1/25/06 -03850

Capito, Bonnie P CIV NAVFAC Lant

From: Jackson, Rodger W CIV NAVFAC Lant
Sent: Thursday, January 26, 2006 1:23 PM
To: Capito, Bonnie P CIV NAVFAC Lant
Subject: FW: Response to Comments, SWMU 303/318 RFI
Attachments: Response to DENR HH Comments.doc; Response to DENR Comments.doc; Response to DENR Eco Comments.doc

Camp Lejeune Site File

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-----Original Message-----
From: Louise.Palmer@CH2M.com [mailto:Louise.Palmer@CH2M.com]
Sent: Wednesday, January 25, 2006 14:37
To: Randy.McElveen@ncmail.net
Cc: kenneth.w.cobb@usmc.mil; Jackson, Rodger W CIV NAVFAC Lant; JCULP@mbakercorp.com
Subject: Response to Comments, SWMU 303/318 RFI

Randy, please review the attached responses to comments for the referenced report, and let us know if you have any questions or items to discuss. We will not finalize the report until we get your concurrence on these responses.

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Response to Comments, NC DENR

SWMU 303/318 Draft RFI, September 2005; Human Health Risk Assessment Portions

David Lilley, 12/12/2005

1. Page 6-23: The latest version of ProUCL is 3.00.02 and can be found at: http://www.epa.gov/nerlesd1/tsc/form.htm. Please use this updated version in future risk assessments.

Response: The most current version of ProUCL is being used in all risk assessments.

2. Appendix H, Table 1: The exposure route listed for fugitive dusts should be inhalation, not ingestion and dermal as listed on this table.

Response: Table 1 will be revised as per this comment in the final version of the report.

3. Appendix H: The difference between Tables 2.3 and 2.4 (Table 2.4 is for the construction worker scenario) should be made clear in the heading of these tables.

Response: Tables 2.3 and 2.4 will be revised in the final report.

4. Appendix H, Table 5.1: 1,2,3-trichlorobenzene does not appear in IRIS as claimed.

Response: 1,2,3-Trichlorobenzene was used as a surrogate. A footnote will be added to Table 5.1 to indicate this.

5. Appendix H, Table 3.2: Why are there 2 different naphthalenes listed with 2 different concentrations? This seems to have been carried throughout the risk assessment. Please correct.

Response: Naphthalene was analyzed as both a VOC and SVOC with two different detection limits given for each analysis. Therefore, both were

carried through the risk assessment to avoid underestimating potential risk from exposure to detected concentrations of naphthalene.

6. Appendix H, Table 7.4: It appears as though an ABS of 0.1 was used for 1,4-dichlorobenzene. Since 1,4-dichlorobenzene is an organic, shouldn't the ABS be the default of 0.01 as appears on Table 4.3 of Appendix H?

Response: The typographical error for the ABS value for 1,4-dichlorobenzene will be corrected. In addition, all applicable risk calculations will be revised as per the comment.

7. Appendix H, Tables 7.x: It is unclear to the reader why dermal exposure to benzene in the deep groundwater was not quantified. Please explain.

Response: An error was located in the Excel model that caused dermal exposure results for benzene in deep groundwater not to be pulled into Tables 7.x. The model will be revised to correct this error.

8. Appendix H, Tables 7.x: The fugitive dust inhalation intake values for 1,4-dichlorobenzene and chrysene seem to be off by several orders of magnitude. Please check the inhalation spreadsheets to make sure they are working properly.

Response: The inhalation spreadsheets will be reviewed. Please note the approach for choosing volatilization factors (VFs) will be revised as follows: the VF provided on the USEPA Region 9 PRG table will be used first, if available. Otherwise, a VF will be calculated based on USEPA OSWER guidance.

Response to Comments, NC DENR

SWMU 303/318 Draft RFI, September 2005

Randy McElveen, 11/24/2005

General Comment

The SWMU 303/318 RFI Report appears to be in good order and represents the data well. Please notify the NC Superfund Section Representative as to the days that additional work will be done on base.

***Response*:** The NC Superfund Section Representative will be notified when additional work is scheduled.

Specific Comments

1. The first paragraph at the top of page 2-8 is inconsistent with EPA SOPs and State guidance and practice for purging and sampling monitoring wells for RCRA Waste. Before varying from the EPA SOPs for groundwater sampling, proposed purge and sampling changes must be discussed with the partnering team to assure that proper techniques are being used consistent State and EPA guidance. At a minimum the State requires that one well volume be purged prior to sampling and purging and sampling should be done at a reasonable extraction rate not to include micro purge rates.

***Response*:** Purging and sampling at SWMU 303/318 were conducted in accordance with the approved work plan. This was discussed at a recent partnering meeting. However, in the future, purging and sampling will follow the revisions described in the new Master Sampling Plan, as approved.

2. Potable well PSWAS4140 is labeled as PSWHP-4140 in the last sentence at the top of page 3-3. Please make appropriate changes.

***Response*:** The well designation on page 3-3 will be changed to PSWAS-4140.

3. Figure 3-9 shows the groundwater contour map of the Upper Castle Hayne Aquifer as of February 2005. Why is there such a significant difference in groundwater elevation data and groundwater flow direction between January 2005 (Figure 3-10) and February 2005 (Figure 3-9)? If Figure 3-9 under sparging conditions at Site 86

please discuss this in the appropriate sections of the report and make a note to that effect on Figure 3-9.

***Response*:** A note will be added to Figure 3-9. However, Section 3.3.2 discusses the significant difference in groundwater elevation and flow direction on pages 3-7 and 3-8.

4. As stated in the last paragraph on page 8-2 the soil data and shallow groundwater data indicate that the TCE and degradation products in the intermediate and deep aquifer are not site related. Will there be an additional effort to locate the source of the TCE in this area or will the plume be treated along with the 303/318 plume?

***Response*:** K. Cobb of EMD is preparing a presentation for the MCB Partnering Team to discuss the site and potential actions. It is our understanding that the Partnering Team will recommend a path forward following the presentation in March 2006.

5. The recommendations at the bottom of page 8-4 include removal of contaminated soil beneath the wash pad. Will this include removal of the surface contamination at SWMU 318-SS01 and SWMU318-IS02 as discussed in the first paragraph on page 8-4?

***Response*:** The Interim Measure is expected to include all the soil contamination in the vicinity of the wash pad.

6. Dave Lilley with the NC Superfund Section is in the process of reviewing the Human Health and Ecological Risk Assessment sections of the Report. His comments will be forwarded when they are completed.

***Response*:** Responses to risk assessment comments are attached.

Response to Comments, NC DENR

SWMU 303/318 Draft RFI, September 2005; Ecological Risk Assessment Portions

David Lilley, 12/19/2005

1. According to Table 4-9, the concentration of isopropylbenzene in SWMU318-GW01 is 4 ug/L, not 2J ug/L as appears in Table 7-4. Please correct and double check Tables 7-3 and 7-3 to ensure the lab data has been copied to these tables correctly.

Response: Values on Table 4-9 reflect mobile laboratory data. Both mobile and fixed base laboratory data were available for SWMU318-GW01. As explained in the final paragraph of Section 7.2.1, fixed based data were preferentially used in the risk assessment. Fixed base data for groundwater sample SWMU318-GW01 are presented on Table 4-12. Isopropylbenzene data on Table 4-12 for SWMU318-GW01 agree with those presented on Table 7-4 and 7-7. Therefore, we believe that no changes to text or tables are necessary.

2. Table 7-3: 1,2,4-trichlorobenzene, 1,3-dichlorobenzene (m-), and 1,4-dichlorobenzene (p-) should all have ESVs of 10 ug/kg according to the 2003 DENR guidance. Please correct.

Response: Screening values on Table 7-3 reflect those values provided by the 2003 DENR Guidance for specific chemicals. Values for "total" chemical classes are only provided on this table if specifically indicated in the guidance. For example, the guidance presents a value for 2,4-dichlorophenol with a note indicating that for this chemical, the value for total dichlorophenols is used as a surrogate. Likewise, the value for total polycyclic chlorinated hydrocarbons is used as a surrogate for 3,3'-dichlorobenzidine as specified in the guidance. In all other instances "total" chemical class values are not used as surrogates for individual chemicals until the refined risk evaluation. Thus, the NCDENR 2003 screening values for total chlorobenzenes, total monochlorophenols, total polycyclic aromatic hydrocarbons, and total phthalates are introduced on Table 7-5 and are used in the refined risk evaluation presented on Table 7-6. Footnotes will be added to Table 7-3 indicating this methodology as follows:

Notes:

NA = Not Applicable/ Not Established

(1) Soil screening values are in microgram per kilogram (ug/kg) for organic compounds and in milligram per kilogram (mg/kg) for inorganic constituents.

(2) Values obtained from *Guidelines for Performing Screening Level Ecological Risk Assessments Within the North Carolina Division of Waste Management* (NCDENR 2003)

(3) The NCDENR (2003) has established a value for total chlorobenzenes, which is introduced in Step 3a (Table 7-5).

(4) The NCDENR (2003) has established a value for total monochlorophenols, which is introduced in Step 3a (Table 7-5).

(5) The NCDENR (2003) has established a value for total polycyclic aromatic hydrocarbons (PAHs), which is introduced in Step 3a (Table 7-5).

(6) The NCDENR (2003) has established a value for total phthalates, which is introduced in Step 3a (Table 7-5).

3. Table 7-6: Since selenium and silver were retained as soil COPCs in Table 7-3, they should appear in Table 7-6. Please correct.

Response: The table will be corrected in the final version of this report.