

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 25, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending March 25, 2005.

Mr. Owen was out of the office on Friday.

A. Microwave Casting. As reported on March 11th, BWXT began their Readiness Assessment (RA) for startup of the microwave casting operation (a campaign limited to 15 runs) in the Enriched Uranium Operations building. The RA was completed on March 16th. The RA team noted that the demonstrations and the level of knowledge of operations personnel associated with the microwave were generally satisfactory. Pre-start findings were identified for incomplete criticality safety documentation, use of outdated engineering forms, and incomplete training. The YSO RA is still expected to start on March 29th.

B. Criticality Safety/Conduct of Operations. As reported since February 18th, 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). Last Friday, YSO issued a formal request to BWXT to examine the procedural and conduct of operations issues associated with the event, develop interim compensatory measures to support resumption of onsite transfers to the Warehouse, and develop a long-term corrective action plan regarding the Y-12 systems for packaging, labeling, and storage of containers.

Regarding interim compensatory measures to support resumption of transfers to the Warehouse, Warehouse management personnel presented results of their investigation to a BWXT management review board this week. Evaluations of more than 4,000 containers yielded one container that was a few grams over the mass limit and several containers stored for many years where the material form was indeterminate from available documentation and will require further action to disposition. Root causes of the 25 over-mass containers identified by BWXT include improper execution of procedures, lack of a requirement/process for addressing all facilities impacted by a change to a criticality limit, and lack of a process between generating and receiving facilities to validate adherence to criticality safety requirements prior to a transfer. Numerous compensatory actions were presented to address these root causes. The near-term actions to allow resumption of transfer activities are expected to be completed next week.

C. Operational Readiness for New Projects. This week, the site reps. met with BWXT management to discuss their approach to ensuring adequate operational readiness is achieved for Y-12 projects. In several recent projects (e.g., the Purification Facility), delays have been attributed to inadequate planning and resource availability for readiness activities (e.g., procedure development and operator training). The BWXT Projects Division recently hired an experienced Operational Readiness and Startup Manager to focus on this area and improve project closure efficiency. Y-12 procedure changes and project manager training are being completed to ensure that operational readiness planning begins at project conception and that the resources needed to accomplish these tasks are factored into project planning. BWXT is applying this process to the Highly Enriched Uranium Materials Facility and the Uranium Processing Facility.