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MCB CAMP LEJEUNE  
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U S NAVY RESPONSES TO AGENCY COMMENTS TO DRAFT CONFIRMATORY SAMPLING  
REPORT SITE 4, 23, 38, 42, 53, 55, 61, 62 AND 66 MCB CAMP LEJEUNE NC  
08/17/2011  
CH2M HILL

Response to Comments  
Draft Confirmatory Sampling Report for  
Sites 4, 23, 38, 42, 53, 55, 61, 62, and 66  
MCB Camp Lejeune, North Carolina

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## Introduction

The purpose of this document is to address comments on the Draft Confirmatory Sampling report for Sites 4, 23, 38, 42, 53, 55, 61, 62, and 66 located at Marine Corps Base Camp Lejeune (MCB CamLej). The North Carolina Department of Environment and Natural Resources (NCDENR) Superfund Section provided the comments listed below. Responses to comments are provided in bold.

## NCDENR Comments (dated March 25, 2011)

### *Specific Comment*

1. Appendix F, Table F-1: Not all the samples that were evaluated in the human health section were evaluated in the ecological risk section. Few soil samples were evaluated for ecological risks at Site 4, 23, 53, 55, 62, and 66. Fewer groundwater samples were evaluated for ecological risks at Site 23. Why?

**Fewer soil samples were used in the ecological risk screening (ERS) for some sites because only samples collected from 0 to 5 feet were included in the ERS data set. Ecological receptors were assumed to not be exposed to soil greater than 5 feet below ground surface (bgs). The only exception was for Site 23. One soil sample was collected at a depth of greater than 5 feet. However, it was included in the ERS because it was the only one available.**

**Groundwater samples were evaluated in the ERS. The only exception was Site 23. No groundwater data were included in the ERS for Site 23 because the site is located 1.5 miles from the nearest surface water body.**

2. Throughout the report: Appendix D is referred to as the location of the human health and ecological risk assessment reports. Appendix D is the Surface Water and Sediment Analytical Results. Please correct.

**The report text and appendices will be revised to indicate Appendix D is the location of the human health and ecological risk assessment reports and Appendix F is the location of the Surface Water and Sediment Analytical Results.**

3. Section 12.4: It is claimed that the US EPA Region 4 ecological screening levels were used to evaluate media. The information in Section 12.2.3 does not mention this source. Looking at the first few screening values for inorganics in Appendix F, Table F-17, it appears as though the Region 4 values were not used. Please correct this inconsistency.

**The ERS summaries were unclear and will be revised. In each of the summaries, references to the screening value sources will be eliminated so there is no confusion between the summary and the ERS text for each site.**

4. Appendix B: Please provide sample results for all chemicals, not just the ones detected.

**The raw analytical data will be included with the report on a CD.**

5. Section 7.3: The conclusion of this section and the risk information presented in Appendix E do not match. Appendix E, Table E.10a shows the cancer risk posed by chromium to be 3E-04, and the hazard indexes for both iron and manganese exceeded 1. The last sentence in Section 7.3 claims the results showed no potential human health risks from exposure to groundwater. Please explain the conclusion in Section 7.3 or revise.

**Additional detail will be provided in Section 7.3 to support the conclusion that no human health risks are present from exposure to groundwater at Site 42.**

6. The screening toxicity values in the report should be updated to reflect the November 2010 values.

**The toxicity values will be updated to reflect the November 2010 screening values.**

7. Section 10.3: The conclusion of this section and the risk information presented in Appendix E do not match. Appendix E, Table E.19a shows the total cancer risk posed by the three carcinogens to be 4E-03. In addition, the hazard indexes for both aluminum and iron exceeded 1. The last sentence in Section 10.3 claims the results showed no potential human health risks from exposure to groundwater. Please explain the conclusion in Section 10.3 or revise.

**Additional detail will be provided in Section 10.3 to support the conclusion that no human health risks are present from exposure to groundwater at Site 61.**

8. Section 12.3: The conclusion of this section and the risk information presented in Appendix E do not match. Appendix E, Table E.23b shows the cancer risk posed by chromium to be 4E-04. The last sentence in Section 12.3 claims the results showed no potential human health risks from exposure to any media. Please explain the conclusion in Section 12.3 or revise.

**Additional detail will be provided in Section 10.3 to support the conclusion that no human health risks are present from exposure to any media at Site 66.**