

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 15, 2005

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** R. Todd Davis/Donald Owen, Oak Ridge Site Representatives  
**SUBJECT:** Activity Report for Week Ending April 15, 2005

Mr. Davis was out of the office on Thursday and Friday.

A. Wet Chemistry Operations. As reported on December 5<sup>th</sup>, BWXT has completed the restart of all wet chemistry processes in the Enriched Uranium Operations building. Since December, BWXT has performed several runs with the denitrator to produce uranium trioxide for feed to the Oxide Conversion Facility. BWXT continues to contend with equipment problems, however, that have prevented wet chemistry from reaching a full operational tempo. For example, feed for secondary extraction has been limited recently because of a pump failure associated with the secondary intermediate evaporator. The primary intermediate evaporator has been used during this time to concentrate some feed for secondary extraction.

B. Activity-Level Work Planning. As reported last week, investigation of a failure to use work planning review protocols on a maintenance activity to replace a conveyor belt in a casting line glovebox was in progress. An Enriched Uranium Operations building operational safety board had reviewed the planning for the work and concluded that the generic Job Hazard Analysis (JHA) presented would not provide a sound basis for safety and directed that a JHA specific to the activity be developed. While the overall investigation of the event continues, BWXT management informed the site rep. this week that work planning personnel had screened out performing a specific JHA in January by improperly interpreting the JHA screening criteria including a criterion regarding breaching a hazardous system.

In early April, BWXT issued a new Integrated Work Control Manual (IWCM) providing requirements for maintenance work planning. The IWCM includes new criteria that defines "minor work" (work that can be performed using skill-of-the-craft with no specific JHA or detailed work instructions required) from all other "complex work" that will require a specific JHA and detailed work instructions. Site rep. review of the criteria this week found that while a criterion dealing with breaching of a hazardous system boundary is included, the IWCM definition for hazardous system boundary essentially restricts systems containing nuclear material to only those that "... present an unintentional criticality potential..." Such restriction could improperly exclude breaches of contaminated gloveboxes, for example, from being designated as complex work. This observation was discussed with YSO and BWXT personnel who indicated the observation would be addressed.

C. Inactive Actinides. YSO recently provided an update to NNSA Headquarters on potential disposition plans for inactive actinides stored at Y-12. Much of this material is currently stored at the Warehouse, which is scheduled to be de-inventoried by 2008. In addition, most of this material is not approved for storage at the Highly Enriched Uranium Materials Facility. Therefore, timely planning and execution of appropriate disposition plans will be required over the next few years. For several of the materials identified, a firm disposition path has yet to be identified and there is no funding for disposition planning in FY 2005. Disposition at the Savannah River Site H-Canyon facility is an option for several material groups; however, none of these materials are identified on the H-Canyon processing schedule.