



State of Ohio Environmental Protection Agency

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PBOW - AR
Res. #2 BG
OEPA comments

Re: Interim Final Site Characterization
Report, Remedial Investigation Part 1 at
Reservoir No. 2 Burning Ground,
Former Plum Brook Ordnance Works,
NASA Plum Brook
Erie County

September 28, 2005

Ms. Linda Ingram (CELRN-EC-R-M)
United States Army Corps of Engineers
Nashville District
110 Ninth Avenue South, Room 682 Annex
Nashville, Tennessee 37203

Dear Ms. Ingram:

The following correspondence represents the formal response of the Ohio Environmental Protection Agency (Ohio EPA) with respect to the Interim Final Site Characterization Report, Remedial Investigation Part 1 at Reservoir No. 2 Burning Ground, Former Plum Brook Ordnance Works.

General Comments

Jacobs Engineering Group, Inc. (Jacobs), on behalf of the United States Army Corp. of Engineers (USACE) recommends additional water level measurements will be collected from bedrock wells (2BG-BEDMW-001, 002, and 003), herein referred to as the 2BG bedrock monitoring wells, to further characterize the potentiometric surface of the bedrock saturated zone. While Jacobs proposes to abandon these wells after an adequate characterization has been completed, Ohio EPA recommends that wells should not be abandoned based on the potential for valuable ground water analytical at some point in the future as well as the continued provision of water level measurements from the bedrock saturated zone.

Jacobs should revise the Interim Final Site Characterization Report, Remedial Investigation Part 1 at Reservoir No. 2 Burning Ground to include ground water sampling logs and corresponding chain of custody documentation for the January 2005 sampling event for 2BG bedrock monitoring wells.

Section 3.0 Comments

Jacobs stated in Appendix L that Section 3.4 has been revised to note that slug testing of bedrock wells was eliminated as the wells exhibited slow recovery. For clarification, there is no mention of the elimination of slug testing. Jacobs should revise the section to reflect the elimination of slug testing.

Please revise the second full paragraph of Section 3.9.3.2 PAH Confirmation to reflect the information presented in Figure 4-2. The figure shows several soil sample locations collected in 2004 and 2005 that have polynuclear aromatic hydrocarbons (PAHs) detections exceeding the preliminary remediation goals (PRGs) while the text states that only one location had PAH results exceeding the PRGs.

Section 4.0 Comments

The text summary associated with Section 4.2.1 (i.e., the bulleted points) is not consistent with the information in Figure 4-2. For example, one sample is listed as exceeding the PRG and/or background value for 2,3,7,8-TCDD. However, Figure 4-2 indicates that locations exceed screening values. Please revise the bulleted summary to reflect the information presented in Figure 4-2.

With respect to Figure 4-2, Distribution of Contaminants Exceeding PRG's in Surface Soil, the legend reads "DPT Locations – Jacobs 2004" however, the figure displays information from soil samples collected in April 2005. Please revise the legend for DPT Locations to reflect samples collected by Jacobs in 2005.

Table 4-21 method detection limits (MDLs) and reporting limits (RLs) for volatile organic compound (VOC) and metals analyses in ground water were elevated. Several MDLs and RLs exceed the corresponding maximum contaminant levels (MCLs). Please provide an explanation for the rationale behind use of these elevated MDLs and RLs. For example, if the elevated analytical limits were due to high analyte concentrations and/or matrix interferences necessitating sample dilutions, then Jacobs should have incorporated this explanation within the report text.

Section 5.0 Comments

Jacobs noted in Section 5.2 that several inorganics were detected in the 2BG bedrock monitoring wells which exceeded established background concentrations. Please provide documentation substantiating the calculation of background concentrations for inorganics or the completion of datasets for the bedrock background monitoring well network.

Section 7.0 Comments

Regarding Section 7.5, PAH analytical data from 2004 was qualified as "NJ," and therefore, Jacobs recommends that this data is not suitable for use in the risk assessment. Ohio EPA does not agree with this recommendation since this data qualifier means that the compound is detected, but the concentration of the compound is estimated. As such, Ohio EPA recommends the following strategies as a resolution: resample the locations in which data was flagged "NJ" considering that the first recommendation is to conduct additional surface soil sampling in the area west of the burn area; or, use the existing data in the risk assessment and discuss the uncertainty in the appropriate section of the risk assessment report, since many of the locations where PAHs were detected have a mixture of contaminants present and any future remedial action will likely address co-mingled contamination.