

North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director



April 5, 2007

NAVFAC Atlantic
Attn: Daniel R. Hood
Code: OPCEV
NC/Caribbean IPT, EV Business Line
6506 Hampton Blvd
Norfolk, VA 23508-1273

RE: Comments on the Draft Non Time Critical Removal Action Work Plan
Operable Unit (OU) # 10, Site 35 at MCB Camp Lejeune, NC
Groundwater Remediation
Camp Lejeune, NC6170022580
Jacksonville, Onslow County, North Carolina

Dear Mr. Hood:

The NC Superfund Section has received and reviewed the Draft Non-Time Critical Removal Action (NTCRA) for Operable Unit (OU)#10, Site 35 at the Camp Lejeune, MCB Superfund Site located in Jacksonville, NC. The following comments are offered for the Partnering Teams consideration. If you have any questions or comments please contact me at (919) 508 8467.

Specific Comments

1. The last paragraph under Section 2.3 on page 2-3, Nature and Extent of Contamination, States that the "wide spread presence of Cis-DCE across the target area at concentrations greater than those of TCE provides evidence that degradation is naturally occurring. I concur; however, if the concentrations of Cis-DCE remain the same or increase after ERD treatment (stalling of the degradation pathway), we may need to inoculate with appropriate bacteria to help the degradation process proceed to non-toxic ethene.
2. Paragraph 1 of Section 3.1, states that the rationale for selecting ERD injections using DPT is presented in the Site 35 Building G522 EE/CA. The proper rationale for this choice does not appear to be in the EE/CA or this document. Please provide the rationale in this NTCRA Work Plan (include technical and other details of why we chose to consider Chemical Oxidation (ChemOx) and Enhanced Reductive Dechlorination (ERD) and the fact that we eliminated permanganate due to the high NOD at the Site and the fact that

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permanganate had very little impact at the Site 35 Pilot Study Area treatment completed in January 2004.)

3. The paragraph on page 2-4 states that: “the southern plume is centered on borings 35-IS117, 35-IS118 and monitoring well MW30IW. These borings are actually on the boundary of the plume, except for MW30IW, rather than on the center of the plume. It appears based on this plume delineation map that additional monitoring wells are necessary in order to properly define and monitor the plume following injection. Additional wells are necessary in order to define the heterogeneity and optimize the injection design locations. Additional wells are needed in the northern and southern plume at the southwest and northwest ends of each plume. Therefore, it is recommended that 4 additional monitoring wells be installed with the 5 additional wells proposed in this Work plan.
4. This NTCRA Work Plan needs to have a map or figure with the Geoprobes and monitoring wells concentration data included on the map for this review. Also provide a map that includes the estimated plume concentration gradients on the proposed injection well layout. As you know this removal action document includes a design that is based on this data. Without the data, the proposed injection probe locations are meaningless.
5. Figure 2-1 has a yellow site boundary that does not include the NTCRA target treatment area. This is confusing and misleading. If the original boundary is in this location, the new boundaries should be re-defined for the purpose of this NTCRA. The EE/CA shows the plume boundary extending to site 89. This same boundary would be appropriate for the NTCRA Work Plan.
6. A yellow site boundary symbol is included in the legend of Figure 2-7 but the boundary is not shown on the Figure. Please make appropriate corrections.
7. Figure 2-3 and 2-4 show the geology and the monitoring wells in the area of the proposed injection probes. Many of the monitoring wells, especially the intermediate and deep wells, show the screened intervals bridging the cemented sands and the River Bend formation. It seems, based on previous experience at site 89 and 93 that the cemented sands are less permeable and act as an aquitard to the contaminants. Please include figures of the proposed injection wells in cross sections of the aquifer. What aquifer(s) do we plan on injecting the ERD substraight into?
8. The last paragraph on page 4-4 states that, at the completion of the field effort, the Field Team Leader (FTL) will contact the Remedial Action Contractor (RAC) to have the Investigation Derived Waste (IDW) containers removed from the Site. This needs to be completed as soon as possible after the work is completed. Preferably within thirty days of the start of work. IDW removal should be completed for all listed or characteristic hazardous waste with proper disposal within a **maximum** of 90 days from the start of work.

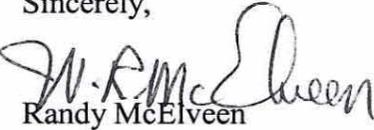
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If you have any questions or comments, please contact me, at (919) 508 8467 or email randy.mcelveen@ncmail.net

Sincerely,

A handwritten signature in black ink, appearing to read "Randy McElveen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Randy McElveen
Environmental Engineer
NC Superfund Section

Cc: Dave Lown, NC Superfund Section
Bob Lowder, EMD/IR
Gena Townsend, USEPA