

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 20, 2009

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending February 20, 2009

Highly Enriched Uranium Materials Facility (HEUMF). B&W recently issued updated Criticality Safety Evaluations (CSEs) intended to cover receipt, handling, re-containerization, and storage operations in HEUMF. This week, YSO formally transmitted an extensive set of comments on the CSEs to B&W. Among a variety of technical issues raised, YSO noted the need for certain passive design features to be identified as controls in the HEUMF Documented Safety Analysis. YSO requested B&W to propose resolutions to each of the comments.

Specific Administrative Control (SAC) Implementation. In a July 30, 2007 letter—in part based on findings from an April 2007 staff review of SAC implementation at Y-12—the Board informed DOE that actions taken to date were not sufficient to close Recommendation 2002-3, *Requirements for the Design, Implementation, and Maintenance of Administrative Controls*. In June 2008, NNSA directed sites to perform field reviews of the design, documentation, implementation, and long-term maintenance of SACs. During the conduct of this review in Building 9206, B&W discovered a Technical Safety Requirements (TSR) violation due to combustibles being present in a storage area contrary to the requirements of an applicable SAC.

B&W's procedure that governs Safety Basis Implementation Plans (SB IPs) and Implementation Validation Reviews (IVRs) requires that the Facility Operations Manager develop a SB IP and a plan-of-action to conduct an IVR for safety basis document revisions. In this situation, the verbiage of the SAC was revised last year to remove the word 'transient' in the phrase 'transient combustibles' as part of an annual TSR update. Yet, a SB IP and IVR plan-of-action were not developed for this annual update. The site reps. believe that an evaluation may be warranted of the process used by B&W to determine whether safety basis document revisions require a SB IP and IVR plan-of-action be developed.

Material Movement. On Monday, while moving drums containing weapon components in the Assembly/Disassembly Building, a drum fell from the second level of a stack of drums to the floor (about 4 feet). The drum fell as a third-level pallet of drums was being removed by forklift. All personnel were appropriately clear of the drums being moved, and the drum had only minor denting on the top and bottom outer edges. Material movement personnel stated that the third-level pallet of drums had just cleared the lower drums when the second-level drum fell; no specific cause has been determined. B&W is in the process of inspecting other stacked drums and evaluating the cause of the drop.

Quality Evaluation Relocation. In late December, B&W had completed its Readiness Assessment for startup of the octagonal glovebox that had been relocated to the Assembly/Disassembly Building (see the 12/26/08 site rep. report). This week, Quality Evaluation operations personnel loaded the first unit into the octagonal glovebox and initiated disassembly operations. B&W expects to complete disassembly of this unit during the next few weeks.