## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 29, 2009

TO: Timothy Dwyer, Technical Director

FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives

SUBJECT: Activity Report for Week Ending May 29, 2009

Mr. Owen was out of the office this week.

Highly Enriched Uranium Materials Facility (HEUMF). In March 2008, B&W issued a Nonconformance Report (NCR) that identified deficiencies in the Quality Assurance (QA) program documentation provided by a sub-contractor that procured and fabricated safety-class storage rack fasteners, which were installed in HEUMF (see the 3/28/08 site rep. report). Subsequent to issuing the NCR, B&W developed and implemented a fastener dedication plan intended to provide reasonable assurance that the fasteners are capable of performing their intended safety function (see the 10/3/08 site rep. report). While executing this dedication plan, B&W discovered the following two additional QA-related anomalies associated with the fasteners (see the 2/13/09 site rep. report): (1) discrepancies existed between actual bolt headmarkings and the head-markings indicated on the Certified Material Test Reports (CMTRs) provided by lower-tier suppliers and (2) an installed lot of bolts was not identified on the sub-contractor's installation map and did not correlate with any of the CMTRs B&W had received.

This week, B&W issued a Summary Report that documents its resolution of these issues. B&W sampled and tested each lot of installed bolts in addition to tracing the bolts to the manufacturer. The Summary Report states that testing, evaluation, and inspection of the bolts indicate that the bolts were manufactured in accordance with design specifications despite the lack of formal flow-down of QA requirements to the sub-contractor's lower-tier suppliers. The Summary Report concludes that all the fasteners meet their design criteria and will perform their intended safety-class function and, therefore, are acceptable to "use-as-is."

YSO is performing a formal assessment of B&W's resolution of fastener QA issues (see the 4/24/09 site rep. report). As part of its 'Conduct of Quality Program' improvement initiative, B&W plans to review all of the NCRs associated with HEUMF procurement and construction activities to identify root causes, which it plans to incorporate into its Lessons-Learned Report for HEUMF (see the 2/27/09 and 4/3/09 site rep. reports). Also, the site reps. have questioned site management regarding whether or not these issues should be externally reported per the requirements of DOE Order 231.1A, *Environment, Safety, and Health Reporting*.

**Fiscal Year (FY) 2009 Funding.** YSO and B&W were successful in obtaining additional FY 2009 funding from NNSA Headquarters to support planned Facility Risk Review maintenance, baseline maintenance of Building 9212, and Oxide Conversion Facility operations (see the 4/24/09 site rep. report).

**HEUMF/Emergency Management.** During a July 2008 review of HEUMF safety analysis documentation (see the 8/1/08 site rep. report), the Board's staff raised questions regarding the ability of HEUMF personnel to safely evacuate HEUMF following a seismic event. In response to these inquiries, B&W recently issued an emergency management document that contains detailed guidance for responding to a seismic event. This document is referenced in the appropriate HEUMF emergency plans and will be physically available to the HEUMF shift manager.