

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 31, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for the Week Ending March 31, 2006

Board members Joseph Bader and John Mansfield and staff members Fortenberry, Tontodonato and Duncan visited Oak Ridge to review Y-12 and ORNL operations and safety issues.

A. Board Visit to Y-12. YSO, DOE-ORO and contractor personnel briefed the Board members on several activities and safety initiatives. In particular, Y-12 personnel discussed conceptual design efforts and plans for the Uranium Processing Facility (UPF) and construction issues for the Highly Enriched Uranium Materials Facility (HEUMF). DOE-ORO provided an update on the uranium-233 disposition project in ORNL Building 3019 and on the Melton Valley Waste Processing Facility. Some noteworthy items from the visit include:

- Uranium Processing Facility — BWXT described their strategy for use of engineered safety controls and no administrative safety controls for facility design. The need to establish the bases for functional classification of safety systems as early as possible in design efforts was discussed.
- HEUMF — YSO and BWXT discussed recent construction quality issues, corrective actions and path forward to resume concrete placements. BWXT noted that extent of condition assessments and disposition of non-conformances are nearing completion and that BWXT intends to brief the Board on the overall investigation and results in late April.
- Criticality Safety/Container Labeling — BWXT noted interim actions to correct deficiencies with container labeling at Y-12 (see 9/9/05 site rep. report). BWXT will use a new labeling system for a loading and storage activity in the Warehouse by June and then deploy the system for use by September in most enriched uranium movement and container loading operations.
- Building 9212 Seismic Issues — To address seismic and other safety issues, YSO plans to conduct a facility risk review to identify system improvements that would support safe operation of this facility for 15 years. Potential risk mitigation measures would be prioritized and captured in a Project Execution Plan for implementation. YSO noted that NNSA plans to brief the Board in August following completion of the risk review.
- Recommendation 2004-2 — Based on the Uranium Processing Facility project schedule, YSO noted that Buildings 9212, 9215 and 9204-2E will be evaluated against the system evaluation criteria for confinement ventilation identified in DOE's implementation plan for Recommendation 2004-2 (see 3/10/06 site rep. report).