

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 29, 2006

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** R. Todd Davis/Donald Owen, Oak Ridge Site Representatives  
**SUBJECT:** Activity Report for Week Ending December 29, 2006

Mr. Davis was out of the office this week. Y-12 nuclear facilities were on holiday routine Monday and Tuesday and with reduced staff the remainder of the week.

A. Oxide Conversion Facility. No Oxide Conversion Facility (OCF) operations have been conducted since the early October event where a small amount of hydrogen fluoride (HF) was released from primary confinement (see the 10/27/06 and prior site rep. reports). BWXT management continues to investigate the event. BWXT management noted that key points being evaluated include system status from the prior incomplete HF vaporizer draining evolution not being effectively carried forward and the conduct of a surveillance with indications that the vaporizer was slightly pressurized. A causal analysis is expected to be completed and corrective actions developed by mid-January.

As noted on October 13<sup>th</sup>, BWXT was also developing a Justification for Continued Operations (JCO) to support completing several past-due (expired) safety basis surveillances. In November, BWXT submitted the JCO to YSO proposing that remaining HF in the primary confinement be purged followed by completion of the surveillances. Late last week, YSO approved the JCO. Development of the purging procedure under this JCO and other maintenance actions are in progress. BWXT management anticipates that the HF purging evolution and the OCF safety basis surveillances will be completed by late-January.

B. Activity-Level Work Planning. Last week, production operations personnel in the Special Materials Processing Building were supporting a maintenance evolution to realign rails to a turntable in a glovebox that is used to fill molds. The role of the operations personnel was to cleanout excess powder (a fire hazard) as glovebox windows were being removed for access. It was discovered after starting the evolution that the production operations personnel had not been using a work instruction written for such glovebox cleanout. While some window removal and cleanout had been performed on prior days, a worker inquiry on December 21<sup>st</sup> led to identifying that a work instruction existed. The work instruction had steps for removal of a mold feed canister and for cleaning or removal of vent line filters (each would be a source of additional powder). These steps had not been accomplished during the work conducted prior to December 21<sup>st</sup> (the mold feed cannister was loaded). The evolution was stopped, a critique was conducted and BWXT management decided to externally report this event as a management concern.

BWXT management noted to the site rep. that a similar maintenance evolution occurred on a second glovebox of the same design in April during which the cleanout work instruction had been used. For this evolution, there were different personnel involved. BWXT management indicated that the work packages are to be reviewed including assessment of the integration of work planning for evolutions requiring such production operations support.