

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 10, 2004

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** R. Todd Davis/Donald Owen, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending December 10, 2004

A. Oxide Conversion Facility. The contractor Operational Readiness Review (ORR) resumed on Monday after a two month suspension (see 10/8/04 site rep. report). The site reps. observed BWXT demonstrations of operations. The ORR team members noted generally satisfactory conduct of the demonstrations and generally satisfactory level of knowledge of operators and supervisors. While a number of issues are still in development, findings in the areas of emergency preparedness and conduct of preventative maintenance are anticipated by the ORR team. Regarding emergency preparedness for a release of hydrogen fluoride (HF), the ORR team identified that resolution of issues from the emergency preparedness exercise conducted last March (see 3/19/04 site rep. report) has not been adequately demonstrated. The site reps. note that emergency response to an HF release had not been identified as an open item by BWXT line management in their declaration of readiness nor had any HF release response demonstrations been planned for the contractor ORR. BWXT management informed the site reps. that demonstration of response to an HF release for line management evaluation is now being planned prior to the NNSA ORR and that an emergency preparedness exercise is being planned for demonstration to the NNSA ORR (now scheduled for late January). The contractor ORR team is expected to out-brief site management next week.

B. Wet Chemistry Restart. On Thursday, BWXT successfully operated the primary extraction process and produced acceptable product solution. Operation of this process completes restart of all wet chemistry processes authorized by YSO in March 2003. Numerous equipment problems have delayed startup of the various wet chemistry processes during the last 21 months. Although BWXT has now completed initial restart, continued management focus on proper conduct of operations and maintenance will be required to safely achieve the desired throughput to process the backlog of uranium-bearing materials. In addition, some processes (e.g., denitrator and wiped film evaporator) have not been operated in approximately 5 months. BWXT plans to ramp up to the full operational tempo over the next few months.

C. Y-12 Activity-Level Work Planning. As previously reported (see 3/12/04, 4/8/04 and 7/23/04 reports), BWXT had briefed the Board regarding Y-12 work planning and authorization processes for addressing infrequent/potentially hazardous activities. BWXT had noted development of two sets of criteria that would trigger successively higher levels of review of work planning for such activities. The reviews would be conducted by either a facility review board or a site-wide review board. Trial use of the criteria and reviews was completed and use of these reviews was being expanded to all Y-12 major nuclear facilities. The site reps. inquired on progress in implementing these protocols in major nuclear facilities. While facility Operational Safety Board (OSB) charters were revised and a new site-wide Management Review Board (MRB) charter is in place, training for a variety of personnel (e.g., planners, shift management personnel) on the need and use of these reviews has yet to be performed. Moreover, formal incorporation of the OSB/MRB reviews into the Y-12 Integrated Safety Management System description (and sub-tier manuals and practices) has not been fully planned. Additionally, formal protocols to notify BWXT and YSO management of such OSB/MRB reviews, as requested by YSO, have not been developed. YSO and BWXT management indicated that these issues will be addressed by January.