

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 3, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending June 3, 2005

A. Quality Evaluation Relocation. BWXT has now completed the Project Execution Plan (PEP) for the relocation of the Quality Evaluation (QE) capability to the assembly/disassembly building (see 3/18/05 site rep. weekly). In addition, BWXT has prepared a Preliminary Documented Safety Analysis that addresses the proposed safety basis for conducting QE operations in this building. Pending YSO approval to proceed, which is expected to occur next week, BWXT will mobilize the project and prepare the first box for relocation. The critical lift required to remove this box from the QE building is now expected to occur in late-July.

B. Y-12 Electrical Panels. BWXT continues planning and has started intrusive inspections for the 133 electrical panels identified for further evaluation in Y-12 major nuclear facilities (see 4/29/05 site rep. weekly). These panels were selected for intrusive inspection based on initial thermal screening and other selection criteria (e.g., age) as part of ensuring an undue fire hazard does not exist. To date, five inspections have been completed in Buildings 9206 and 9204-2. Additional resources have now been applied to this effort and BWXT is working towards completion of all 133 panel inspections by the end of September. Some of the older panels that will be inspected do not have spare parts available and will likely require panel replacement if issues are identified.

C. Chip Container Failure. On Wednesday, operators in the Enriched Uranium Operations building observed that a container of machine chips had failed with a small hole in the wall of the container and that a few liters of sludge-like substance had spilled onto the floor. This container of chips is one of several containers of chips produced during a special program dating back to 1987. The chips had continued to remain in storage in those containers awaiting disposition. The area was secured and BWXT is preparing to cleanup the spilled material. BWXT will be determining near-term actions regarding the failed chip container. Past management, storage conditions, and disposition planning for these containers (the material is included under NNSA's inactive actinide effort) are under review by BWXT and YSO management. BWXT had not yet reported this event in the DOE occurrence reporting system; however, YSO personnel are inquiring with BWXT on need to externally report the event.

D. Criticality Safety/Conduct of Operations. As reported on March 25th, YSO issued a formal request to BWXT to examine the procedural and conduct of operations issues associated with an event in the Warehouse regarding receipt and storage of 25 containers with material exceeding criticality mass limits (double contingency was maintained). In the last few weeks, BWXT has proposed corrective actions in the areas noted in YSO's request. While many short-term actions have been developed and are already complete, many of the long-term actions call for further evaluations before specific correction actions are identified later this year. BWXT also anticipates revision and use of new technology to monitor and move fissile material in storage at Y-12 and to have those systems in place by early 2008 to support load-out of the Highly Enriched Uranium Materials Facility. YSO is reviewing the proposed actions.