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Department of Environment, Health, and Natural Resources
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James B. Hunt, Jr., Governor

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

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May 5, 1993

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1822
Attn: MCB Camp Lejeune, RPM
Mr. Byron Brant, PE
Norfolk, Virginia 23511-6287

Commanding General
Attn: AC/S, Environmental Management
Building 1, Marine Corps Base
Camp Lejeune, NC 28592-5001

RE: Draft Remedial Investigation Report for Operable Unit #3 (Site 48)

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,

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

Attachment

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

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SITE 48
Draft Remedial Investigation
MCB Camp Lejeune
Jacksonville, North Carolina

COMMENTS

General

The North Carolina Superfund Section has reviewed "EPA Comments" regarding Risk Assessment and concurs with their comments.

Specific

ES-6 Conclusions, 1st paragraph: Please expand, what type of contamination would be expected from the reported disposal of mercury at this site. Mercury is insoluble in water and migration from the point of disposal may be insignificant. Can the lack of evidence of mercury contamination support the finding that no mercury disposal took place.

1-1 3rd paragraph: Please correct 2nd sentence to read that the"RI serves as the basis for the **baseline** risk assessment...

2-29 Section 2.6.2.1: The text describing the number of stations and samples obtained from the New River, marsh area and the tributary does not agree with Figure 2-5 and Table 2-6. Please correct.

4.2: Please indicate in footnotes if "J" is biased high or low on all tables.

4-6 2nd paragraph and Table 4-4: The text on page 4-6 and Table 4-4 refer to Base Specific Background Levels. Please provide reference indicating location, date and analysis methods.

4.7 Table 4-4: Please indicate where soil samples were obtained to determine "Background Concentrations."

4-15 1st and 2nd paragraph: Manganese appears in groundwater at 585 ppbs and 539 ppb, which is significantly above the level of 50 ppb to 120 ppb in the public water supply (are those values before or after treatment?). The source of manganese may very well be site related. Where are the results of the soil samples for this bore hole?

4-27 4th paragraph: Correct 2nd sentence to read "PAHs in the subsurface **sediment** sample"...

6-1 Public Health Advisory, last sentence: It should be noted that exposure also includes future exposure.

6-3 Section 6.2.1, 1st sentence: Correct establish to established.

6-3 Last paragraph, 4th sentence: It is noted that pesticide contamination is not site related. Although the levels of pesticide contaminants are not significant the presence of pesticides may very well be site related.

6-7 Section 6.3.1.3 Groundwater: Future use scenario must be used in the Base Line Risks Assessment.

6-9 Section 6.4.2.4, last sentence: Please state "...render the groundwater or surface water unsuitable..."

SITE 48
DRAFT REMEDIAL INVESTIGATION
MCB CAMP LEJEUNE
JACKSONVILLE, NORTH CAROLINA
TOXICOLOGIST COMMENTS

5-2 Section 5.3: The statement is made that because metals occur naturally, the metals that are present in groundwater samples occur from natural sources. The evidence provided does not support this claim.

5-2 Section 5.3: The statement is made that the low concentration and frequency of detection of trichloroethene in groundwater leads to the conclusion that this contaminant is not site related. The evidence provided does not support this claim. Even if the organics were not site related, this is not the issue, the contaminants were found on-site.

5-3, last paragraph: It is stated the presence of inorganics may be due to sediment particles suspended in the surface water due to agitation. This statement alone is not a valid justification for dropping the inorganics from the list of chemicals of concern.

6-1, Section 6.1: It is stated that to assess public health risk, contaminants must be related by either natural processes or by human action. It is unclear to the reader why this is necessary, what does this mean?

6-1, Section 6.1: It is stated risk is a function of both toxicity and exposure. It should be noted that risk also includes the potential for exposure.

6-1: The reference marked March 25, 1992 was not found in the references section.

6-2: It is unclear to the reader what message is conveyed in the third paragraph.

6-3, Section 6.2.1: What parameters were used in determining bis(2-ethylhexyl)phthalate and methylene chloride concentrations were most likely lab blank contamination?

6-3, Section 6.2.1: Stating that contaminants were not detected in any media other than groundwater is not a valid reason for the elimination of the contaminants from the list of chemicals of concern.

6-3, last paragraph: It is irrelevant whether the DDT and its breakdown products are site related, the contaminants were found on-site.

6-3, last paragraph: Simply stating acetone is an artifact of pesticide-grade isopropanol is not proof the acetone detected in the surface soil was due to decontamination procedures. Was acetone present in lab or equipment blanks? If EPA's Standard Operating Procedures for decontaminating field equipment, which require a 24 hour air drying period after the final isopropanol rinse, had been followed, acetone should not be detected.

6-4, first paragraph: If inorganics are to be eliminated because it is believed past or current practices have not impacted the site, the background levels for inorganics needs to be provided for comparison. Please reference source of background data and tables used to compare the data.

6-4, Section 6.2.4: Stating that toluene and xylene were not detected in any media other than surface water and not believed to be site related are not valid reasons for dropping them as chemicals of concern.

6-5, first paragraph: The parameters used to screen chemicals should be given or the reader should be referred to the appropriate table.

6-5: The US EPA, May 1992 reference is not in the reference section of this document.

6-6, Section 6.3.1.1: The possibility for future land use is not accounted for.

6-7: It is recommended inorganics be considered via the dermal route. It is also recommended a future land use scenario be accounted for.

6-7, Section 6.3.1.3: The North Carolina Superfund Section does not accept leaving groundwater contaminated because nobody is currently drinking it.