

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 20, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending October 20, 2006

Mr. Owen was out of the office this week. Staff member Brett Broderick was on-site this week to perform site representative duties.

A. Oxide Conversion Facility. Facility personnel performed a second critique this week to review the procedures and actions that led to the release of a small amount of hydrogen fluoride (HF) that occurred two weeks ago (see 10/13/06 site rep. report). Last week, it was believed that the vaporizer had been drained but not purged and that residual HF in the vaporizer was released during a surveillance evolution. However, during the second critique, facility personnel noted that the procedure for draining the vaporizer was suspended late in the draining evolution and was never completed. Although the majority of the HF was drained to the cylinder, the procedural requirements to use nitrogen to force residual HF back into the cylinder were not performed. Failure to complete this portion of the procedure also left the vaporizer slightly pressurized. BWXT continues to evaluate issues from this event and develop a Justification for Continued Operations to support completing required safety basis surveillances.

B. Y-12 Throughput Improvement Plan. In an effort to meet aggressive production targets for Fiscal Year 2007/2008, BWXT developed the Y-12 Throughput Improvement Plan (YTIP) to study the current production environment and identify areas where process efficiency and capacity improvements could be achieved. The YTIP highlights potential funding shortfalls in both production support and facility operations, which include funding gaps associated with 10CFR830 safety basis implementation in Building 9212 and the execution of high priority actions captured in the Fire Protection Program Comprehensive Corrective Action Plan. In addition to recommending increased funding to address these shortfalls, the YTIP recommends instituting two-shift operations in certain critical areas, which would require additional facility safety, criticality safety, and system engineering personnel.

C. Warehouse Containers. This week, Warehouse personnel identified several containers that had questionable lid seals. These particular containers are packaged in the Enriched Uranium Operations Building and shipped to the Warehouse for storage in the tube vaults. During transfer of the containers within the Warehouse, an operator noted the crimp seal did not appear to be tight. Subsequent evaluation of several containers at the Warehouse identified similar issues with the crimp seal closure. Initial investigation indicates that the container issues may be limited to those closed by a particular machine that is not normally used. However, BWXT plans to perform additional inspections of these type containers. BWXT has also conducted training on the post-closure inspections for appropriate personnel. The containers with closure issues have been segregated and will likely be returned to the Enriched Uranium Operations Building for repackaging.

D. Special Material Capability Project. Earlier this month, NNSA approved Critical Decision-2 (performance baseline) and Critical Decision-3A (procure long lead equipment) for the special material capability project (see 8/11/06 site rep. report). This project will install a new negative-pressure glovebox and associated filtered exhaust systems in an existing Y-12 facility. The current estimated startup date for this activity is April 2010.