

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 4, 2009

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending September 4, 2009

Highly Enriched Uranium Materials Facility (HEUMF). B&W started its Implementation Validation Review (IVR) of HEUMF safety basis controls. As B&W intends to credit the IVR in scoping the B&W Operational Readiness Review, this IVR represents the start of the operational readiness confirmation process for HEUMF. The IVR is to be completed by September 18th.

Criticality Safety/Conduct of Operations. YSO and B&W management held their quarterly senior management meeting on the Y-12 criticality safety program. At this meeting, recent operational events and Criticality Safety Evaluation (CSE) reviews were discussed in detail.

In response to recent operational events that involved lack of adherence to criticality safety postings and procedural requirements (see the 8/28/09 site rep. report), B&W senior management noted the need for near-term and longer-term actions. B&W is immediately increasing the on-the-floor presence of Criticality Safety Officers and other support personnel to observe operations and mentor operating crews on proper adherence to procedures and postings. B&W has also tasked a senior production manager to lead a review of recent (over the past year) criticality safety infractions. B&W is to complete this review over the next few weeks and longer-term actions are to be defined.

B&W management also discussed the progress made in performing extent-of-condition reviews of Y-12 CSEs in response to the Board's letter of January 23, 2009 (see the 8/28/09 and 7/3/09 site rep. reports). B&W has completed approximately 20 of the 150 CSE reviews planned between now and July 2010. While performing one of these reviews this week, B&W criticality safety personnel identified a credible abnormal condition that had not been addressed in the applicable CSE (a failure/spill of a safe bottle on an elevator in Building 9212). In response, B&W declared a Potential Inadequacy in the Safety Analysis and restricted use of the subject elevator.

ORNL Building 3019/Uranium-233 Disposition. Numerous changes to the project baseline have been made and re-design efforts for the Uranium-233 Downblending and Disposition Project have been in progress over the past several months (see the 1/30/09 site rep. report). This week, Isotek issued the Preliminary Safety Design Report to DOE-ORO as called for by DOE project management requirements (DOE Order 413.3A). To support future approval of Critical Decision-3, Approve Start of Construction, DOE Headquarters will be conducting a Construction Project Review that includes a formal 60% design review starting the week of September 14th.

Justifications for Continued Operations (JCOs). The Board's letter of April 19, 2007 to DOE outlined several weaknesses and deficiencies in the processes associated with JCO requests, reviews, and approvals. The Board specifically noted that some JCOs across the complex appeared to have excessive durations. There are currently 5 JCOs implemented at Y-12. These JCOs have been implemented for durations of 6, 14, 16, 41, and 50 months. In response to the Board's letter, DOE developed a draft revision to DOE Guide 424.1A, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*, which states "JCOs should not continue past a required annual DSA update unless the JCO was submitted within three months of the submittal date of the annual update." The draft revision to the Guide has not yet been approved or issued.