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MCB CAMP LEJUENE
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U S NAVY RESPONSES TO U S EPA REGION IV AND NORTH CAROLINA DEPARTMENT
OF ENVIRONMENT AND NATURAL RESOURCES COMMENTS ON THE DRAFT RECORD
OF DECISION OPERABLE UNIT 20 (OU 20) SITE 86 MCB CAMP LEJEUNE NC
05/02/2014
CH2M HILL

**Response to Comments
Draft Record of Decision
Operable Unit 20, Site 86
Marine Corps Installations East – Marine Corps Base Camp Lejeune
(MCIEAST-MCB CAMLEJ), North Carolina**

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Introduction

The purpose of this document is to address comments on the Draft Record of Decision (ROD) for Site 86, Operable Unit (OU) No. 20. The United States Environmental Protection Agency (USEPA) and North Carolina Department of Environment and Natural Resources (NCDENR) provided the comments listed below. The responses to comments are provided in bolded text.

United States Environmental Protection Agency

Comments (dated April 28, 2014)

1. Page 1-1, Scope and Role of Response Action: Text from table below describing soil action could be included in this Section to show that other media that are within Site 86 have been addressed by other Program.

"In 2005, approximately 1,200 tons of SVOC- and metal-impacted soil identified during the RFI was removed from SWMUs 303 and 318 under an Interim Measure. Confirmatory soil samples indicated that all target contaminants were below applicable screening criteria."

The following text was added/ revised to summarize the other media investigated and addressed:

"Investigations at Site 86 have included the analysis of soil, groundwater, surface water, and sediment samples. Unacceptable human health risks were identified from exposure to semivolatile organic compounds (SVOCs) and metals in soil and volatile organic compounds (VOCs) in groundwater. A soil removal action was conducted in 2005 to address the soil contamination. No further action is required for soil, surface water, and sediment. A response action is required for groundwater and this ROD presents the final remedial action for Site 86 and OU No. 20."

2. Page 1-1, Scope and Role of Response Action: Need to add a sentence that clarifies the scope of Site 86 in terms of soil, surface water and groundwater contamination investigated

but response action only necessary for groundwater. In other words, the ROD needs to be clear that No Action for those other media.

See response to comment 1.

3. Page 1-1, Assessment of the Site: Revise to strike "under future residential use scenarios." Groundwater consumption can occur with any land use and in fact the aquifer below Camp Lejeune is an actual drinking water resource and classified as such. Accordingly, replace the above recommended stricken text with "when used for drinking water or other consumptive purposes." Then add the following sentence: "Groundwater beneath Site 86 is not currently used for drinking water supply."

Text was revised as recommended.

4. Page 1-1, Assessment of the Site: Consider adding statement or similar wording that "Investigation and evaluation of soil (surface and subsurface) contamination determined that no unacceptable risk to human health and the environment exists and therefore no remedial action is necessary for this media."

The following sentence was added:

"Investigation and evaluation of soil, surface water, and sediment determined that no unacceptable risk to human health and the environment exists and, therefore, no remedial action is necessary for this media."

5. Page 1-2, Assessment of the Site: Add sentence that briefly explains what MNA consists of in terms of a remedial approach under EPA guidance that involves monitoring and analyzing the progress of natural attenuation processes of COCs in multiple areas of the plumes in view of attaining cleanup levels in a reasonable timeframe.

The following sentence was added:

"MNA is a remedial approach that involves monitoring and analyzing the progress of natural attenuation processes of contaminants in multiple areas of the groundwater plumes in view of attaining cleanup levels in a reasonable timeframe."

6. Page 1-2, Statutory Determinations, Paragraph 1: Revise to strike the text stating that the remedy uses alternative treatment technologies to MEP. MNA is a remedial strategy that does not involve treatment.

Text was revised as recommended.

7. Page 1-2, Statutory Determinations, Paragraph 1: Start new sentence with "Trends... and strike the phrase "groundwater is not currently used for drinking water" and add the phrase "to attain cleanup levels" after the word 'VOCs' and add phrase "and restrict groundwater uses" after the word 'exposure'.

Text was revised as recommended.

8. Page 1-2, Statutory Determinations, Paragraph 2: Replace entire paragraph with the paragraph on p. 2-25 which better describes the FYR requirements and possibility of amending the remedy if MNA/LUCs not successful.

Text was revised as recommended.

9. Page 2-19, Overall Protection of Human Health and the Environment: Add " of the natural attenuation processes"

Text was updated as recommended.

10. Page 2-19, Compliance with ARARs: Revise citation to 40 CFR 300.430(e)(9)(iii)(B) Compliance with ARARs.

Text was updated as recommended.

11. Page 2-21, Rationale for the Selected Remedy, Paragraph 2: Add the following text: "as a potential drinking water supply."

Text was updated as recommended.

12. Page 2-21, Rationale for the Selected Remedy, Last Sentence: Add the following text: "and remedial action objectives"

Text was updated as recommended.

13. Page 2-21, Description of the Selected Remedy: Add the following text: "in view of documenting decreasing trends that demonstrate cleanup levels can be attained in a reasonable timeframe" and: "throughout various locations of the plumes"

This bullet has been updated to read as follows:

- **MNA to monitor groundwater throughout various locations of the plumes and track changes in COC concentrations and geochemical parameters in view of documenting decreasing trends that demonstrate cleanup levels can be attained in a reasonable timeframe**

14. Page 2-24, Statutory Determinations: Add "more stringent" before the word 'state'

Text was updated as recommended.

15. Page 2-24, Compliance with ARARs: Add (TBC) which is the acronym for to-be-considered guidance

Text was updated as recommended and TBC added to acronyms and abbreviations.

16. Page 2-24, Compliance with ARARs: Add 'TBC'

Text was updated as recommended.

17. Page 2-24, Compliance with ARARs: Add "and TBC."

Text was updated as recommended.

18. Page 2-24, Preference for Treatment as a Principal Element: Add 'cleanup levels throughout the plume and'

Text was updated as recommended.

19. Page 2-25, Preference for Treatment as a Principal Element: The use of the GW is not relevant for whether there is PTW. Also, LUCs are not relevant for this determination. Remove this language and add more language such as that from Section 2.7 earlier in the

document that the dissolved phase levels of the COCs are such that no DNAPL or NAPL (which is considered PTW) remains in the GW. Also, indicate if treatment for NAPL has occurred under earlier removal or RCRA corrective actions or treatability studies.

Text has been updated to read as follows:

“Additionally, NAPL has not been observed during groundwater sampling, concentrations of COCs indicating NAPL have not been detected, and no source materials constituting principal threats are present. “

20. Table A-1: Strike 'applicable' and replace with 'relevant and appropriate'. MCLs or State GW standards are almost always R&A not legally applicable. Also, possible concern that NC 2L standards not consistently applied in all GW cleanup projects.

Text was updated as recommended.

21. Table A-2: Add ARARs for land disturbing activities such as the NC stormwater and fugitive dust regs. See Site 73 ROD

Well installation activities will not result in the disturbance of greater than one acre of land and do not generate regulated quantities of fugitive dust. In addition, there is no special circumstance that indicates erosion and/or sedimentation would need to be addressed. Therefore, these regulations are neither applicable nor relevant and appropriate.

22. Table A-2: Add prerequisite text from earlier page

Table was updated as recommended.

23. Table A-2: Add ARARs for Characterization of HW see Site 73 ROD in the event the soil cuttings for a well contain TCE at levels that fail TCLP and thus considered characteristic or determined to be from spent solvents and thus media is considered Listed HW due to contained in policy

ARARs were added as recommended.

24. Table A-2: Add ARARs for disposal of RCRA hazardous waste and soils in the event that a soil cutting from a new monitoring well hits hot spot and levels of TCE or PCE is at characteristic levels. See Site 73 ROD

The disposal of hazardous materials and samples citations were added as offsite requirements. Identifying them as ARARs implies that offsite disposal is exempt from administrative requirements when it is not.

25. Table A-2: Add ARARs for Transportation of HW. See Site 73 ROD

The transportation of hazardous materials and samples citations were included as offsite requirements. Identifying them as ARARs implies that offsite disposal is exempt from administrative requirements when it is not.

**North Carolina Department of Environmental and Natural Resources
Comments (dated April 24, 2014)**

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1. Page 2-10, Geochemical Data: The paragraph states “Indicator parameters suggest that conditions in the CVOC plume area of the surficial aquifer are limited to somewhat favorable for reductive dechlorination.” This sentence should be reworded.

Text was updated to read as follows:

“Indicator parameters suggest that conditions in the CVOC plume area of the surficial aquifer are somewhat favorable for reductive dechlorination in some areas while limited in others.”