



North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

May 13, 2010

NAVFAC Mid-Atlantic
Attn: Dave Cleland Code: OPQE
USMC NC IPT, EV Business Line
6506 Hampton Blvd
Norfolk, VA 23508

RE: Comments on the Draft Expanded Soil and Groundwater Background Study for the Camp Lejeune, MCB Superfund Site, located in Jacksonville, NC
NC6170022580
Jacksonville, Onslow County, North Carolina

Dear Mr. Cleland:

The NC Superfund Section has received and reviewed the Draft Expanded Soil and Groundwater Background Study for the Camp Lejeune, MCB Superfund Site, located in Jacksonville, NC. The Draft Study is dated April 2010. The following comments are offered for your consideration.

Comments:

1. The Soil Screening Standards listed in SAP Worksheets #15-1 through #15-6 should be updated to the new NC Superfund, Federal Remediation Branch (FRB) Tables. The updated FRB Tables reflect the EPA's updated Maximum Contaminant Levels (MCLs) date December 2009 and the NC DENR updated Groundwater Quality NCAC 2L Standards dated January 2010. Please make the appropriate corrections in the Final SAP Work Plan.
2. The SOP for low-flow groundwater sampling from monitoring wells is provided in Appendix B. The instructions in step nine on page 2 is acceptable and appropriate. However, as previously discussed with the partnering team, a purge rate less than 0.3 liters per minute often does not provide a representative groundwater sample from the aquifer. This is especially true if the screened interval of the monitoring well is greater than 5 feet in length. These extremely low purge rates provide discrete interval samples of the groundwater.

I acknowledge the White Paper on Low-Flow Sampling at the end of this section of the SOP and generally agree with these procedures. Every effort should be

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made to complete purging and sampling of monitoring wells consistent with these procedures. However, issues of volatilization are minor compared to the issue of discrete sampling of the aquifer and missing the more permeable section of the aquifer and thus the primary contaminant flow interval of the aquifer. If purging of the aquifer at rates less than 0.3 liters per minute is required the well can be purged dry and sampled after recovery or other sampling methods should be considered (PDBs, etc.).

In general, if the water table drops slightly then we know that the entire screened interval is being purged and therefore a representative sample is being collected. This would be true of all types of aquifers even fine grained aquifers.

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

Sincerely,

Randy McElveen
Environmental Engineer
NC Superfund Section

Cc: Dave Lown, NC Superfund Section, Electronic only
Bob Lowder, EMD/IR
Gena Townsend, USEPA
Bryan Beck, NAVFAC