

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 12, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending July 12, 2002

Staff members W. Andrews, J. Deplitch, L. Parkins, and R. Rauch and Outside Expert R. West were on site this week to review the status of a variety of programs including: fire protection, surplus material disposition, and alternative uranium processing technology development.

A. Oak Ridge National Laboratory (ORNL) Radiological Contamination Event: On Monday, ORNL terminated the operational emergency (see last week's report) and transitioned to recovery operations. The root cause investigation is being managed by the Bechtel Jacobs Company (BJC). Much of the evidence points to the HEPA filter change out activity, performed by BJC, as the source of the event, but the investigation continues to rule out other potential sources. On Friday, the Site Representative observed a coordination meeting between ORNL and BJC. Much work remains to quantify the source term for this release. Filter changeouts and air-handler damper position movements for systems that feed the 3039 stack have been suspended. (1-C)

B. BWXT Y-12 Enriched Uranium Warehouse: On Tuesday, the Site Representative observed the first-use of the Californium Shuffler procedure. Work progressed slowly; some factors contributing to delays were:

1. An inconsistency between a procedural step and a criticality safety requirement. In this instance, a requirement change to provide a larger range of acceptable values of can heights was not fully promulgated through the procedure in a recent change. After some deliberation, it was determined that the procedure could be performed as written.
2. Discrepancies between the serial numbers on tamper indication devices on two cans. The serial numbers recorded in the work package conflicted with values in the work-stream database. Facility management is pursuing the root cause of this condition.

In a detailed post-job debriefing session, BWXT Y-12 personnel discussed opportunities for improved performance and procedure optimization. (2-A)

C. Recommendation 97-1: On Wednesday, ORNL personnel discovered that a cannister had been stuck in the Shielded Transfer Carrier (STC) and was not stored in the tube vault as intended. In order to recover the cannister, ORNL personnel modified the work procedure, performed an Unreviewed Safety Question Determination (which was negative), and trained the operators on the protocol to recover the cannister from the STC. The Site Representative observed the recovery operation, and it was performed without incident. Troubleshooting of the vacuum lifting device showed that a check valve maintains vacuum for a few seconds after vacuum is shut off, so the cannister was drawn back into the STC before the suction cup could release it. Procedure modifications to prevent recurrence of this event are being developed.

D. BWXT Y-12 Enriched Uranium Operations (EUO): On Tuesday, the Performance Self Assessment for wet chemistry restart commenced. The Management Self Assessment is approximately 70% complete. (2-A)

cc: Board Members