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NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

NCDENR

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February 22, 1999

Commander, Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Building N-26)
Norfolk, Virginia 23511-2699

Attention: Ms. Katherine Landman
Navy Technical Representative
Code 18232

Commanding General
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004

Attention: AC/S, EMD/IRD

RE: NC Superfund Section Comments
Draft Focused RI Report, ROD, and PRAP
Operable Unit 17 (Sites 90, 91, and 92)
Marine Corps Base, Camp Lejeune

Dear Ms. Landman:

We have reviewed these documents and have the following comments:

1. Sites 90, 91 and 92. State and Federal Criteria and Standards. In addition to the Base background levels, soil values should be screened using EPA's Soil Screening Guidance for the soil-to-groundwater pathway (using NC parameters and groundwater standards) and the Region III RBC's for direct contact.

2. Site 90. Tetrachloroethene (PCE) and bis(2-ethylhexyl)phthalate were detected in groundwater samples from permanent monitoring wells at levels greater than the 2L standards. Permanent wells that exceeded the standards should be re-sampled and analyzed for VOCs and SVOCs. Depending on the results, groundwater monitoring and institutional controls may be required for State concurrence with the ROD. If re-sampling confirms that bis(2-ethylhexyl)phthalate is

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related to quality control issues, then additional sampling will not be required. PCE will require four contiguous sampling events of below-standard analysis before monitoring can be discontinued.

3. Site 91. Chloroform and bis(2-ethylhexyl)phthalate were detected above North Carolina 2L standards in groundwater samples from permanent monitoring wells. Permanent wells that exceeded the standards should be re-sampled and analyzed for VOCs and SVOCs. Depending on the results, groundwater monitoring and institutional controls may be required for State concurrence with the ROD. If re-sampling confirms that these contaminants are related to decontamination or sampling procedures, than additional sampling will not be required.

4. Comments on the risk assessments for each site are attached.

Please call me at (919) 733-2801, extension 278 if you have any questions.

Sincerely,

David J. Lown, LG, PE
Geological Engineer
Superfund Section

Attachments

cc: Gena Townsend, US EPA Region IV
Neal Paul, MCB Camp Lejeune

June 9, 1998

TO: David Lown

FROM: David Lilley

RE: Comments prepared on the Draft Focused Remedial Investigation OU 17 (Site 90), Sections 5.0 and 6.0, Marine Corps Base, Camp Lejeune, NC
August 15, 1997

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

1. Page 5-1, Section 5.2.1: Surface soil should be sampled and evaluated in this Qualitative Risk Assessment.

2. Page 5-5, Section 5.2.3.1, Mobile Laboratory: It is claimed that five subsurface soil samples were analyzed for VOCs in the mobile laboratory. The information in Table 4-4 shows seven subsurface soil samples were analyzed for VOCs. Please explain this inconsistency.

3. Page 6-3: Since the NCWQS was exceeded for tetrachloroethene in sample IR90-MW04-01, some sort of follow-up (such as periodic sampling) is recommended.

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June 10, 1998

TO: David Lown

FROM: David Lilley

RE: Comments prepared on the Draft Focused Remedial Investigation OU 17 (Site 91), Sections 5.0 and 6.0, Marine Corps Base, Camp Lejeune, NC
August 15, 1997

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

1. Page 5-1, Section 5.2.1: Surface soil should be sampled and evaluated in this Qualitative Risk Assessment.

2. Page 5-5, Section 5.2.3.1, Mobile Laboratory: It is claimed that five subsurface soil samples were analyzed for VOCs in the mobile laboratory. The information in Table 4-4 shows eight subsurface soil samples were analyzed for VOCs. Please explain this inconsistency.

3. Page 5-6, Section 5.2.3.2, Fixed Base Laboratory: It is claimed that nine groundwater samples were analyzed for VOCs, SVOCs, and PCBs/Pesticides in the fixed base laboratory. The information in Table 4-8 shows ten groundwater samples were analyzed for these parameters in one round of sampling, and eight analyzed in another round. Which samples were used for this risk assessment and why?

4. Page 5-7, Section 5.3, Subsurface Soil: It is claimed the detected concentrations of aluminum in the soil were within base background levels. According to Table 5-1, twice the average base specific background concentration for aluminum is 7,375.3 mg/kg, and the high concentration of aluminum was 8,250 mg/kg, which is above background. Please correct the statement on page 5-7 to be consistent with the data in Table 5-1.

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June 11, 1998

TO: David Lown

FROM: David Lilley

RE: Comments prepared on the Draft Focused Remedial Investigation OU 17 (Site 92), Sections 5.0 and 6.0, Marine Corps Base, Camp Lejeune, NC
August 15, 1997

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

1. Page 5-1, Section 5.2.1: Surface soil should be sampled and evaluated in this Qualitative Risk Assessment.

2. Table 5-1: The high concentration for chromium was 9.6 mg/kg found in sample 92-TWSB02-03, not 5.2 mg/kg as claimed.

3. Page 5-6, Section 5.2.3.2, Mobile Laboratory: It is claimed that seven samples were analyzed by the mobile laboratory. Table 4-7 shows six samples, and the summary table shows four samples. How many samples were analyzed? Which samples were used for this risk assessment and why?

4. Page 5-7, Section 5.3, Subsurface Soil: It is claimed the detected concentrations of arsenic in the soil were within base background levels. According to Table 5-1, twice the average base specific background concentration for arsenic is 1.97 mg/kg, and the high concentration of arsenic was 5.5 mg/kg, which is above background. The same situation exists for iron (high concentration: 8,240 mg/kg with 7,252.1 mg/kg as twice the background). Please correct the statement on page 5-7 to be consistent with the data in Table 5-1.

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