

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 October 29, 2010

Nuclear Criticality Safety (NCS). Staff members John Abrefah and Ernie Elliott visited Y-12 to review NCS and discuss development of criticality safety process studies for the Uranium Processing Facility (UPF). Noteworthy items from the visit include the following:

- B&W's NCS organization was restructured several months ago. The highest priorities of the new NCS management team are to (1) ensure that the controls identified in NCS analyses are the right controls, (2) ensure that NCS controls are effectively implemented and maintained in the operating facilities, and (3) ensure that the UPF project is adequately supported in the area of NCS. Key actions identified by NCS management related to these priorities are ensuring that NCS engineers are spending adequate time in the field and accelerating efforts to upgrade Criticality Safety Evaluations (see the 9/17/10 report).
- B&W's Criticality Safety Committee, which includes several senior managers, provides oversight and guidance for the Y-12 NCS program. This committee meets periodically to discuss the following topics as they relate to NCS: performance metrics, new and modified procedures and analyses, recent assessments, and the status of actions related to the NCS program improvement plan. The committee has also recently requested briefings on UPF NCS process studies and site-wide container simplification initiatives.

Storage Operations. Earlier this year, B&W relocated a significant quantity of nuclear material from Building 9720-5 (the Warehouse) to the Highly Enriched Uranium Materials Facility (HEUMF) and subsequently down-posted the Material Access Area in Building 9720-5 (see the 4/30/10 report). B&W is planning to consolidate nuclear material currently stored in other aging nuclear facilities into Building 9720-5. For the stated purpose of supporting a change in the mission of Building 9720-5, B&W recently submitted a revision to applicable Safety Analysis Report (SAR) to YSO for approval. Based on this proposed revision to the SAR, it is unclear to the site representatives how the mission of Building 9720-5 is changing from a safety perspective. B&W plans to operate Building 9720-5 as a Hazard Category 2 nuclear material storage facility for the foreseeable future. As such, B&W will continue to maintain the fire suppression system, criticality accident alarm system, lightning protection system, and facility structure as safety-significant systems and structures.

Operational Drills. DOE Orders 151.1C, *Comprehensive Emergency Management System*, and 426.2, *Personnel Selection, Training, Qualification, and Certification Requirements*, require DOE contractors to develop a continuing training program that includes conducting operational drills for both operators and emergency response personnel. In response to the results of a training self-assessment it performed earlier this year, B&W has committed to implement a new drill program in FY 2011. Production management is heavily involved in this initiative.

Uranium Processing Facility. This week, NNSA's Peer Review Team for the seismic and structural design of UPF visited Y-12 to get briefed on the status of B&W's seismic and structural design efforts (see the 4/16/10 report).