

8/17/05 - 03773

**Capito, Bonnie P CIV NAVFAC Lant**

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**From:** Jackson, Rodger W CIV NAVFAC Lant  
**Sent:** Thursday, August 18, 2005 2:22 PM  
**To:** Capito, Bonnie P CIV NAVFAC Lant  
**Subject:** FW: MCB Camp Lejeune SWMU 46 Draft RFI

MCB Site file

Rodger W. Jackson, P.E.  
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-----Original Message-----

**From:** Randy McElveen [mailto:Randy.McElveen@ncmail.net]  
**Sent:** Wednesday, August 17, 2005 17:29  
**To:** Louise.Palmer@CH2M.com  
**Cc:** JCULP@mbakercorp.com; Kenneth.W.Cobb@usmc.mil; Jackson, Rodger W CIV NAVFAC Lant; DAVID.LILLEY@ncmail.net  
**Subject:** Re: MCB Camp Lejeune SWMU 46 Draft RFI

Sorry for the delay,

I forwarded it to Dave Lilley and his response was:  
"I have no more comments."

I was trying to get some input on his response but haven't. I think, based on this response from Dave, that the NC Superfund Section can **concur** with the responses to comments on the draft RFI for SWMU 46. The last revised response letter emailed on August 8, 2005 resolved Dave's issue (See Attached). Is that correct Dave?  
Randy McElveen, NC Superfund Section

Louise.Palmer@CH2M.com wrote:

Randy, I can't find in my records if you or Dave Lilly have concurred with these revised responses for the draft RFI report. We are in the process of finalizing the report and would like your concurrence on the responses before we publish it.

Thanks for your consideration.

Louise

-----Original Message-----

**From:** Palmer, Louise/CLT  
**Sent:** August 08, 2005 1:40 PM  
**To:** 'Randy McElveen'  
**Cc:** JCULP@mbakercorp.com; Kenneth.W.Cobb@usmc.mil; rodger.jackson@navy.mil; DAVID

8/22/2005

LILLEY

**Subject:** RE: MCB Camp Lejeune SWMU 46 Draft RFI

Hello, Randy,

Responses to NC DENR comments on the referenced document have been revised per your and Dave Lilly's request, and are presented in "track changes" mode.

Please let me know if you have any other questions or comments.

*Louise Palmer*

CH2M HILL  
4824 Pkwy Plaza Blvd., Suite 200  
Charlotte, NC 28217  
704 329-0072  
fax 704 329-0141

-----Original Message-----

**From:** Randy McElveen [mailto:Randy.McElveen@ncmail.net]

**Sent:** July 27, 2005 10:59 AM

**To:** Palmer, Louise/CLT

**Cc:** JCULP@mbakercorp.com; Kenneth.W.Cobb@usmc.mil; rodger.jackson@navy.mil;

DAVID LILLEY

**Subject:** Re: MCB Camp Lejeune SWMU 46 Draft RFI

Good morning Louise,

Dave Lilley's comments to your responses to the Human Health and Ecological Risk assessments for SWMU 46 are attached. As Dave requests, please clarify your responses so we can move forward. 2 response pages are included on this Word letter.

Randy McElveen, NC Superfund Section

Louise.Palmer@CH2M.com wrote:

Randy, please review the attached response to comments for the referenced report, and let us know if you have any questions or items to discuss. We have supplied it in Word 95 format. We will not finalize the report until we get your concurrence on these responses. A hard copy of the responses will be included with the final report, but I can fax you one now if you need.

*Louise Palmer*

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"He is no fool who gives what he cannot keep to gain what he cannot 1

Jim Elliot, Shadow of the Almighty

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# Response to Comments, NC DENR

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## SWMU 46 Draft RFI, November 2004

Randy McElveen, 12/14/2004

### General Comment

As usual the RCRA Investigation Report appears to be in good order and is very thorough and conservative in the evaluation of the data. As these SWMUs continue to progress along it becomes critical that appropriate sampling and statistical evaluation be completed for the Data Quality Objectives (DQO) process as directed by the EPA Guidance and Systematic Planning for Environmental Decision Making. As stated in the last paragraph on page 6-18 of the Report 'As a result, the assumption of random sampling is not met for the statistical methods described in the 2002 guidance.' It is also clear that for the size of the site sufficient surface and subsurface soil data has not been provided. In the follow-up investigations we need to complete these objectives in order to have defensible data.

It is recommended that where high concentrations of metals are detected in initial samples, that random grid samples be collected in the area adjacent to the SWMU using field instrumentation consistent with EPA guidance. The Department of Energy (DOE) DQO decision process should be used to help guide us in this process <http://www.hanford.gov/dqo> or contact Sebastian Tindall at [sctindal@mail.bhi-erc.com](mailto:sctindal@mail.bhi-erc.com). If this process is followed it will help make our results more defensible. It is believed that good field instruments such as the XRF and OVA along with a small percent of CLP laboratory confirmation samples is sufficient to provide technically defensible data for the DQO process. Another statistically acceptable method is to collect multi-increment samples rather than grab samples at each location. Surface soil sampling can easily be completed for metals using a x-ray florescence (XRF) instrument and a few CLP laboratory grab or multi-increment samples.

The EPA Regions are being trained in this Environmental Decision-Making process with the objective of "institutionalizing" the DQO process. The State of NC is on board with this process as long as it is logically applied.

*Response:* We will consider this approach for future investigations.

### Specific Comments

1. The last paragraph on Page 6-7 states that "Sample concentrations were compared to base-specific (i.e., two time the average concentration) background levels. This method is inconsistent with the CERCLA process that uses the mean plus two standard

deviations. In general the State of NC does accept two times the average concentration. However, we would like to see consistency as much as possible in both programs. If this is the way the background concentration has been and always will be used under the RCRA program then it is acceptable to the State. Please assure consistency within the program.

**Response:** USEPA Region IV guidance, Supplemental Guidance to RAGS: Region IV Bulletins, Human Health Risk Assessment (<http://www.epa.gov/region4/waste/ots/healthbul.htm>) recommends the use of two times the average site-specific background concentration in the COPC selection process. While this differs from the background concentration used in the CERCLA process, Mr. Dave Lilley of NC DENR indicated a preference to following the Region IV guidance. This methodology has been applied to the past several RFI reports.

2. As stated above the Shapiro-Wilkes distribution is not acceptable for this data since the data set is not sufficient and not randomly selected as discussed on page 6-18 and 6-19. We understand that the initial investigation of contamination is almost never initiated with a random sampling process. However, if significant contamination is collected at the SWMU using judgmental sampling it should be followed up with a random sampling process and perhaps some additional judgmental sampling.

**Response:** Comment noted. This approach will be considered for future investigations.

3. Dave Lilley with the NC Superfund Section is in the process of reviewing the Human and Ecological Risk Assessment sections of the report and will provide his comments at a latter date.

**Response:** Comments are addressed below.

### **David Lilley, HHRA Comments, 1/12/2005**

1. Page 6-1, first paragraph: The latest version of RAGS Part D is dated December, 2001. I made this comment in my 6/18/03 comments on the Master Project Plans, RCRA Program. Please use the latest version of RAGS Part D in all human health risk assessments conducted from this point on.

**Response:** As suggested, this report will not be revised. However, all future risk assessments will use the latest version of RAGS Part D. ~~Comment acknowledged.~~

2. Figure 6-1: Please add residents exposure to subsurface soil via the ingestion, dermal, and inhalation exposure routes in order to be consistent with Appendix K, Table 1.

**Response:** The figure will be corrected.

3. As mentioned in my 6/18/03 comments (comment #2), "The maximum concentration (or detection limit, see RAGS Part A, Section 5.3 for guidance) should be used to screen against the Region IX PRGs for detects and nondetects. All screening should take place in RAGS Part D Tables 2.x." All chemicals that were analyzed for should appear in Appendix K, Tables 2.x and either the maximum concentration or the maximum

detection limit should be used to screen against the Region IX PRGs and appropriate ARARs.

**Response:** Comment acknowledged. The maximum concentration or detection limit was used for screening, although those compounds/analytes not detected do not appear in the 2.x tables. However, since this revision will not affect the final conclusions/recommendations for this risk assessment, the Appendix K tables will not be revised for this report. Tables 2.x will be revised for future Camp Lejeune risk assessments.

4. Appendix K, Table 3.4: Although it is not listed on the EPA Region 4 website, more recent guidance, dated August 29, 2002, is provided for the calculation of the groundwater exposure point concentration. The guidance is provided as an attachment to the electronic version of these comments. Please use this guidance for the calculation of the groundwater exposure point concentration in human health risk assessments conducted from this point on.

**Response:** As suggested, this report will not be revised. However, this guidance will be used for the calculation of groundwater exposure point concentrations in all future risk assessments completed for Camp Lejeune. ~~Comment acknowledged.~~

5. Appendix K, Table 1: I've never seen the future adult trespasser scenario quantified, trespassers are usually considered to be adolescents. In future risk assessments, the trespasser scenario may be adequately represented by the teenage receptor.

**Response:** As suggested, this report will not be revised. However, future risk assessments completed for Camp Lejeune will evaluate only the teenage receptor for the trespasser scenario. ~~Comment acknowledged.~~

6. Appendix K, Table 2.5, footnote 2: Please replace "Target Groundwater Concentration" with "Groundwater Quality Standards".

**Response:** The table will be corrected.

7. Please provide the logic by which chemicals were included/excluded in Tables 10.x

**Response:** Only those chemicals identified as risk drivers in the text were intended for inclusion in Tables 10.x. However, in the re-ordering of COPCs to create Tables 10.x, COPCs that were not risk drivers may have inadvertently been left in the table or deleted from the table. The Tables 10.x will be reviewed and revised.

### **David Lilley, Ecological Risk Assessment Comments, 1/12/2005**

1. Table 7-3: The EPA Region 4 screening values with acceptable surrogates have been compiled and listed in Guidelines for Performing Screening Level Ecological Risk Assessments Within The North Carolina Division Of Waste Management, NCDENR Division of Waste Management. October 2003. Please replace the screening values in Table 7-3 with the values in this document.

**Response:** Screening values in Table 7-3 will be replaced with values from NCDENR 2003. Associated text will be edited as appropriate.

~~Changes will be made to the text in the final version of this report. However, these changes will not affect the conclusions of the ERA.~~