

# ***PLUM BROOK ORDNANCE WORKS***

## ***Restoration Advisory Board***

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***Quarterly Fact Sheet***

***October through December 2002***

### **SITE DESCRIPTION**

The former Plum Brook Ordnance Works is located four (4) miles south of Sandusky, Ohio, near Lake Erie. Nitro-aromatic explosives produced at the site included TNT, DNT, and pentolite; other products produced at the ordnance works included nitric and sulfuric acid. The plant operated for four years from 1941 to 1944, and was decontaminated by the end of 1945. Possession of the property was transferred to the Ordnance Department in 1946, then to the War Assets Department, and finally to the GSA in 1949. NASA acquired the property in 1963 and presently maintains and utilizes 6453.5 of the original 9009 acres.

### **SITE HISTORY**

The U.S. Army entered into a contract with Trojan Powder Company for the purpose of manufacturing this ordnance. The official title for the site during this time was the Plum Brook Ordnance Works (PBOW). Groundbreaking to construct the facilities to support the manufacturing of ordnance began on April 15, 1941. Production began on December 16, V-J Day (1941). During the production period more than one billion pounds of ordnance was manufactured.

PBOW was placed in standby condition from 1945 to 1946. Throughout this time, the Army conducted decontamination and decommissioning (D&D) of many of the buildings and structures associated with the manufacturing of ordnance. Decontamination efforts on all TNT and DNT lines began in September 1945. Decontamination of TNT lines, acid lines, pentolite lines, and DNT lines was halted during the last quarter of 1945. Typical D&D methods for buildings and structures involved removal and relocation of all explosives to a burning ground where they were burned. Where possible, remaining buildings and structures were burned to the ground. Steam lines, drain lines, etc., were flushed and dismantled. There is no indication in PBOW historical records of where lines were flushed.

It is estimated that 65 percent of the necessary decontamination of PBOW was completed by December 1945. On midnight of December 17, the physical custody of the PBOW was transferred from Trojan Powder Company to the U.S. Army Ordnance Department. The Ordnance Department became the accountable agency and the U.S. Army Corps of Engineers assumed responsibility for maintenance and custodial duties at the PBOW from January 1 through June 30, 1946.

After further decontamination efforts were completed, and the extent of contamination certified, PBOW was transferred to the War Assets Administration in August 1946. From 1946 to 1949 the property was protected and maintained by Matthew-Levio and Sons. In 1949 it was transferred to the General Services Administration (GSA), which maintained oversight of the facility. Ravenna Arsenal conducted further decontamination efforts from 1945 to 1958. NASA accepted the facility in 1963 after Ravenna Arsenal certified that the PBOW had been completely decontaminated and was suitable for unrestricted future use. After acceptance of the PBOW, NASA identified further areas that required decontamination. In 1964, NASA continued site decontamination and the removal of structures.

In 1956 an agreement was made to lease 500 acres of the north portion of the site to construct and operate the Plum Brook Reactor Facility (PBRF). NASA operated the PBRF from 1963-1973 under a license agreement with the Atomic Energy Commission (AEC). NASA currently has a license agreement with the Nuclear Regulatory Commission (NRC) for the safe protective storage of the PBRF. NASA acquired an additional 6,000 acres of the former PBOW on March 15, 1963, for the purpose of conducting various aerospace research activities. NASA continues to use the site today.

## **SUMMARY OF ACTIVITIES**

### *Red Water Ponds Area - Feasibility Study (Soils)*

The Draft Final was distributed in late September 2002 and reviewers' comments were requested by late October 2002. OEPA requested additional time to complete their review of the document, and in an email dated December 17, 2002 they agreed with the Feasibility Study. The Final Feasibility Study was submitted in mid-December 2002.

### *TNT Area B - Remedial Investigation/Feasibility Study (Soils)*

An Action Memo was completed for soils removal and was made available for public review and comment on March 28, 2002. There were no public comments received during the comment period. USACE Huntington District awarded the contract for the interim removal action and fieldwork will be completed in Spring 2003.

### *TNT Area A and TNT Area C - Remedial Investigation/Feasibility Study (Soils)*

The draft Feasibility Study (Volume IV) was submitted to OEPA, USACHPPM, NASA, HTRW-CX, and USACE Nashville and Huntington Districts for review and a review meeting was conducted in late March 2002. The review comments included a concern of HTRW-CX regarding composting of the soil. The contractor (Shaw) reevaluated remedial alternatives. The Draft Final document was revised to address the HTRW-CX concern and to incorporate remediation goals discussed in the USACE meeting with OEPA on November 20, 2002. The Draft Final document is expected for review by mid-January 2003.

### Groundwater Remedial Investigation for TNT A, B and C & Red Water Ponds Areas

The fourth round of sampling was completed in mid-July 2002. The Draft First Annual Data Summary and Evaluation Report was distributed in late August 2002 and comments have been received. LRH and LRN met with OEPA in mid-September 2002 and it was agreed between OEPA and USACE to sample the background wells in October 2002 (completed) and April 2003. USACE met with OEPA on November 20, 2002 to discuss groundwater issues and LRN has begun scoping efforts for FY03.

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A RAB meeting was held on December 11, 2002. Marshall University (LRH Contractor) provided a presentation on Geographic Information Systems (GIS) for the RAB. LRH updated the RAB on the TNT B Interim Soil Removal Activities. The next RAB meeting is scheduled for April 16, 2003.

### Project Team Meetings

- November 13-14, 2002 - Nashville, Tennessee; LRN and LRH. The agenda included a discussion of the continuing groundwater investigation.
- November 20, 2002 - Dayton, Ohio; OEPA, LRN and LRH. The purpose of the meeting was to discuss the remediation and groundwater issues at the site.
- February 2003 – Nashville, Tennessee; LRN and LRH. The agenda will include discussions of the overall project parameters, including technical and administrative issues.

### **PBOW WEBSITE**

USACE Huntington continues to maintain the website which is dedicated to keeping the public informed about the PBOW activities. This site is being updated regularly with new project information, as well as the PBOW fact sheets, investigation schedules and the Annual FUDS Newsletter. To find out the latest news on the PBOW project, please visit the website at the following address: [www.lrh.usace.army.mil/PM/PBOW](http://www.lrh.usace.army.mil/PM/PBOW).

### **PBOW TOLL FREE NUMBER**

USACE Huntington has a toll-free number in place for your use. If you have any information such as personal knowledge, photographs, maps, newspaper articles of past activities or other information you would be willing to share, or you just have questions about current activities at the site, please feel free to use the toll free number. We're interested in hearing from you, so call toll free 1-800-822-8413 and ask for Lisa Humphreys or Frank Albert.

## **PROJECT CONTACT**

The PBOW Project Manager is Richard L. Meadows, Huntington District (CELRH-PM-P) at (304) 529-5388, fax (304) 529-5715 or via email at Richard.L.Meadows@Lrh01.usace.army.mil. He may be reached during the hours of 8:00 a.m. to 5:00 p.m, Monday - Friday. You may also call the toll free number listed above and ask to be transferred directly to his office.