

**Responses to Comments on the
Draft Proposed Plan for Groundwater
TNT Areas and Red Water Pond Areas
Former Plum Brook Ordnance Works, Sandusky, Ohio
Document Dated April 3, 2009**

Comments by Bradley Stark, Assistant District Counsel, USACE, Huntington District, received May 29, 2009.

Comment 1: I have reviewed the draft Proposed Plan for soils and sediments TNT Area C, Plum Brook Ordnance Works, Sandusky, Ohio DERP-FUDS site number G05OH001800. As you are aware there have been concerns over the fact that a PRP issue exists. That PRP issue appears to have been addressed and partially resolved with a decision that the Corp will clean up the contamination created at this Government Owned Contracted Operated (GOCO) site. As a result, NASA will be responsible for the contamination they created and the Corp is responsible for the DERP/FUDS contamination. There still is an issue with areas that cannot be strictly shown to be solely DERP/FUDS areas.

Response 1: Comment noted. Given the site history and the COCs which are chiefly nitroaromatic explosives, it is likely that the non-naturally occurring contamination is solely associated with former DOD activities.

Comment 2: On page 3 Site Background “The 9,009 acre PBOW facility was built in early 1941” is not a correct statement. The manufacturing plants were located on the 9,009 acre site all 9,009 acres were not part of the manufacturing plant.

Response 2: The text will be revised consistent with the following: “The ~~9,009-acre~~ PBOW facility was built *on property totaling 9,009 acres* in early 1941 as a manufacturing plant for TNT, 2,4-dinitrotoluene (DNT), and pentolite (International Consultants Inc., 1995).

Comment 3: Page 4, bottom sentence. The Army did not reacquire the 3,230 acres, the Army re-obtained control or jurisdiction but we did not buy the property from an owner other than the government, the government always retained control of the property from what I have been informed., Page 5 bottom of paragraph please change to “On March 15, 1963, NASA obtained accountability and custody for the remaining PBOW property, approximately 6,030 acres...”

Response 3: Revisions to the text will be made as suggested.

Comment 4: Page 8, middle. “this water unit meets the USEPA criterion for Class III nonpotable groundwater” Since we are using the EPA requirements than

I am assuming there are no Ohio standards in place. If Ohio has codified their standards then we should be using the state standards.

Response 4:

Ohio groundwater standards appear only under their Voluntary Action Program (VAP). The OEPA PBOW team members have stated the state standards cannot be used unless all VAP protocol is followed.

Comment 5:

Page 22, states that “As long as NASA owns the property it is expected that RAO No.1 would be met by each of the four alternatives.” NASA does not own the property. GSA is the owner of the property (arguably). The fact that NASA is still controlling the use of the property also means there is no exposure pathway for the soil. This is a fenced in site where I doubt even hunters are allowed to be. Using the same logic for the Ground water as was used for the soil, a hunter could drink/get splashed and inhale water vapors from the different contaminated ground water sites, and that is the exposure pathways. The reason I point this out is not because I believe there is an exposure pathway, but the same logic and justification for the soil remediation also exist for the ground water. I recognize that the groundwater on this site is not potable, but it seems to me that since we will need to put restrictions on the property for the ground water we could also use LUCs for the soil also.

Also I don’t know why we need monitoring of the ground water. If our position that we are trying to prevent migration of the contamination of site then we need to state that and show the migration is going on or contamination have not been contained within PBOW.

I don’t see why GW-1 with LUCs would not accomplish what is necessary. Is there anything showing that the contamination is going off site at a level to endanger the health of those individuals exposed? GW-2 would require monitoring for 150 years, and LUCs. Shouldn’t we only be using the monitoring to assure that we are not contaminated off property sources of current or potential drinking water?

These are some of the same concerns I have made in the past. I don’t object to the monitoring, but what benefit is there to show that the contaminations are clearing up when LUCs will prevent the use of the groundwater?

Response 5:

The text will be changed to state that NASA maintains control over the property rather than owning it. With respect to soil, this Proposed Plan does not cover soil. The soil/sediment Proposed Plans and Decision Documents are being prepared separately for the three TNT area sites, and soil for the two red water pond area sites are being addressed in a combined Proposed Plan and Decision Document. Exposure pathways for soil are presented in these respective documents. A hunter could not be exposed to groundwater because he has no access; there are no groundwater taps installed.

With respect to monitoring, the current monitoring well network is inadequate to monitor source areas and to appropriately determine whether contaminants may be moving off site. The text will be revised to emphasize that 150 years of monitoring was used as a cost assumption only (based on modeling), but that the LTMP will be developed with an exit strategy based on decreasing contaminant trends (including contamination associated with leaching) and observations showing that off-site concentrations, if they exist, do not represent a health threat and are likewise decreasing.