

PBOW Tenn
Meeting
27 March 02

March 27, 2002 meeting with USACE and OEPA
Plum Brook Ordnance Works

Attendees:

Lisa Humphreys	USACE Huntington District	304-529-5953
Rick Meadows	USACE Huntington District	304-529-5388
Ron Nabors	Ohio EPA	419-373-3147
Mark Bohne	PBOW RAB Co-Chair	419-499-2667
Mikael Spangberg	Pacific Env. Services, Inc.	860.478.9658 (860-676-7780 after 4/15)
Mike Gunderson	Pacific Env. Services, Inc.	865-694-2996
Bill Anderson	IT Corp	814-238-7262
Steven Downey	IT Corp	654-694-7496
Bob Lallier	NASA PBS	419-621-3234
Lannae Long	USACE Nashville District	615-736-2049
Linda Ingram	USACE Nashville District	615-736-5622

The meeting opened at 2:00 PM with introductions of participants.

Bill Anderson of IT Corporation delivered a presentation of the TNT A&C Feasibility Study, PBOW. This presentation provided an overview of the study including site descriptions, past decontamination efforts, remedial investigation, risk assessment, remediation goals, alternative treatment technologies, and conclusions.

During the discussion on Risk Assessment (RA), a question was asked about what was used regarding evaluation of endangered species. It was noted that there are two nesting eagles near K site. Bill responded that he dealt specifically with Human Health Risk Assessment (HHRA) and that Mark Weisberg can be consulted regarding Eco RA. Lannae Long commented that no additional mathematical evaluation will be conducted for Eco RA; however, addressing HHRA will reduce any potential Eco risk. Mark Weisberg will be consulted to determine if there are any endangered species (both plant and animal). Davey Tree Service was suggested as a contact regarding a sitewide vegetation survey.

During the discussion on treatment alternatives, it was noted that windrow composting was eliminated from further consideration due to the high unit costs associated with treatment of relatively small quantities. The pros and cons of this technology were discussed. One of the pros is that it qualifies as an innovative technology. Chemical treatment was also discussed as a possible innovative technology. Method of application of sodium permanganate (KMnO₄) for chemical treatment was discussed. Method used in the alternative cost analysis is direct application to the surface in a bermed area. An alternative method is through well point injection. Gradation of soil and its potential impact on effectiveness of the chemical treatment was also discussed. The cost of conducting a treatability study was discussed and it was stated to be in the \$10,000 to \$20,000 range. These costs were confirmed to be included in the cost analysis.

There were concerns raised regarding potential residual chemicals remaining in the soil after chemical treatment, lack of detailed characterization (potential hot spots), and impermeable soil (clay) which may inhibit treatment. Since manganese is already a problem (hazard quotient of 1), for groundwater, chemical treatment may compound this problem. Since the costs of chemical treatment and off-site disposal are close, we may be better off with off-site disposal to avoid potential negative future stakeholder perception related to leaving chemicals in the ground.

There was some discussion of the cost estimate details included in the FS report. The estimate details will be reviewed to assure adequate funding is requested.

Per discussion, TNT A and C areas are not on the NPL, therefore a Decision Document (DD) will be used; not a ROD document. There will be a separate DD for each area. The FS for

groundwater will include TNT A, B, and C and two Red Water Ponds; each area will be evaluated separately, even though they may be included in the same FS. Comments on the FS are due to USACE Nashville District by 5/1/02.

The meeting continued with a presentation of the Sitewide Groundwater Remedial Investigation for PBOW by Mike Gunderson of PES (subcontractor to IT). This presentation provided a summary of the objectives, background information, fieldwork, analytical program, analytical results, conclusions, planned activities, and recommendations.

Migration of contamination to the northeast as evidenced by levels detected in wells near the perimeter of the site was discussed. If any offsite (private) wells exist in close proximity to the site boundary, these could provide valuable information relative to potential contaminant migration offsite. It was noted that Wess Watson of the USACE might have information regarding whether or not offsite wells exist that may be sampled.

There is a sump in the reactor that groundwater is pumped from. Bob Lallier pointed out that a pump and treat system will be installed in the area of the reactor sump this summer. He will check to see if this sump has a flow meter. If so, it could provide valuable modeling info.

A 4" force main was identified on a NASA drawing. This force main may have been a contaminated waste line. Further investigation of this force main is warranted.

The next round of groundwater sampling is scheduled for the first two weeks of April.