



State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Road
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

Bob Taft, Governor
Bruce Johnson, Lieutenant Governor
Joseph P. Koncelik, Director

Re: Plum Brook Ordnance Works
Erie County
Comments for Round 2 Quarterly
Groundwater Monitoring Report
for Acid Areas 2 and 3

November 17, 2005

*Rec'd 21 Nov 2005
LSI*

Ms. Linda S. Ingram
Department of the Army
Nashville District, Corps of Engineers
P. O. Box 1070
Nashville, Tennessee 37202-1070

Dear Ms. Ingram:

The Ohio Environmental Protection Agency (Ohio EPA), Division of Emergency and Remedial Response (DERR), has reviewed the Round 2 Quarterly Groundwater Monitoring Report for Acid Areas 2 and 3 Document. This document was submitted to the Ohio EPA by Jacobs Engineering (Jacobs) on behalf of the U.S. Army Corps of Engineers on September 1, 2005, for review and comments.

The Ohio EPA, has completed its review. Please note the following comments:

1. The fourth paragraph, page 2-2, Section 2.2 of the Jacob's August 2005, Round 2 Quarterly Groundwater Monitoring Report (Round 2 Report) is very confusing. Jacobs states that during the low-flow purging of bedrock wells AA3-BEDGW-001 and PB-BED-MW19, the wells displayed increased yields as the water levels were lowered. Therefore, the increase yield prohibited a complete purging of the wells. Jacobs further states that purge volume requirements were met for the wells. Ohio EPA requests that Jacobs clarify this paragraph.
2. Copies of chain of custody documentation in Appendix C of the Round 2 Report are completely illegible.
3. Ohio EPA recommends that Jacobs perform the necessary maintenance to remove the blockage in the casing at Acid Area 2 overburden well IT-MW10.
4. Jacobs states on page 4-3 and 4-5 that VOCs detected in the bedrock saturated zone are attributed to naturally occurring hydrocarbons in the Delaware Limestone that exists beneath NPBS. Ohio EPA cautions Jacobs that while naturally occurring hydrocarbons have been documented in the bedrock, not all VOCs (e.g., 1,1,2-trichloroethane) should be attributed to this phenomenon by default.

5. Sections 4.2.1 and 4.2.2 of the Round 2 Report indicate that background concentrations have been developed for several constituents in the bedrock saturated zone at NPBS and that these background values were used to evaluate concentrations of constituents at Acid Areas 2 and 3. Ohio EPA requests that Jacobs prepare a briefing memo or similar document that presents these background concentrations and their relationship to background screening concentrations (BSCs) as contained in Appendix M of the 2004 Annual Report.
6. Based upon a review of Tables 4-3, 4-4, 4-6, and 4-7 of the Round 2 Report, analytical data suggests that the bedrock saturated zone has been impacted although it is unclear whether by naturally occurring hydrocarbons or by historical NPBS activities. As an alternative to performing additional rounds of ground water sampling at Acid Areas 2 and 3, a more logical approach would be to incorporate the bedrock zone into the sitewide ground water investigation for further evaluation.

Please review the above comments and submit a revised final document that addresses Ohio EPA concerns. If you have any questions or comments feel free to contact me at (419) 373-3147.

Sincerely,



Ron Nabors
Environmental Specialist II
Division of Emergency and Remedial Response

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pc DERR-NWDO File
ec: Archie Lunsey, DERR/NWDO
Laurie Moore, OFFO/SWDO
John Weaver, DDAGW/NWDO

21 Nov 2005
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these electronically from
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