to describe the relationship of the calculated risk to the target risk range ( $1E-4$  to  $1E-6$ ) is not always consistent. In one case, a risk of  $7E-4$  is indicated to be "below" the risk range. In another example, the same risk value of  $7E-4$  is said to be "above" the risk range. Likewise, a risk of  $2E-3$  is indicated as both above and below the target risk range for two different scenarios.