

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 18, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending November 18, 2005

Staff member Von Holle was at Y-12 observing the NNSA Readiness Assessment (RA) for the new disassembly glovebox. In addition, staff member Winters and outside expert Lewis were at Melton Valley observing the DOE Operational Readiness Review (ORR) for processing contact-handled transuranic waste.

A. Melton Valley Transuranic Waste Processing. The DOE Office of Environmental Management (EM) initiated their ORR for processing contact-handled transuranic waste on Monday. The staff and site rep. observed demonstrations in the main glovebox and box breakdown areas. The ORR team has identified a number of issues during their review this week. The team noted that during glovebox loading with 55-gallon drums, glovebox differential pressure drops considerably and may not provide satisfactory confinement. Following an emergency drill simulating a glovebox fire, a ORNL fire department responder was found not to be familiar with the Melton Valley facility. The ORR team intends to complete the review by early next week.

Following ORR team inquiry on specific processing plans, Foster-Wheeler and DOE-ORO personnel indicated that several hundred 55-gallon drums were to be processed in the box breakdown area during the first year and not in the main glovebox. Such an approach would not utilize the engineered hazard control afforded by the glovebox (versus reliance on personnel protective equipment for box breakdown area operations). This is a variation from the understood scope and the ORR team raised this issue with DOE-EM management.

B. New Disassembly Glovebox. On Monday, the RA prerequisites were completed and the NNSA RA team began their review of the disassembly glovebox. All operational demonstrations of glovebox activities were completed this week. The team plans to complete their review by the end of the November.

As a part of YSO line management validation of readiness, YSO verifies closure of previously identified issues and completion of the NNSA RA Plan of Action prerequisites. The YSO team completed their review last week and concluded that all pre-start actions have been closed. However, the YSO team identified a deficiency with lack of causal evaluation of findings from the contractor RA. The site reps. had previously noted that issues closed during an RA may not be adequately reviewed for causal analysis (see 10/21/05 site rep. report). The YSO team concluded that the lack of causal evaluation for most of the findings from the contractor RA may have prevented adequate identification of the extent of conditions. The YSO team categorized this issue as a post-start finding as all specific issues with the glovebox had been resolved.

C. Pressurized Drum. On Wednesday, BWXT identified a drum that appeared to be pressurized in the Enriched Uranium Operations building. The drum had been packed with waste and sealed four days earlier. Facility operators took appropriate action to vacate the area and control access. A response plan was developed to vent the drum and place it in a safe/stable condition. This plan was reviewed by the facility operational safety board and successfully executed on Wednesday afternoon. Subsequent radiological surveys and continuous air monitors indicated no release of contamination from the drum. The drum contents have now been transferred to a sorting hood for additional evaluation. While investigation of this issue continues, BWXT is monitoring other drums packed in the same area.