

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 2, 2007

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** R. Todd Davis/Donald Owen, Oak Ridge Site Representatives  
**SUBJECT:** Activity Report for Week Ending March 2, 2007

A. Uranium Processing Facility. This week, Board members Joseph Bader and Larry Brown and staff members David Grover and Roy Kasdorf visited Y-12 to discuss the design and status of the Uranium Processing Facility (UPF). The Board and NNSA have had an on-going dialogue with regards to the level of analysis and design detail required at conceptual design (i.e., Critical Decision-1) to ensure that facility safety systems are adequately defined. For the UPF project, the Board members and staff discussed with YSO and BWXT personnel plans for completing a facility structural layout, safety systems details (e.g., one-line diagrams) and overall facility hazard analysis. The staff continues to work with project personnel to resolve open questions as the project nears the completion of conceptual design.

YSO management stated that approval of Critical Decision-1 (alternative selection and cost range) is now expected in May 2007. In support of this critical decision, NNSA plans to conduct an integrated project review of the UPF conceptual design package. The on-site portion of the review is to be conducted next week.

B. Highly Enriched Uranium Materials Facility. In preparing for a concrete placement at a wall-to-wall intersection on Monday, BWXT personnel identified that four items of reinforcing steel (U-bars) were not installed as required in the adjacent concrete placement that had been completed in August 2006. BWXT suspended concrete placements by the construction contractor. YSO and BWXT management stated to the staff and site reps. that investigation of quality assurance checks, applicable BWXT drawings of record, construction contractor fabrication drawings, and extent of condition for similar configurations is in progress. BWXT corporate management has assigned personnel from outside Y-12 to support the overall evaluation of the event and the determination of the path forward.

C. Uranium-233 Disposition at ORNL. On Wednesday, Isotek assumed responsibility for Building 3019 operations from UT-Battelle. Building 3019 operations are essentially limited to surveillance and maintenance activities for the near future. Dismantlement and removal of legacy process equipment to make room for new down-blend process equipment is the next planned major operation in Building 3019, now expected in Fiscal Year 2008. Isotek will be performing legacy equipment characterization and preparing to hire a sub-contractor to perform the dismantlement operations during the remainder of Fiscal Year 2007.

As reported on January 5<sup>th</sup>, approval of Critical Decision-2/3A (approve performance baseline and start long-lead equipment procurement) for the down-blending project had been delayed. DOE-ORO management informed the staff and site reps. that these approval actions are not expected to be completed until May. DOE-ORO management noted that natural phenomena hazard evaluation of the ventilation stack adjacent to Building 3019 will need to be addressed before DOE Headquarters will consider approval of Critical Decision-2/3A.