

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 8, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJ: Activity Report for Week Ending October 8, 2004

A. Enriched Uranium Manufacturing Facility. Last Friday, YSO formally requested NNSA approval for Critical Decision 0 (mission need) for the Enriched Uranium Manufacturing Facility (EUMF). The EUMF is envisioned as part of the Y-12 Modernization plan to consolidate enriched uranium activities that are currently conducted in several aging facilities at Y-12. The facility will be collocated with the Highly Enriched Uranium Materials Facility so that the security footprint at Y-12 will be greatly reduced. The projected total project cost range is \$600M to \$1,100M and operations would begin as early as FY 2013. Timely approval of mission need will allow the site to complete the conceptual design during FY 2005.

B. Oxide Conversion Facility. Last Friday, BWXT decided to suspend the Contractor Operational Readiness Review (CORR) for the Oxide Conversion Facility (OCF) because of procedure issues and questions concerning equipment reliability. BWXT had begun the CORR on Monday, September 27th. Facility demonstration activities were delayed, however, until Thursday, September 30th because of an asbestos issue caused by unrelated roof work. Surveillance, calibration and Hydrogen Fluoride cylinder removal demonstrations last Thursday and Friday were not completed because of surveillance and calibration procedure issues and intermittent, spurious alarms associated with the main safety programmable logic controller. The site reps. note that prerequisites in the CORR Plan of Action required two successful integrated runs for the operating procedures prior to the CORR (5/7/04 site rep. weekly); however, this approach was not required nor employed for the surveillance or calibration procedures.

BWXT has developed a recovery plan that includes additional validation of surveillance procedures and software modifications to eliminate the spurious alarms. In addition, BWXT decided to perform additional software modifications that had been scheduled after completion of the CORR. BWXT expects to resume the CORR in mid-November. The NNSA Operational Readiness Review is now expected to occur in January 2005.

C. Authorization Basis Implementation. Last week, YSO completed their evaluation of the implementation of the Documented Safety Analysis (DSA) at the assembly/disassembly facility (site rep weeklies 8/20/04, 9/24/04). The YSO team identified 5 deficiencies and 3 observations. Notably, the YSO team identified that change packages for safety systems are not closed out in a timely manner by facility engineering leading to potential questions with regard to configuration control. In addition, an assumption checklist that helps ensure that safety basis assumptions and initial conditions are protected was not developed as required by a Y-12 Standing Order. In addition to communicating the specific issues associated with this facility, YSO provided feedback to BWXT management to ensure these issues are evaluated by the contractor assessment team at other Y-12 facilities prior to declaring the DSA implemented.

D. Conduct of Operations/Warehouse Criticality Deficiency. On Wednesday, BWXT identified a criticality deficiency in the warehouse where multiple unsecured containers were being handled by operators during an inventory activity. The governing procedure requires that only one unsecured container be handled in this area for criticality safety purposes. Subsequent BWXT investigation of this issue revealed issues with activity work scope and procedure compliance. The material movement plan and the pre-job brief for this activity covered a different container configuration than was found during the inventory; however, the activity was not stopped by the workers.