

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 31, 2009

TO: Timothy Dwyer, Technical Director  
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives  
SUBJECT: Activity Report for Week Ending July 31, 2009

Mr. Owen was out of the office this week. Mr. Kupferer attended the DOE Readiness Workshop in Knoxville on Tuesday and Wednesday.

**Highly Enriched Uranium Materials Facility (HEUMF).** Earlier this month, B&W submitted a Safety Basis Supplement to the HEUMF Documented Safety Analysis that evaluated operational parameters unique to the initial load-out of materials into HEUMF (see the 7/10/09 site rep. report). The primary differences between normal HEUMF operations and those planned during the load-out phase are the following: (1) the use of a different type of forklift to unload on-site transportation vehicles, (2) different requirements for the configuration of opened and closed facility doors, and (3) confirmatory checks of the containers at the shipping facility rather than at HEUMF. The duration of these load-out operations is expected to be 18 months. B&W identified one compensatory measure in the supplement, which is a requirement to implement a fire watch while unloading the on-site transportation vehicles. YSO approved the Safety Basis Supplement last week.

**Assembly/Disassembly Building Operations.** Last month, B&W identified a positive Unreviewed Safety Question regarding the use of three 115 volt, 340 watt heat tapes on the outside of a metal bell chamber to moderately heat the components inside (see the 6/26/09 site rep. report). B&W developed a Justification for Continued Operations (JCO) to resume use of the bell chamber and heat tapes. B&W revised the associated compensatory measure (formerly to place the heat tapes out-of-service) to require production personnel to perform a dual verification that components containing a specific material have not been loaded in the bell chamber prior to using the bell chambers *and* heat tapes (no dual verification is required if the heat tapes remain tagged out-of-service). YSO approved the JCO on the condition that the applicable procedure will be revised to incorporate the dual verification requirement prior to resuming operations. B&W is developing an implementation plan and evaluating whether an implementation validation review is necessary (see the 7/17/09 site rep. report).

**Recommendation 2004-2.** This week, YSO forwarded the confinement ventilation system evaluations for Buildings 9204-2E, 9212, and 9215 to NNSA Headquarters as required by DOE's Implementation Plan for Recommendation 2004-2, *Active Confinement Systems* (see the 8/1/08 site rep. report). All three evaluations identify significant gaps between the mandatory performance criteria (contained in the Ventilation System Evaluation Guidance) and existing conditions. YSO stated in its forwarding letter that reconfiguring the facilities to support a confinement ventilation system that is consistent with the aforementioned Departmental guidance would require a significant investment. YSO noted that some confinement ventilation upgrades are included in the scope of the Facility Risk Review (FRR, see the 8/29/08 site rep. report). Based on NNSA's plans to fund the FRR upgrades and replace these facilities with the Uranium Processing Facility, YSO recommended not investing significant resources to upgrade the confinement ventilation systems in these antiquated facilities.

**Documented Safety Analyses (DSAs).** Following a prompt from YSO safety basis personnel, B&W recently submitted the annual updates of the DSAs for Building 9201-5. These submittals were received more than 20 months after the last annual update. B&W acknowledged that other initiatives (particularly deactivation of 9204-4, see the 4/3/09 site rep. weekly) distracted them from the annual update requirement and issued a nonconformance report. There were no changes to the existing safety basis as a result of this most recent annual update.