

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 4, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending March 4, 2005

A. Criticality Safety/Nuclear Material Storage. As reported during the last two weeks, on-site transfers to the Warehouse have been suspended due to receipt and storage of at least 25 containers with material exceeding criticality mass limits (double contingency was maintained). This week, receipt of a few drums packed to DOT requirements with additional checks and oversight was permitted. BWXT is still completing their investigation of the event and now intends to brief YSO next week on causal factors and corrective actions prior to allowing unrestricted receipts of material at the Warehouse.

Also noted last week, a YSO Facility Representative identified that several containers in the Enriched Uranium Operations Building had been stored with batch cards that did not provide information on mass and other parameters needed to determine compliance with criticality safety requirements. YSO was evaluating this issue including compliance with requirements of ANSI/ANS-8.19, *Administrative Practices for Nuclear Criticality Safety*. This week, YSO management informed the site reps. that BWXT implementation of an ANSI/ANS-8.19 requirement regarding labeling of fissile material containers is problematic. Specifically, there is no clear plant-wide requirement or policy that ensures container labeling provides appropriate information related to criticality safety limits/parameters; rather, container labeling has been largely driven by material control and accountability considerations. YSO intends to formally request corrective action.

B. Oxide Conversion Facility. On Monday, the YSO Manager authorized startup of the Oxide Conversion Facility. Facility operations are planned to proceed with the introduction of hazardous fluids during the next several weeks followed by initial uranium operations in April.

C. Quality Evaluation Relocation. As previously noted (site rep. weeklies 1/7/05, 12/3/04), BWXT plans to relocate the Quality Evaluation (QE) activities from the Quality Evaluation building to the Assembly/Disassembly building. In early February, BWXT submitted the preliminary plan that describes the project which is expected to be complete in FY2007. This week, YSO responded to the BWXT plan and requested that a formal Program Execution Plan (PEP), Preliminary Documented Safety Analysis (PDSA) and program risk assessment be submitted to and approved by YSO prior to start of equipment dismantlement. BWXT had been planning this month to begin dismantlement of one of the gloveboxes to be relocated. YSO noted that the PDSA will ensure formal agreement of design criteria and facility controls. YSO also noted that hold points will be established for key project milestones (e.g., actions that will impact QE capabilities).

D. Building 9212 Seismic Deficiencies. As reported on October 15th, YSO is evaluating identified seismic deficiencies as a part of their Documented Safety Analysis review. BWXT previously concluded that it is not cost-beneficial to perform seismic upgrades based on the total cost and schedule estimates and the expected remaining facility life. Staff members Linzau and Moury and the site reps. performed a walk-down of the Building 9212 complex to evaluate the structural deficiencies that have been noted in the facility seismic calculations. The staff was able to confirm many of the issues identified in the seismic calculations. The staff also noted that there appeared to be a missing structural member in the Stack 110 Bag House. The BWXT structural personnel present recognized that this brace is a key lateral support and committed to investigate the issue.