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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 EPA Region IV Comments on
the Draft Final RI/FS Project Plans for Operable Unit No.
1 (Sites 78, 21, and 24)

Dear Ms. Glenn:

We have received the EPA Region IV comments (letter dated
February 11, 1993) to the subject draft final documents. 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 EPA Region IV Comments on Draft RI/FS Project Plans
for Operable Unit #1 via letter dated 11/17/92

Copy to:

NC DEHNR (Mr. Peter Burger)
MCB Camp Lejeune (Mr. George Radford)

Blind copy to:
1823 (LGB) (2 copies w/encls)
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**Response to Comments Submitted by the
US Environmental Protection Agency, Region IV
on the Draft Final RI/FS Work Plan and Sampling and
Analysis Plan for Operable Unit No. 1
MCB Camp Lejeune, North Carolina
Comment Letter Dated 2/11/93**

Responses to Draft Final Work Plan Comments

Responses to General Comments

1. The response to EPA General Comment No. 3 indicated that all newly-installed monitoring wells will be analyzed for full TCL organics and TAL inorganics. The Final Work Plan and Sampling and Analysis Plan have been revised to indicate this. The response also indicated that only soil samples collected as part of the soil gas survey will be analyzed for full TCL organics and TAL inorganics. Soil samples collected at various areas of concern where the former waste practice is known (UST tanks, pesticide mixing areas, etc.) would only be analyzed for the suite of contaminants that would be expected to be present with a limited (approx. 10%) of full scan analysis. However, all surface soil samples from the various areas of concern will be analyzed for full TCL organics and TAL inorganics.

The following changes were made to the Final RI/FS Work Plan:

- o A subsection has been added to Section 5.3.1.3 (Soil Investigation) describing the collection of soil samples at areas of concern identified by the Soil Gas Survey. Note that the response to EPA General Comment No. 3 indicated that soil samples collected as a result of the soil gas survey will be analyzed for full TCL organics and TAL inorganics and soil samples collected from various areas of concern (UST areas, pesticide mixing areas at Site 21, etc.) will only be analyzed for the suite of contaminants expected to be present due to former waste practices. Also note that at least 10 percent of the samples (all of the surface soil samples) collected from UST areas or pesticide mixing areas will be analyzed for full TCL organics and TAL inorganics. Table 5-1 has been revised in accordance with the above changes.
- o Section 5.3.1.4 and Table 5-1 have been revised to indicate that all newly-installed monitoring wells will be sampled and analyzed for full TCL organics and TAL inorganics.
- o Section 5.3.2.2, Table 5-1, and Figure 5-9 have been revised to indicate that soil samples collected from test borings that will be used as monitoring well locations will be analyzed for full TCL organics and TAL inorganics.
- o Section 5.3.2.3, Table 5-1, and Figure 5-9 have been revised to indicate that groundwater samples collected from newly-

to indicate that groundwater samples collected from newly-installed wells will be analyzed for full TCL organics and TAL inorganics.

- o Not all soil samples collected at Site 24 will be analyzed for full TCL organics and TAL inorganics. Based on existing groundwater data (full TCL organics and TAL inorganics), only elevated levels of inorganics have been detected at various areas of concern. Approximately one-half of the soil samples collected at Site 24 will be analyzed for full TCL organics and TAL inorganics. The remaining soil samples will only be analyzed for full TAL inorganics. We feel that the proposed sampling scheme at Site 24 (and other sites) will be sufficient to determine the extent and nature of contamination, assess human health and ecological risks, and evaluate remedial alternatives.
- 2. The Department of Navy response did not indicate that background surface water and sediment data will be incorporated into the RI/FS Work Plan. The background data will be used in the RI and FS reports as appropriate (i.e., nature and extent of contamination, risk assessment, remediation goals, etc.). Background surface water and sediment data from these surface waters will not influence the RI/FS scope of work at Operable Unit No. 1 and therefore, it is not necessary to include this information in the Work Plan.
- 3. With respect to background surface water and sediment data, please refer to response No. 2.

Background soil samples are discussed in Section 5.3.1.3. Groundwater background quality is discussed in Section 5.3.3.3 (second paragraph has been revised to indicate which monitoring well will be used to assess background groundwater quality for the entire Operable Unit No. 1).

Response to Specific Comments

- 1. The initial response may be misleading with respect to the soil sampling locations. Although the "exact" sampling location is unknown (the figure depicting the sampling locations was scaled at one inch equals one thousand feet), the "general" sampling location is known. We disagree that the information is of little value. The information is valuable with respect to knowing the types of contaminants present at the site as well as the concentrations detected. The general areas that these samples were collected (i.e., inside the fence, outside of the fence) is also valuable from a standpoint of potential contaminant migration, and where samples have been collected previously.
- 2. No response required.

3. Neither area is believed to be considered as a source area. Test borings were drilled at Building 1202 during a previous investigation. Soil samples were collected for full TCL volatile analysis. Limited contamination was detected (acetone and methylene chloride, which are common laboratory contaminants). These results can be found in Appendix B (see sample analyses for soil borings HPSB16, -17, -18, -19, and -20. In addition, groundwater samples collected from this area are limited, suggesting that the contamination present in this area is related to a source area upgradient from Building 1202 (i.e., the 1600 Building Area). Based on this information, Building 1202 is not believed to be a source area and no additional soil sampling is warranted.

With respect to building 1709, monitoring wells in this area are primarily contaminated with low levels of TCE and benzene. The contamination in these wells are related to a source area (i.e., the 1600 building Area) upgradient from Building 1709. Geophysical investigations performed around Building 1709 did not detect any underground storage tanks, which are believed to be possible sources of groundwater contamination. In addition, it is believed that the contamination is related to a plume from the Building 1600 Area, therefore no soil sampling is warranted around Building 1709.

4. Analytical results for monitoring well HPGW21, HPGW29, and HPGW20 are included in Appendices A, B, and C. These appendices include the "historical" sampling and analysis for all wells at the HPIA.
5. Please refer to response No. 1 under "General Comments" (above). All TCL and TAL are not necessary for all samples, especially in areas where the history of the waste handling activities are known (e.g., UST storage tanks, pesticide mixing areas, etc.). Over 10 percent of all surface soil samples are being analyzed for full TCL organics and TAL inorganics.
6. The Department of the Navy accepts the consequence of using PVC monitoring wells at Operable Unit No. 1. Justification is provided in Section 5 of the SAP.

**Response to Comments for the Draft Final RI/FS Sampling and
Analysis Plan for Operable Unit No. 1**

1. The Department of the Navy accepts the consequence of using PVC monitoring wells at Operable Unit No. 1. Justification is provided in Section 5 of the SAP.
2. The description of the coring device and decontamination procedures are provided in Sections 5.5 and 5.6.1.2, respectively. The description of the coring device has been revised with information provided by the manufacturer. In addition, a sampling procedure has been added as an appendix. The decontamination procedure provided in Section 5.6.1.2 is for stainless steel or metal sampling equipment such as hand coring devices.
3. The frequency for collection of the preservation blank has been revised in accordance with the comment.
4. Stainless steel inserts will be used.