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IN REPLY REFER TO:
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Superfund Section of the North Carolina
Department of Environment and Natural Resources
Attn: Mr. David J. Lown, LG, PE
P.O. Box 27687
401 Oberlin Road
Raleigh, North Carolina 27611-7687

SUBJECT: RESPONSE TO COMMENTS FOR THE FOLLOWING DOCUMENTS;
DRAFT FOCUSED REMEDIAL INVESTIGATION REPORT,
OPERABLE UNIT 17 (SITES 90, 91 AND 92), MARINE
CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA, AND
DRAFT SUPPLEMENTAL GROUNDWATER INVESTIGATION
REPORT FOR SITES 90, 91 AND 92, MARINE CORPS BASE,
CAMP LEJEUNE, NORTH CAROLINA

Dear Mr. Lown:

This letter serves as a transmittal letter for the response
to comments for the subject reports as attached.

If you should have any questions, please do not hesitate to
call me at (757) 322-8422.

Sincerely,

K. A. STEVENS
Remedial Program Manager
Installation Restoration Section
(South)
Environmental Programs Branch
Environmental Division
By direction of the Commander

Attachments

Response to Comments Submitted by Mr. David J. Lown, LG, PE, Superfund Section of the North Carolina Department of Environment and Natural Resources, Dated February 22, 1999 to the Draft Focused Remedial Investigation Report, Operable Unit No. 17 (Sites 90, 91, and 92), Marine Corps Base Camp Lejeune, North Carolina.

General Comments

1. Region III tapwater RBCs were used for comparison in the Qualitative Risk Assessment (see Table 5-1 for each site - Note: A section has been added to Sites 90 and 91 portions of the report so Table 5-1 will now be Table 6-1). The EPA's Soil Screening Guidance for the soil-to-groundwater pathway has been added to this table. USEPA Region III tapwater standards were used in the soil-to-groundwater calculations in the case where the NC groundwater standards were not established. Two acetone detections at Site 92 exceeded the soil screening levels for protection of groundwater so acetone was retained as a COPC. All other detections did not exceed soil screening levels for protection of groundwater. The calculation spreadsheets for the SSLs are now included in the report (Tables 6-4 and 6-5 for Sites 90 and 91, Tables 5-4 and 5-5 for Site 92).
2. We concur with this comment. Four rounds of samples will be collected from monitoring well IR90-MW04 because the PCE detection exceeded the NC DENR 2L Standard. There were no PCE detections in IR90-MW04, or any of the other wells sampled during the November supplemental groundwater investigation. Samples will be collected from monitoring wells IR90-MW04, IR90-MW06, IR90-MW13, IR90-MW16IW, IR90-MW18IW, IR91-MW01, IR91-MW03, IR91-MW05, IR91-MW06, IR91-MW08, IR91-MW09, IR91-MW11, IR91-MW13, IR91-MW15, IR91-MW16IW, and IR91-MW17IW to confirm or dispute the original detections of chloroform and bis(2-ethylhexyl)phthalate. The results of the additional sampling and a discussion regarding these results has been included in the final text. Based on the results of this investigation, bis(2-ethylhexyl)phthalate, methylene chloride, acetone, and 2-butanone were determined to be laboratory contaminants. Chloroform was determined to be non-site-related. Further investigation around IR90-MW04 is recommended due to a detection of TCE (likely a breakdown product of the previously detected PCE).
3. Monitoring wells IR91-MW06, IR91-MW08, IR91-MW16IW and IR91-MW17IW will be re-sampled and analyzed for VOCs and SVOCs as per NC DENR's request. The results have been incorporated into the RI. Based on the results of this investigation, methylene chloride, acetone, and 2-butanone were determined to be laboratory contaminants. Some bis(2-ethylhexyl)phthalate was determined to be site-related. 1,4-Dichlorobenzene was detected in a duplicate sample and is considered to be site-related. It is recommended that IR91-MW16IW be sampled under the long-term monitoring program. Site 91 has been included in the LTM program for Camp Lejeune starting in July 2000.
4. Noted.

Specific Comments submitted by Mr. David Lilley for Site 90:

1. The purpose of the Focused RI was to determine if contamination exists near the source in the subsurface soils and groundwater in the vicinity of Site 90. The investigation was "focused" on the source area. If contamination was discovered during the first phase of the Focused RI, then a second phase was to be completed which would complete any data gaps in the first phase. This was outlined in the project plans submitted for Site 90 and agreed to by USEPA Region IV and NC DENR.

Surface soils were not part of this initial phase and therefore were not included in the Qualitative Risk Assessment.

2. The typo in text will be corrected as per the comment.
3. See the response to general comment number 2 submitted by Mr. David J. Lown from the Superfund Section of NC DENR.

Specific Comments submitted by Mr. David Lilley for Site 91:

1. See response to Specific Comments submitted by Mr. David Lilley for Site 90, comment number 1.
2. See response to Specific Comments submitted by Mr. David Lilley for Site 90, comment number 2.
3. There are nine samples (see Table 4-8) that were collected from Site 91 and submitted to the fixed base laboratory for VOCs, SVOCs and pesticides/PCBs. Therefore the text in Section 5.2.3.2 is correct.
4. As stated in the text, all aluminum concentrations were below the maximum background aluminum concentrations found at Camp Lejeune (see Appendix H). Only one detected concentration of aluminum exceeded twice the average base background concentration. This does not indicate a pattern or a source area and does not appear to be site-related. The text has been changed to reflect this.

Specific Comments submitted by Mr. David Lilley for Site 92:

1. See response to Specific Comments submitted by Mr. David Lilley for Site 90, comment number 1.
2. The text will be corrected as per the comment.
3. The text in Section 5.2.3.2 was correct. The typographical errors contained in Table 4-7 will be corrected in the final version of the text.
4. As stated in the text, all arsenic concentrations detected at Site 92 were below the maximum background arsenic concentration found at Camp Lejeune (see Appendix H of the Draft Focused RI report). Only one detected concentration of arsenic exceeded twice the average base background concentration. This does not indicate a pattern or a source area and does not appear to be site-related. The text has been changed to reflect this.

Response to Comments submitted by David J. Lown of the Superfund Section, Naval Facilities Engineering Command, dated March 13, 2000, to the Draft Supplemental Groundwater Investigation Report for Sites 91, 91, and 92 - Marine Corps Base Camp Lejeune, North Carolina.

Comments:

1. This corrections will be made to Table 3-7 as per your comment. Because no Final Supplemental Groundwater Investigation Report will be issued, this table has been incorporated into the Final Focused RI Report as Table 5-5. The interim NCAC 2L standard has been used for comparison. As shown in this table, there were no detections of 1,2,4-trichlorobenzene exceeding this standard. The contaminant has not been determined a contaminant of concern.
2. Monitoring wells 91-MW05 and 91-MW13 have been included as a part of the Camp Lejeune Long Term Monitoring (LTM) program and were monitored beginning in July 2000. Monitoring will continue until the contaminant concentrations decrease to below the North Carolina groundwater standards for each contaminant of concern for this site.
3. See response to Comment 2.
4. The level of 1,4-Dichlorobenzene exceeds the USEPA Region III RBC in monitoring well 91-MW16, and it is therefore recommended to be monitored until the level of 1,4-Dichlorobenzene decreases to below regulatory levels. If the level is below the regulatory level this well will be dropped from the monitoring program.