

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 19, 2010

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending March 19, 2010

Mr. Owen was out of the office on Friday. Mr. Kupferer was out of the office from Wednesday through Friday.

Highly Enriched Uranium Materials Facility (HEUMF). B&W's plan to load HEUMF consists of two sequential phases: (1) a three-month effort to de-inventory the Warehouse and (2) a 15-month effort to transfer material from other Y-12 nuclear facilities (see the 10/3/08 site rep. report). B&W has transferred almost all of the Rackable Can Storage Boxes from the Warehouse to HEUMF using the SST-E on-site transfer vehicle. B&W is currently focused on transferring drums from the Warehouse and is planning to complete this activity by the end of April. On Wednesday, however, B&W suspended SST-E on-site transfers after discovering one drum that was not authorized in the SST-E had been transferred to HEUMF on the SST-E. This transfer violated a Specific Administrative Control in the SST-E Technical Safety Requirements (TSR). B&W is issuing an occurrence report on this TSR violation.

Uranium-233 Disposition/Recommendation 2008-1. In response to the Board's Recommendation 2008-1, *Safety Classification of Fire Protection Systems*, DOE developed interim guidance for the design and operation of new wet-pipe sprinkler systems that are to be used in safety-significant and safety-class applications. Last month, the DOE Office of Environmental Management (EM) directed its field elements to utilize this interim guidance for nuclear projects that have not yet achieved Critical Decision-1 (CD-1) approval. DOE approved the CD-2/3A package for the U-233 Downblending and Disposition Project in 2007. Due to the importance of fire suppression systems to downblending, DOE-ORO has directed Isotek to use additional design and operability criteria (based on the interim guidance) for the project's safety-significant sprinkler systems in ORNL Building 3019. The new criteria apply to both new and existing sprinkler systems. Isotek is evaluating the potential impact of the new criteria.

Criticality Safety. In response to the Board's letter of January 23, 2009 regarding concerns with Criticality Safety Evaluations (CSEs), B&W committed to review all active CSEs to ensure credible abnormal events are adequately analyzed (see the 9/5/09 site rep. report). B&W has reviewed about 95 CSEs and plans to review the remaining 50 CSEs over the next four months.

Conduct of Operations. In January, B&W issued an occurrence report on an unexpected discovery of radioactive material outside of a posted radiological area (see the 1/29/10 site rep. report). B&W had intended to update its occurrence report to document their concern that when employees made this discovery, they did not properly stop work and make required notifications to the shift manager and radiological control. The site reps. noted, however, that the "final" update of the report issued last week did not address this concern in most sections of the report including the title, description of cause, and corrective actions. The site reps. discussed this observation with B&W management who indicated that the occurrence report will be revised.