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(804) 445-8637

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

Waste Management Division
United States Environmental Protection Agency,
Region IV
Attn: Ms. Michelle Glenn
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Re: MCB Camp Lejeune; Responses to North Carolina DEHNR-Draft RI for Site 48, MCAS Mercury Dump, MCB Camp Lejeune, North Carolina

Dear Ms. Glenn:

We have received the North Carolina DEHNR Draft RI and PRAP for Site 48 (letter dated May 5, 1993) to the subject draft document. The Navy/Marine Corps responses to these comments are enclosed.

Any questions concerning these responses should be directed to Ms. Linda Berry at (804) 445-8637.

Sincerely,

L. A. BOUCHER, P.E.
Head
Installation Restoration Section
(South)
Environmental Programs Branch
Environmental Quality Division
By direction of the Commander

Encl:
Response to North Carolina DEHNR Draft RI Report for Site 48, MCB Camp Lejeune, North Carolina

Copy to:
NC DEHNR (Mr. Peter Burger)
MCB Camp Lejeune (Mr. Neal Paul)

Blind copy to:
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18S, LGBDoc:epa48

Response to Comments Submitted by the North Carolina DEHNR on the Draft RI Report for Site 48, MCB Camp Lejeune Comment Letter Dated May 5, 1993

Response to General Comments

1. No response required.

Responses to Specific Comments

1. The conclusion has been re-written to indicate that the site has not been impacted by the reported disposal of mercury. With respect to the question posed by the comment ("does the lack of evidence of mercury contamination support the finding that no mercury disposal took place"), we did not conclude that no mercury disposal took place and we cannot speculate on why mercury contamination was not found.

2. The word "baseline" has been added to the sentence.

3. Table 2-6 has been corrected to indicate the number of samples collected per station.

4. The data were validated in accordance with EPA functional guidelines. Under these guidelines, the data did not have to be qualified as "biased low" or "biased high" and therefore, data were only qualified as "estimated" (i.e., with a "J" qualifier). To re-validate the data and incorporate the results in the RI for purposes of determining whether the reported value may or may not be higher than reported, would not be feasible or necessary.

5. The RI and risk assessment sections both refer to the location of the base-specific background samples.

6. The location of background samples has been included in the text.

7. There is no soil data indicating elevated levels of manganese which could be attributable to a source of contamination. Soil results are presented in Section 4. Elevated levels of manganese were detected in groundwater at other sites also, confirming the reference that manganese is elevated in groundwater throughout MCB Camp Lejeune. The manganese in groundwater is not related to previous disposal activities.

8. The word "soil" has been changed to "sediment."

9. A quantitative risk assessment will be performed in subsequent versions of the RI report to address USEPAs concerns regarding future land uses. As part of this quantitative risk assessment future potential exposures to site-related soils, groundwater, surface water, sediment and biota will be estimated for children,

adolescents, and adults.

10. The correction has been made in accordance with the comment.

11. As part of the revised RI report, the organic contaminants, 4,4′-DDE, 4,4′-DDD, and 4,4′-DDT will be retained as Contaminants of Concern for further evaluation since they are present in one sample. However, these contaminants are not believed to be present in the one soil sample as a result of disposal activities.

12. As part of the revised Base Line Risk Assessment, groundwater scenarios (i.e., ingestion and dermal contact) will be estimated for future potential residents (i.e., children and adults).

13. This correction will be made to the text.

Responses to Comments Submitted by the DEHNR Toxicologist

1. Inorganic detected in the groundwater were considered to be naturally occurring based on a comparison of total metal to dissolved metal concentrations. Although dissolved metal concentrations cannot be used for risk assessment purposes, they can be used to determine if metal concentrations are representative of the groundwater. Examination of the data indicates that the dissolved metal concentrations are significantly lower. Because groundwater collected from the monitoring wells was not turbid-free, it is possible that metal concentrations are due to soil particles and not inherent in the groundwater. In addition, the specific conductance measurements obtained during groundwater sampling ranged from 194 to 489 micromhos/cm. This ranges is consistent with typical values for natural waters.

2. As part of the revised quantitative analysis, trichloroethene, will be retained as a Contaminant of Concern. However, trichloroethene cannot be quantitatively evaluated due to the unavailability of toxicity information.

3. As part of the quantitative Baseline Risk Assessment, inorganic contaminants mercury and lead will be retained as Contaminants of Concern. These inorganics will be retained based on comparisons with the National Oceanic and Atmospheric Administration (NOAA) sediment screening values.

4. As part of the revised Baseline Risk Assessment, the text will be clarified.

5. The text has been modified to include future potential risks.

6. The referenced document has been included in the reference section.

7. This section has been revised since a quantitative risk assessment has been conducted.

8. QA/QC analyses (see Appendix L) indicate the presence of methylene chloride (5 ug/l) in trip blanks and field blanks, and the presence of bis(2-ethylhexyl)phthalate (2 ug/l) in field blanks. The levels indicate that the presence of methylene chloride and bis(2-ethylhexyl)phthalate in groundwater samples are possibly due to laboratory contamination.

9. As part of the Baseline Risk Assessment, these contaminants will be retained as Contaminants of Concern.

10. The text will be modified to include DDT and its breakdown products as Contaminants of Concern.

11. It is possible that sampling equipment was not completely dry and may have been responsible for the presence of acetone. Acetone should not be included as a contaminant of concern since there is no documentation that acetone was ever used

or disposed of at Site 48. The disposal events at Site 48 occurred over 25 years ago. Acetone would not be in the environment if it was disposed of during that period due to its very high rate of volatilization and solubility.

12. Base-specific background values represent an average for four samples collected offsite on the main side area of the base, several miles from Site 48. These samples were collected from an area that is not believed to have been impacted from previous waste disposal activities. The sentence referencing these samples has been revised to better define background soil quality.

13. Low levels of toluene and total xylenes were detected at an upstream location and at one location at Site 48. These contaminants were not detected in any other media, and based on upstream detection, they are not believed to be site-related. Consequently, these low toxic contaminants were not retained as contaminants of concern.

14. As part of the revised Baseline Risk Assessment section a Table will be prepared listing the Contaminants of Concern.

15. The revised Baseline Risk Assessment will not include this reference.

16. The future potential use of land at Site 48 will be evaluated in the revised RI report.

17. The revised RI report will estimate risks from inorganics via the dermal route if inorganics are determined to be Contaminants of Concern.

18. The future potential use of groundwater at Site 48 will be evaluated as part of the revised RI report.

Response to Comments Submitted by the North Carolina DEHNR on the Draft Proposed Remedial Action Plan for Site 48, MCB Camp Lejeune Comment Letter Dated May 6, 1993

Response to General Comments

1. No. Operable Unit No. 3 is only comprised of one site, Site 48.

2. The data were not validated to determine high or low biases (under EPA guidance and Region IV requirements, the data are qualified with only a "J" value for estimated concentrations). The acronym "CRDL" is defined in the footnote.

3. This comment no longer applies since the reference to mercury contamination has been deleted.

4. This section has been re-written to focus on a quantitative risk assessment. The comment is no longer applicable since a qualitative risk assessment was not conducted.

5. The text has been revised. The discussion of mercury contamination has been deleted based on comments received from EPA.