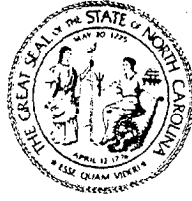


03.01-06/15/93-00965



State of North Carolina
Department of Environment, Health, and Natural Resources
512 North Salisbury Street • Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

Division of Solid Waste Management
Telephone (919) 733-4996

Jonathan B. Howes, Secretary

June 15, 1993

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1822
Attention: MCB Camp Lejeune, RPM
Ms. Linda Berry, P.E.
Norfolk, Virginia 23511-6287

Commanding General
Attention: AC/S, Environmental Management
Building 1, Marine Corps Base
Camp Lejeune, NC 28542-5001

RE: Draft Final Remedial Investigation for Operable Unit, No. 3, Site 48
MCB Camp Lejeune, Jacksonville, Onslow County, NC

The North Carolina Superfund Section has reviewed the referenced document. Our comments are attached. If you have any questions please contact me at (919) 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "E. Peter Burger".

E. Peter Burger, P.E.
Environmental Engineer
NC Superfund Section

Attachment

cc: Neil Paul, MCB Camp Lejeune
Michelle Glenn, US EPA Region IV

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984 Fax # 919-733-0513

SITE 48
Draft Final Remedial Investigation
MCB Camp Lejeune
Jacksonville, NC
COMMENTS

1. Page 4-5, 2nd paragraph and Table 4-4, page 5-7: Please provide "reference" for Base-Specific Concentrations. The source of this data is not specified.
2. Page 4-27, 5th paragraph: Please correct text to read "subsurface sediment soil sample" to read "subsurface sediment sample." I think this is what the author intended, although it is a moot point.
3. Page 5-1 3rd paragraph, 2nd and 3rd sentence: The argument that because metals occur naturally in soils, the metals concentration in groundwater is also naturally occurring, is not valid. This is an assumption on the part of the author regardless of how probable this relationship may be.

4th and 5th sentence: Please provide some reasoning for the conclusion that TCE is not a site related contaminant.
4. Page 6-5: The criteria outlined in the Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A) (RAGS) for excluding common laboratory contaminants from the list of chemicals of concern needs to be followed.
5. Page 6-5, Second paragraph, fifth sentence: A chemical not being historically associated with the site is not a reason to drop it from the list of chemicals of concern.
6. Page 6-7, first paragraph: Acetone has been dropped from the list of chemicals of concern because it may be an artifact of pesticide-grade isopropanol. See comment #1.
7. Page 6-10: It is unclear to the reader why surface water and sediment samples in the New River were analyzed for organics, but surface water and sediment samples from the Marsh Area and the Intermittent Tributary were not analyzed for organics.
8. Page 6-20, Ingestion of Biota: It is unclear to the reader why residential adults may be exposed via this pathway but not residential children. Are there currently residents on the site other than base personnel?
9. Page 6-21, Section 6.3.2.4, Air: It appears as though the information in this paragraph contradicts the information presented in Figure 1, page 6-20.

10. Page 6-24 and 6-26: In a residential scenario, EPA currently recommends soil ingestion rates of 100 mg/day for adults and 200 mg/day for children.
11. Page 6-28: It is unlikely an adult resident would wear a long sleeve shirt, pants, and shoes in North Carolina in the summer. It is recommended a skin surface area of 4,800 cm² be used.
12. Page 6-39: According to the cited document (RAGS, Part A) page 6-45, 6.5 grams/day as a fish consumption rate should be used with an exposure frequency of 365 days/year. The reader was unable to locate the consumption rate of 54 grams/day with an exposure frequency of 350 days/year in RAGs Part A.
13. Page 6-45, second paragraph: The risk accepted in the state of North Carolina is 1.0E-06.
14. Page 6-46: Adult exposure, not that of a child, needs to be used to determine the risk posed by carcinogens.
15. Page 6-53, second paragraph: Risk associated with the potential use of groundwater (showering, washing clothes, cooking, etc.) must be evaluated. The reader was unable to find any supportive evidence for the last sentence in this paragraph.
16. Page 6-53, third paragraph: The NC Superfund's policy on sampling is no filtering. Unfiltered sampling data must be included.
17. Page 6-53, third paragraph: It is stated that groundwater sampled from monitoring wells cannot be considered representative of potable groundwater. Please explain. It is also stated that the use of total inorganic analytical results over estimates the potential human health risks. Please explain.
18. Page 7-1: It is claimed that phenol found at 3 ug/l is below drinking water standards. The reader could not find the drinking water standard for phenol in this report.
19. Page 7-2, Human Health Risk Assessment: It is stated that there is no risk to human health. This wording is unacceptable. It should read "risks at the site were below acceptable levels."
20. Page 7-3, Conclusions/Recommendations: It is stated that environmental quality is good. This is a value judgement and should be removed.
21. Page 7-3, Conclusions/ Recommendations: It is stated that media at the site pose no adverse impacts to public health. It should read "risks at the site were below acceptable levels."