

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 21, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending October 21, 2005

A. New Disassembly Glovebox. This week, BWXT completed repair of equipment (a vacuum pump) that delayed an operational demonstration for the BWXT Readiness Assessment (RA) team (see last week's report). The demonstration was completed on Thursday this week. The RA team plans to brief results of the RA to management on Monday.

B. Melton Valley Transuranic Waste Processing. Foster-Wheeler restarted their Operational Readiness Review (ORR) for processing contact-handled transuranic waste. This ORR had previously started in late-July but was suspended (see 8/5/05 site rep. report). Operational demonstrations were conducted and the ORR is expected to be completed early next week.

C. Oak Ridge Radioactive Waste Management. As noted on August 19th, planning was in progress by Bechtel Jacobs Company (BJC) to extract samples from the highly radioactive soil around waste tank W-1A to delineate soil that would be handled as transuranic waste from soil that could be handled as low-level waste. On Friday, DOE-ORO personnel noted to the site rep. that work planning documents, including activity hazard analysis, radiological work evaluations and work instructions/permits have been completed. A line management assessment is pending. An independent BJC RA is now scheduled for November 7th.

D. Transformer Failure. Last week, a low-power 161 kV transformer in a Y-12 switchyard failed resulting in destruction of the insulator stack (pieces scattered more than 100 feet). A fire ensued and power was lost to about 60 percent of Y-12 facilities. No personnel were injured and the fire was extinguished by a deluge fire suppression system associated with a nearby voltage regulating transformer. The transformer that failed is a capacitance-coupled voltage transformer that supplies power to switchyard instrumentation and devices. The failure caused a protective relay trip resulting in isolation of one of the two 161 kV feed lines. BWXT has reconfigured the system and all facilities now receive power from the remaining 161 kV feed line.

The 161 kV lines are monitored remotely and indications of a problem were apparently identified about two hours prior to transformer failure; however, the transformer failed while operators and the system engineer were investigating the situation. BWXT has initiated a formal investigation to evaluate issues associated with this transformer failure.

E. Readiness Assessments. BWXT RAs for the Purification Facility and for furnace reduction operations were recently completed (see the last two site rep. reports). YSO personnel and the site reps. have noted that the RA teams identified issues that were subsequently "closed during the review" without being subject to formal identification and treatment as a finding (where otherwise warranted). Such a practice may bypass proper determination of cause and generic or other implications, and potentially provides an incentive to rush closure of an issue. Such a practice is specifically prohibited for ORRs by DOE Standard 3006-2000, *Planning and Conduct of Operational Readiness Reviews*. Following site rep. inquiry, YSO and BWXT personnel have noted to the site reps. that this practice will not be employed for the RA in progress for the New Disassembly Glovebox noted above. The site reps. have inquired with YSO and BWXT management on the basis for this practice and site plans to address the issue.