

Baker

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Michael Baker Jr., Inc.

A Unit of Michael Baker Corporation

Airside Business Park
100 Airside Drive
Moon Township, PA 15108

(412) 269-6000
FAX (412) 375-3996

April 17, 2003

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Bldg. N-26)
Norfolk, VA 23511-2699

Attn: Mr. Kirk Stevens, P.E.
Navy Technical Representative
Code EV23-KAS

Re: Contract N62470-95-D-6007
Navy CLEAN, District III
Contract Task Order (CTO) 0219
Natural Attenuation Evaluation Report
Operable Unit 10 - Site 35
Marine Corps Base, Camp Lejeune, North Carolina

Dear Mr. Stevens:

Michael Baker Jr., Inc. (Baker) is pleased to submit one unbound and one bound copy of the Natural Attenuation Evaluation (NAE) Report for Operable Unit 10, Site 35 at Marine Corps Base (MCB), Camp Lejeune, North Carolina. Copies have also been forwarded to Mr. Rick Raines at the Environmental Quality Branch of MCB, Camp Lejeune and CH2M Hill. Additional copies of the report have been distributed to representatives of the United States Environmental Protection Agency (USEPA), the North Carolina Department of Environment and Natural Resources (NC DENR), and Shaw Environmental as noted on the distribution list.

A Draft NAE Report was submitted in 1999 under CTO 130, which provided an evaluation of natural attenuation conditions primarily within and adjacent to the former fuel farm. Based on recommendations from the draft report, a focused NAE investigation of the wetland area was completed under CTO 219 in 2002 per the approach outlined in Final Sample Strategy Plan (November 2001). This report provides a comprehensive summary of the NAE investigations conducted from 1998 (initial NAE study), focuses on the 2002 (wetland NAE study), and will serve as final NAE report for the site. Accordingly, no comments are required for this document.

As documented in the report, natural attenuation processes appear to be degrading chlorinated solvent-related contamination at Site 35 as evidenced by the presence of daughter products, loss of parent contaminant mass, plume stability, the presence of small quantities of ethene and ethane, and positive results of other geochemical indicators. Natural attenuation processes, however, are being slowed and efficacy is being impacted. The discrepancy between calculated half-lives and observed conditions in the

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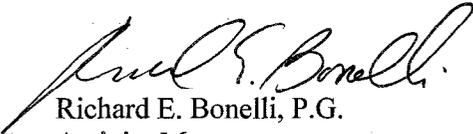
Mr. Kirk Stevens, P.E.
LANTDIV
April 17, 2003
Page 2

wetland area suggests that upgradient sources and sorbed-phase contamination continue to supply parent compound. Also, mass balance calculations indicated that complete degradation might not be occurring.

Baker appreciates the opportunity to serve LANTDIV on this important project. Should you have any questions regarding this submittal, please contact me at 412-269-2033.

Sincerely,

MICHAEL BAKER JR., INC.



Richard E. Bonelli, P.G.
Activity Manager

pcl
Attachments

cc: Mr. Daniel Hood, Code EV23, LANTDIV
Ms. Beth Collier, Code AQ115, LANTDIV (w/o attachments)
Mr. Rick Raines, Camp Lejeune, Environmental Quality Branch
Mr. Thomas Burton, Camp Lejeune, Environmental Quality Branch (w/o attachments)
Ms. Gena Townsend, EPA, Region IV
Mr. Randy McElveen, NC DEHR, Superfund Section
Ms. Diane Rossi, NC DEHR, Groundwater Section
Mr. Christopher Bozzini, CH2M Hill
Mr. Scott Bailey, CH2M Hill
Mr. Ron Kenyon, Shaw Environmental