

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending August 12, 2011

ORNL Tank W-1A. UCOR initiated its Operational Readiness Review (ORR) this week (see the 7/29/11 report). The ORR team plans to complete its review early next week. Because UCOR expects to be able to quickly address the issues identified thus far by the ORR team, DOE is considering initiating its ORR on August 22nd.

Conduct of Operations/Criticality Safety/Feedback and Improvement. Last October, B&W completed its Readiness Assessment (RA) for the startup of a new glovebox in Building 9204-2E (see the 10/8/10 report). During this RA, the RA team identified a pre-start finding associated with operators skipping a step in a 'continuous use' procedure. The skipped step directs operators to close and latch a 'cart guard', which implements a criticality safety requirement to ensure that no fissile items can be placed below the glovebox. B&W addressed this pre-start finding by conducting remedial training and requiring that operators use a place keeping method during first-use operations. Operations management determined that place keeping was no longer required after first-use of the new glovebox (see the 3/11/11 report). Last week, during a periodic walkthrough to observe ongoing operations, criticality safety managers identified that the cart guard had been left in the open position, which indicates operators skipped the aforementioned procedural step.

While gathering information related to this event, the site representatives discovered several steps that could not be performed as written in the 'continuous use' procedure for the subject glovebox. Specifically, there are a several instances in which the glovebox procedure directs operators to perform steps from a second procedure, but then directs operators to return to the incorrect step in the original procedure (i.e., the glovebox procedure). The site representatives communicated this issue to production management.

B&W is collecting additional information regarding these two issues and is determining whether it will conduct a formal critique. B&W plans to issue a revision of the Y-12 Conduct of Operations Manual this month, which is expected to include additional requirements and guidance associated with place keeping (see the 7/29/11 report).

Dismantlement Operations. B&W externally reported a near-miss occurrence regarding an event that occurred on August 9th while operators were using a hoist to load a large weapon component into a multi-axis machining tool in Building 9204-2E (see the 10/22/09 report). The weapon component slid free of its rigging and fell approximately four feet to the floor. No one was injured. B&W management directed that operations personnel conduct an investigation to determine the causes of this event.

Temporary Modifications. In 2007, YSO performed a review of temporary modifications (i.e., alterations to systems, structures, and components such that they no longer conform to the approved configuration). At that time, YSO communicated to B&W that temporary modifications were implemented longer than allowed by Y-12 procedures, which state that "these alterations are temporary in that they are expected to be installed for six months or less." Specifically, YSO identified that four temporary modifications in Building 9204-2E and 12 temporary modifications in Building 9212 were more than 6 months old. Last month, YSO completed another review of temporary modifications, the scope of which was limited to Building 9212. YSO identified seven temporary modifications that have been installed for more than five years, including a modification to the denitrator system (see the 7/15/11 report). B&W management is actively engaged in removing these temporary modifications.