

MEMORANDUM

TO: Mark Bohne, PBOW RAB Co-chair and RAB members

FROM: Julie Weatherington-Rice, Ph.D., RAB TAPP Coordinator

RE: Addendum to Plan of Operations Interim Soil Removal Action Continuation Soil Excavation and Disposal, Plum Brook Ordnance Works – Pentolite Road Red Water Ponds (PRRWP) Sandusky, Ohio, McTech Corp.

DATE: June 16, 2008

Per our current contractual arrangement with US ACE which require both a technical memorandum for each report and an educational explanation to the RAB, this memorandum constitutes the educational review of the McTech May 2008 “Addendum to Plan of Operations Interim Soil Removal Action Continuation Soil Excavation and Disposal, Plum Brook Ordnance Works – Pentolite Road Red Water Ponds (PRRWP) Sandusky, Ohio” document. Please forward these comments to the other RAB members.

As has been typical of the work submitted by McTech, most of this document is very well written and well thought out. In reviewing their work, I often am relegated to making spelling and typing corrections for lack of anything substantive that needs correcting and/or further clarification. With the review of this document, I find that I am in that same position again. I have only one conceptual general set of comments that I think would improve the content of this report.

This addendum to the report submitted last summer was necessary when it was discovered that the soil materials being removed from the Pentolite Road Red Water Ponds had concentrations of 2,4-DNT that were too high to be disposed of at the Erie County Solid Waste Landfill. Therefore, instead of transporting the soils materials to a hazardous waste landfill, the decision was made to co-compost the soil with chicken manure and straw to break down the 2,4-DNT levels to levels safe enough to be placed at the Erie County Solid Waste Landfill. This same technique was successfully utilized at the TNT-B area before the contaminated soils there were removed. We will be viewing the new treatment process at the next RAB quarterly meeting, June 26, 2008. The composting pad is already constructed. It is assumed that the composting will take approximately 8 weeks to complete and the project will be in operation seven days a week until test results demonstrate that the 2,4-DNT and breakdown daughter products are at safe levels for off-site disposal at a solid waste facility.

General & Specific Comments

1. 4.3.3 Treatment Pad

G05OH001810_08.12.1002_a

My sole set of concerns about this document is directed to the somewhat limited information presented in this paragraph. Last Thursday, June 12, 2008, I e-mailed Lisa Humphreys a list of my concerns about this section. Those lists of concerns, along with her responses, are here included.

My Comments

When the pad construction is described in **Section 4.3.3 Treatment Pad**, there are notations that the sumps will be lined with HDPE liners to keep them from leaking. The text that discusses the creation of the composting pad area discusses grubbing and clearing it and then grading it and compacting it to a 0-2% slope and then adding 2-3 inches of straw before the soil to be composed is laid down.

1. Is the topsoil removed as part of the clearing and grading and stockpiled nearby for reuse after the pad is decommissioned?
2. Are there specifics about how the pad site will be reclaimed and reseeded?
3. While there is a mention of grading and recompacting, it's not clear to me if the recompaction achieved is on the order of a "clay liner" for a landfill or some lower level of recompaction. Ohio requires that clay liners be constructed of materials with cobbles no larger than 4 inches in diameter and that 50% or more of the materials must pass through the 200 mesh sieve. Given the nature of soils in that area, I would expect that soils in the B horizon or below would probably come close to and/or meet that level of grain size requirements, but I couldn't find anything that told me that.
4. Also, clay liners and test pads are supposed to be placed in lifts, no thicker than 6 inches and the recompaction should be done with a sheepsfoot roller and/or a compatible piece of equipment.
5. Landfill clay liners are typically 5 feet thick.

Lisa Humphreys' Response

- 1, 2 and 3. Topsoil was removed and during the grading, most of it was used for the perimeter berms, while the vegetation / brush was pushed to the north area (too swampy to use as pad area) and a little bugs/bunny habitat was created for them to use this spring / summer ...the berm material will be placed back on the site when composting / and confirmation sampling has confirmed we didn't leave anything behind ..then we'll be coordinating w/ John Blakeman for any seeding requirements like we did at TNT B stockpile area (no specifics at this time, just based on what John wants/ needs to have at the site). When you see the site, we graded everything to drain to the sumps so that all runoff was contained and would be sampled prior to disposal of sump water. We have 4 10,000 gallon frac tanks on site to hold the water from the sump areas while it is being analyzed at the lab.
4. No, this is not a RCRA cap per se, but we did compact the area w/ the sheeps foot roller and smooth roller as well as put down the small barrier between the soil and existing ground. Last time we composted and went to the trouble of putting down a clay pad (with proper compaction in 2" lifts), the composter continually ate up the clay and kept getting stuck (even though we

had a 2-3" gravel road for the rubber tires) ...so, this time, we took the effort and created a much better road for the composter (you'll see this at the site visit) and then have the windrows w/ the barrier below created. Also, we will be sampling the area once the windrows are hauled off so that we're sure we didn't contaminate this site. McTech actually did such a grand job on the pad area, I'm hoping we could use this area for any future composting / treatment, but that will have to be decided down the road on those individual projects. Once you see it, you'll know what I'm talking about.

5. Actually, the levels of the contaminated soil are just about the TCLP limit of 0.13 mg/l, nothing compared to what we composted last time, but still considered above the haz(ardous) limit ..I'm not really expecting it to take the full 8 weeks, but w/ the way the sampling starts and is weekly, we really won't know anything for about 3 weeks (normal lab turnaround time), so we have the 8 week time w/ the contractor and will do whatever it takes to get it below that limit.

My Conclusions

This response from Lisa Humphreys satisfied my set of questions and concerns. I assured her that I had no further questions about the treatment pad construction but recommended that the paragraph at **Section 4.3.3 Treatment Pad** be expanded to capture the pertinent points of this dialogue. I am looking forward to observing the site at the next RAB meeting.

This concludes my educational comments on this Addendum to Plan of Operations Interim Soil Removal Action Continuation document. If you have any questions and/or need further clarification on any point discussed in this memorandum, please feel free to contact me.