

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 16, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending January 16, 2004

A. Melton Valley Waste Processing Facility (WPF). As reported last week, the DOE Operational Readiness Review (ORR) for startup of supernate processing was conducted. The site rep. and staff had discussed observations with DOE-ORO line management on the ORR demonstration of a ventilation filter replacement, a hazardous, non-routine activity. The observations involved lack of use or reference to the procedure, lack of direct supervision, and active involvement of the radiological control technician (RCT) in the filter removal and replacement tasks in addition his radiological survey and oversight tasks. This week, DOE-ORO line management briefed the Board via video-conference on WPF progress toward startup including actions being taken to address the staff observations. DOE-ORO management noted that WPF requirements would be promulgated regarding non-routine activities that call for (1) proper procedural use ("in hand" use and, for certain procedures, deviations allowed only with supervisory approval), (2) direct supervisory oversight, and (3) definition of limits of assistance allowed by RCTs. (III)

B. Y-12 Building 9204-4: Storage of Machine Chips - Update. As last reported on December 23rd, BWXT had been planning an effort to vent several unvented drums containing depleted uranium chips. Based on site rep. and staff inquiry on specific response plans for a fire following venting of a drum, a BWXT and YSO review of the fire response planning in handling credible contingencies was initiated. BWXT personnel informed the site rep. this week that BWXT is now planning to use argon to prevent or extinguish a fire following drum venting and intends to start this activity on January 22nd. YSO review of the work planning for drum venting is in progress. (II)

C. New Enriched Uranium Manufacturing Capability. An effort under consideration for some time at Y-12 has been provision of a modernized enriched uranium manufacturing capability. As noted by NNSA in their letter of September 23, 2003 to the Board on Building 9212 B-1 Wing fire protection, planning for such new capability has been started and NNSA anticipates approval of Critical Decision-0 (CD-0) early in calendar year 2004. In a December 22nd letter to NNSA, YSO submitted a Program Requirements Document (PRD) for an Enriched Uranium Manufacturing Facility. Following approval of the PRD and development of a pre-conceptual design, YSO anticipates submitting a formal request for CD-0 approval to NNSA by early spring. Conceptual design efforts leading to the CD-1 milestone are planned for completion in 2006. (II)

D. Y-12 Authorization Basis (AB) Implementation - Independent Validation. YSO and BWXT management had briefed the Board during their July visit to Y-12 that protocols were to be developed to perform independent validation of implementation of new/revised AB safety controls under 10 CFR 830 (see 8/1/03 site rep. report). These protocols were to be adjunct sections to the YSO and BWXT procedures/manuals for conducting activity startup/restart readiness reviews. Development of such requirements and guidance has not yet been completed by YSO or BWXT, however, an interim "Standing Order" has been issued calling for BWXT reviews. Validation reviews have been recently conducted in Buildings 9720-18 and 9720-38 (Hazard Category 3 nuclear storage facilities) that resulted in substantial findings related to AB surveillances, configuration management and training. BWXT management noted to YSO management and the site rep. this week that these validation reviews will be repeated following corrective action by line management and that other lessons-learned are to be determined and factored into implementation efforts at other Y-12 nuclear facilities. (I)