

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 4, 2004

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Donald Owen, Oak Ridge Site Representative  
**SUBJ:** Activity Report for Week Ending June 4, 2004

A. Oxide Conversion Facility (OCF) Startup. As reported last week, YSO formally requested BWXT to evaluate the impact to the OCF startup schedule of certain scope additions (mockup testing of certain valves and development of Maintenance Requirements Analyses). This week, BWXT responded to YSO indicating that the scope additions will push back the planned declaration of readiness and start of the BWXT Operational Readiness Review to September. YSO management has concurred with the proposed schedule change.

B. Plutonium-238 at ORNL/Neptunium Storage at Y-12. As reported last week, ORNL had repackaged the first of three items that had suspect inner container metal O-ring seals into special-form capsules for interim storage. This week, the site rep. observed repackaging of one of the other two items. An attempt to unscrew the threaded closure of the outer container of the item was not successful (the threads were apparently bound/galled). The operation was stopped, cutting on a spare outer container was demonstrated with a manual pipe-cutter tool, and the repackaging procedure was revised. The outer container was then successfully cut and the inner container removed and repackaged. The third item was also repackaged (without needing to cut on the outer container) this week.

As reported on April 16<sup>th</sup>, these plutonium-238 items were to be stored for use in a planned Pu-238 production program at ORNL using neptunium-237 feed material (from Savannah River) that is to be stored at Y-12. DOE-ORO personnel informed the site rep. this week that DOE Headquarters has changed plans and now intends for plutonium-238 production to be performed at the Idaho National Laboratory.

C. Y-12 Building 9204-2E Disassembly Glovebox. As reported on September 19, 2003, installation of a new disassembly glovebox facility was in progress, with initial activity intended for a specific weapon system. BWXT and YSO Readiness Assessments (RAs) were planned to confirm readiness. In recent discussions with BWXT and YSO personnel, the site rep. and staff had been informed that the intended scope of the RAs was to review the glovebox equipment and safety features but not review the initial weapon system activity. Following discussions with the site rep. and staff on this issue, YSO has asked BWXT to include the initial weapon system activity in the scope of the RAs. Development of RA Plans-of-Action are in progress.

D. Conduct of Operations - Pre-Job Briefings. At least four recent events have occurred where lack of an adequate pre-job brief was identified as a causal factor. The events have included: failing to wear required respiratory protection during machine coolant draining activities in Building 9215; cutting into material not intended to be cut during work on an assembly in Building 9204-2E (see last week's report); violating a criticality mass limit during shearing of items in Building 9215 (see the May 21<sup>st</sup> site rep. report); and, failing to close the sash of a hood (a criticality safety requirement) following a sampling survey for a certain contaminant in Building 9212. All of these activities were either non-routine or infrequently performed. Site rep. review of Y-12 requirements/guidance indicates that there is some description of when to perform pre-job briefings in a section on the purpose of a pre-job brief; however, the specific requirements for pre-job briefs are silent on when one is to be performed. The site rep. discussed this observation with YSO and BWXT management.