

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 28, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending January 28, 2005

Board members A.J. Eggenberger, Joseph Bader and R. Bruce Mathews and staff members Fortenberry and Andrews visited Y-12 to review both Y-12 and ORNL operations and safety issues. Mr. Bader toured the uranium facilities at Y-12, Building 3019 at ORNL and the Melton Valley Waste Processing Facility.

A. Board Visit to Y-12. YSO, DOE-ORO and their contractors (BWXT and UT-Battelle) briefed the Board members on site activities and safety initiatives. In particular, Y-12 personnel discussed their plans for the Uranium Processing Facility (UPF) that recently received approval of mission need. BWXT noted that a significant acceleration of processing activities will be required to allow consolidation of enriched uranium processing and storage at the UPF and the Highly Enriched Uranium Materials Facility. Other Y-12 topics discussed included: stockpile work; transition activities (e.g., Quality Evaluation relocation); wet chemistry operations; and integrated safety management initiatives. DOE-ORO provided an update on the uranium-233 disposition/medical isotope project in Building 3019 and the Melton Valley Waste Processing Facility. Some noteworthy items from the visit include:

- Implementation of Safety Basis Controls — YSO and BWXT presented their processes for conducting independent validation reviews of implementation of safety basis controls under 10 CFR 830. Potential use of the Y-12 processes at other NNSA sites and potential use of such reviews on a periodic basis to ensure safety basis controls continue to be properly implemented were discussed.
- Security Upgrades — Security upgrades being planned that have the potential to impact nuclear facility safety bases will be formally evaluated for impact on facility safety bases.
- Activity Level Work Planning — BWXT noted efforts to improve automated job hazard analyses (AJHAs) including forming a group of individuals by April to perform a required review function for individual AJHAs. BWXT management noted that ambiguous controls will not be permitted in AJHAs (e.g., “contact fire protection engineering” for fire hazards or “see the RWP [radiological work permit]” for radiological hazards).
- Flowdown of Safety Requirements — BWXT described their efforts to verify flowdown of safety requirements to site implementing processes and documents. It was noted, however, that these efforts have not been extended to subcontractors performing work at Y-12.

B. Oxide Conversion Facility. The NNSA Operational Readiness Review (ORR) was started this week. Certain issues regarding radiological control planning and conduct of a surveillance are in development, but the ORR team noted that the demonstrations conducted have been generally satisfactory. As reported last week, the NNSA ORR activity schedule did not include a field demonstration of “test procedures” intended for initial OCF operation with hazardous materials (uranium, hydrogen fluoride, etc.). While the ORR team reviewed the test procedures this week, field demonstration of the test procedures is not planned for the NNSA ORR. The site reps. discussed this matter with YSO management.