

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 2, 2009

TO: Timothy Dwyer, Technical Director  
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives  
SUBJECT: Activity Report for Week Ending July 3, 2009

**Conduct of Operations.** Due to the concern generated by several recent events (see last week's site rep. report), B&W has directed its senior management team to brief all nuclear operations and support personnel on the importance of attention-to-detail and adherence to procedures prior to resuming operations next week.

In response to direction from DOE Headquarters and YSO, B&W has issued a safety strategy for conducting new work associated with the American Recovery and Reinvestment Act (see the 3/20/09 site rep. report). Both DOE's direction and B&W's safety strategy highlighted the need for the contractor (B&W) to provide rigorous day-to-day oversight of sub-contractor work. The site reps. noted to Y-12 management that the aforementioned safety strategy does not identify any mechanisms for B&W to provide rigorous day-to-day oversight of sub-contractor work. B&W plans to revise its safety strategy. Concurrently, in response to a recent operational event during which a YSO Facility Representative observed that sub-contractor personnel were not properly using and following the procedure (see the 6/19/09 site rep. report), B&W is now planning to increase its oversight of sub-contractor operations. Specifically, B&W is developing requirements for floor managers (representing the facility operations organization) to provide additional operational oversight as well as requirements for appropriate personnel from the Environment, Safety, and Health Division to observe the first two iterations of new activities.

**Criticality Safety.** In response to questions the Board raised regarding the extent-of-condition evaluations B&W performed on Y-12 Criticality Safety Evaluations (CSEs), B&W recently issued a plan to perform additional extent-of-condition reviews (see the 5/1/09 site rep. report). Specifically, B&W committed to review all of the effective CSEs for Buildings 9212, 9215, 9204-2/2E, and 9720-5. Based on input from the Board's staff, B&W developed additional guidance for performing these reviews. B&W expects to complete these extent-of-condition reviews during the next 12 months.

B&W also recently issued revisions to the CSEs for the Highly Enriched Uranium Materials Facility (HEUMF) that are intended to comply with the content and format requirements of DOE Standard 3007-2007, *Preparing Criticality Safety Evaluations* (see the 5/1/09 site rep. report).

**Unreviewed Safety Question Determination (USQD) Process.** From December to May, B&W performed a pilot trial of a new expert-based USQ screening process in the Assembly/Disassembly Building (see the 10/10/08 and 6/6/08 site rep. reports). The pilot procedure allows for designated individuals to screen proposed changes from the formal USQD process if it is *readily apparent* that the proposed change would not result in a positive USQ. B&W has briefed results of the pilot to YSO. Out of 59 proposed changes, 28 changes were screened as not requiring a formal USQD. B&W and YSO intend to discuss the results of the pilot with DOE Headquarters and start a similar pilot effort in another Y-12 nuclear facility by August to further refine the procedure and gather more data.

**New On-site Transfer Vehicle (SST-E).** This week, B&W completed its Operational Readiness Review (ORR) for the SST-E that is to be used for load-out of HEUMF (see the 4/24/09 site rep. report). The ORR team concluded that SST-E operations can be safely started subject to resolution of several findings in areas such as roles/responsibilities, criticality safety evaluations, and configuration management.