AR - PBOW
TNT
"B"

Shaw Environmental, Inc.

312 Directors Drive
Knoxville, TN 37923
865.690.3211
Fax 865.690.3626

Shaw® Shaw Environmental, Inc.

March 4, 2005

Commander
U.S. Army Engineer District, Nashville
ATTN: CELRN-EC-R-M (Mrs. Linda Ingram)
110 Ninth Avenue South, Room 682
U.S. Court House Annex
Nashville, Tennessee 37203

Submittal of TNT Area B Draft Proposed Plan and Decision Document
Former Plum Brook Ordnance Works, Sandusky, Ohio
Contract Number DACA62-00-D-0002; Shaw Project Number 806950

Dear Mrs. Ingram:

In accordance with the requirements of Delivery Order 002 of Contract Number DACA62-00-D-002, Shaw Environmental, Inc., is pleased to submit Revision 1 of the Preliminary Draft Proposed Plan and Draft Decision Document for TNT Area B, Former Plum Brook Ordnance Works located in Sandusky, Ohio.

Enclosed are two (2) copies each of the respective revised draft documents, as well as the respective responses to comments. These documents reflect the investigation, evaluation, and remedial actions associated with soil, surface water and sediment. Overburden and Bedrock groundwater will need to be included in these documents once the evaluation of groundwater is complete. All references to groundwater information that will need to be inserted or revised are highlighted. These documents have been prepared incorporating the attached responses to comments and in accordance with EPA guidance.

Should you have any questions or require additional information regarding this submittal, please do not hesitate to call me at (865) 694-7496.

Sincerely,

Steven T. Downey, P.E.
Project Manager

G05OH001814_05.01_0501_a

Reduction of Toxicity, Mobility, or Volume.

Short-Term Effectiveness.

Implementability. .

Cost.

State Acceptance.

Community Acceptance.

2.11 Principal Threat Waste

The NCP establishes a preference for methods that employ treatment that results in a reduction in toxicity, mobility, or volume (300.430[e][9][ii][D]). This especially includes the expectation that treatment will be used to address principal threats posed by a site when practicable (300.430[a][1][iii][A]). The term "principal threat wastes" refers to source materials, but does not include contaminants dissolved or suspended in groundwater (EPA, 1991b). At TNTB, the principal threat wastes were the highest soil concentrations of nitroaromatics that, prior to removal and treatment during the interim action, may have served as a source for groundwater contamination, or to which an individual might have been directly exposed under a future land-use scenario (EPA, 1997b). The toxicity and mobility of these principal threat wastes were reduced using windrow composting. Because these areas of soil contamination have been remediated, there are no known principal threat wastes remaining at TNTB.

2.12 Selected Remedy

2.12.1 Soil

Rationale. The basis for selecting Alternative 3, Excavation, Ex Situ Stabilization, and Off-Site Disposal, for the interim soil removal action was described in the FS and presented in the June 2003 Action Memorandum.

Outcome. Through implementation of the interim soil removal action, the RAO for soil has been met. Release of the property for unrestricted use is appropriate with respect to soil.

2.12.2 Groundwater

(Discussion will be added once the groundwater FS is complete.)

Rationale.

Expected Outcome.

2.13 Statutory Determinations Exposure to soil and groundwater associated with TNTB may potentially result in adverse human health effects and/or may adversely affect environmental receptors as indicated by the BHHRA and the ERA. Therefore, remedial actions are necessary at TNTB.

2.13.1 Soil

Remedial Alternative 3 was implemented for the remediation of TNTB soils as a Non-time Critical Interim Removal Action per the Action Memorandum (USACE, 2003a). This alternative is was described in the Action Memorandum as:

- Excavation of soils that exceed the RGOs
- TCLP testing of untreated soil for hazardous waste characteristics
- Ex situ stabilization of soils that are determined to be hazardous based on waste characteristics
- Disposal at a nonhazardous waste landfill (assuming further treatment would not be necessary based on analytical results).

As described in Section 2.2.3, a variance to the above protocol was made after excavation and TCLP testing began. Instead of stabilization, windrow composting was used for nitroaromatic-impacted materials identified as hazardous based on TCLP results; similarly, windrow composting was also used on soil that could not be disposed of in a hazardous waste landfill due to concentrations of nitroaromatics that exceeded land disposal restriction treatment standards (40 CFR 268.40). After composting, these materials tested as nonhazardous and were disposed of at the Erie County Landfill (nonhazardous). Lead-contaminated materials were not composted, but were stabilized, determined as nonhazardous, and transported to the Erie County Landfill for disposal.