

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2002

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Matt Forsbacka, Oak Ridge Site Representative  
**SUBJ:** Activity Report for Week Ending June 14, 2002

Staff members M. Moury and J. Shackelford and Outside Expert D. Boyd were on site this week to review the BWXT Maintenance Improvement Schedule and observe maintenance activities.

A. BWXT Y-12 Disassembly Operations: On Wednesday, YSO gave approval to perform Phase I disassembly operations in Building 9204-2E, Assembly and Disassembly, and BWXT Y-12 commenced first-use of the operation on Thursday. The setup of the tooling went smoothly; however, when a cutting machine unexpectedly failed to engage after being turned on, operators momentarily left the work platform while the machine was running to caucus about corrective actions. The Site Representative pointed out that someone needed to be monitoring the cutting machine until it was shut off, and BWXT Y-12 personnel quickly responded by returning to the work platform. The cause of the malfunction was found to be a loose electrical connection that apparently resulted from inadequate strain relief of the cable to the control unit. Post maintenance testing verified the configuration of the repaired cable, but did not involve functional checks of the system. This evolution provides insight that equipment malfunctions should be anticipated and that actions to cease operations safely should be thought out in advance. (2-A)

B. BWXT Y-12 Maintenance Program: This week, BWXT Y-12 and YSO provided briefings on the status of BWXT Y-12's comprehensive Maintenance Improvement Schedule. Progress is being made in a number of areas, but many initiatives are in immature stages of development. Key observations include:

1. The contractor has implemented a program to conduct scheduled outages at nuclear facilities. This program, while still new, is showing promise in achieving a higher degree of maintenance accomplishment for important plant systems.
2. Considerable progress is being made in reducing the overall maintenance backlog, and the current backlog appears to be adequately understood and prioritized by the plant staff.
3. The contractor has also expended considerable effort at benchmarking the Y-12 maintenance program with other DOE and nuclear industry programs. This should provide additional information and motivation for improvement.

To continue this positive trend, significant management attention and buy-in by the work force will be necessary. (2-A)

C. BWXT Y-12 Enriched Uranium Operations: The Site Representative and Outside Expert observed numerous activities associated with maintenance operations for Wet Chemistry restart. Four relatively simple maintenance jobs were observed to be performed satisfactorily, however, a more complex task involving the denitration system was delayed throughout the week due to complications discovered during the job. Coordination of efforts necessary to resolve issues during the planning for corrective actions of this critical task appeared to be cumbersome. Delay of the BWXT Y-12 Performance Self Assessment is likely. (2-A)

cc: Board Members