



Portsmouth Site Specific Advisory Board  
Waste Disposition Subcommittee Meeting  
January 5, 2009

Committee Members:

DOE Representatives:       Melda Rafferty  
                                      Dave Kozlowski  
                                      Mike Kennicott, LPP  
                                      Jeff Pinkerton, LPP  
                                      Clyde Gaston, LPP  
                                      Darrin Hovis

Support Staff:                Kate Timmons, EHI

Meeting opened at 4:00 p.m.

**Poly-Bottle Presentation**

Mike Kennicott delivered a presentation on poly-bottle disposition. Kennicott explained that the bottles were used to store highly enriched uranium (HEU) and went on to explain that poly-bottles must be at least one-foot apart for safety and that the DOE stores the bottles with two-feet in between, twice the federal regulation for proper bottle storage. Francis inquired what would happen if the bottles were stored too close together. Kennicott stated that that if a spacing violation occurred that one more issue would have to be present before a criticality exists.

Kennicott stated that the uranium in the bottles would not be recovered, instead would be solidified, and sent to the Nevada Test Site. Two types of testing must be done before bottles can be sent to the test site. The first test will determine if a treatment permit is needed, and the second test will determine if the treated material is hazardous. Kennicott also ensured the committee that the workers handling the material were safe from contamination.

Swain inquired about how the safety is monitored. Kennicott stated that LPP monitors the safety of the area. Swain asked why the Ohio EPA was not part of the monitoring process. Kennicott explained that the Ohio EPA is not called in because an air quality issue does not exist; the issue is a worker safety one and is monitored by LPP.

Kennicott explained that 30 bottles will be treated and samples will be sent to the Ohio EPA for testing. Testing is required to ensure that the hazardous material cannot escape the binding solution. Francis asked about the capabilities of the USEC lab to do the tests. Kennicott stated that the testing had to be done by an EPA-approved lab and that he did not believe that the USEC lab was capable of conducting the type of tests that were required. Once the material is tested and proven to be stable, a NTS profile will be completed prior to shipping.

### **UF6 Small Cylinder Presentation**

Darrin Hovis delivered a presentation on UF6 Small Cylinders. Hovis stated that Phase 1 of the project was completed, with Phase 2 now in process. The small containers are for gases and UF6. He explained that to stabilize the heels (what is left in the containers after normal processing without being washed out) was incorporated with a magnesium hydroxide solution to stabilize the materials, then mixed with mortar to solidify the contents. He stated that about 60 pounds of concrete was added to Phase 1 cylinders.

Hovis stated that 127 cylinders were sent to USEC, as there was enough uranium that could be recovered and could be profitable to the DOE. The rest of the cylinders do not have enough recoverable uranium and will be shipped off as waste.

16 cylinders are going into autoclaves for cylinder extraction. IES will come up from Atlanta, Georgia, to analyze the cylinders and follow the same methods as in Phase 1.

Hovis indicated that Phase 2 is slated for completion in September 2009. Cylinders will be shipped as they are completed. In February 2009, a stainless steel structure will be erected in the X-333 building for analyzing, and process will begin in March.

### **Process Gas Filter Ash and Oil Leak Gunk Disposition**

Rafferty explained that the ash is the consistency of baby powder and is the by-product of the creation of uranium hexafluoride, while gunk consistency ranges from concrete to silly putty and is the by-product of oil leaking into the process line and mixing with highly enriched uranium – both processes occurring in the 1970's. This material was sent to the Nevada Test Site to recover the uranium. This cannot be done, resulting in the material being shipped back to LPP for stabilization and disposal.

### **Action Items**

1. Subcommittee requests project updates as they become available.
2. Subcommittee requests summaries be sent out to the committees prior to the board meetings.
3. The Lube Oil and Pyranol presentation was postponed to the next meeting of the Waste Disposition committee.
4. The DOE is in the process of preparing the DMSA 11 and 12 fact sheets should be available by the next sub-committee meeting.

Next meeting is scheduled for Monday, February 2, at 4:30 p.m.