

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 26, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending April 26, 2002

The site representative was on leave Friday.

A. BWXT Y-12 Integrated Safety Management (ISM) System: BWXT Y-12 has appointed a Manager for ISM. This is a new position in the BWXT Y-12 organization. He will report directly to the Deputy Plant Manager and will be the plant-wide champion for continuous ISM system improvement. No additional staff are assigned to this function. (1-C)

B. BWXT Y-12 Readiness Assessments: The Contractor Readiness Assessment (CRA) for the restart of the Californium Shuffler in Building 9720-5, Enriched Uranium Warehouse, which commenced last week, is nearing completion. The team appears to be well organized and is thoroughly evaluating its assessment criteria in a disciplined manner. A generic issue that adds unnecessary complexity to the CRA is the need to deal with multiple revisions of the Safety Analysis Report (SAR). These include the currently implemented SAR, an NNSA/YAO approved but soon to be implemented SAR, and a draft SAR revision that will likely be submitted to NNSA/YAO for approval in a few months. The CRA final report is expected next week. (1-C)

C. BWXT Y-12 Hoisting Incident: Last Friday, a lifting fixture failed while in use by the Product Certification Organization in Building 9204-2E, Disassembly and Assembly. The fixture incorporates a gauge to check the weight of a unit and has been in use for at least 5 years. Because the tooling designers could not certify the load carrying capability of the gauge itself, they added a safety catch that would prevent the unit from falling if the gauge failed. The safety catch, however, obscures the connection point to the lower hook. The upper hook, that attaches to the hoist, is on a swivel mount. The workers visually check the upper swivel, but they did not surveil the lower connection point. The lower connection point is threaded into the lower part of the gauge and is not intended to swivel. When the lower hook broke free, the worker said he had turned the gauge about 90 degrees to take a reading. The lower hook has 8 threads on it, so the cumulation of many small turns appears to have led to its disengagement. This incident highlights the need for routine reviews of tooling to determine that tooling is used as intended and if tooling adequately meets safety and operational requirements. (2-A)

D. Recommendation 97-1: Oak Ridge National Laboratory personnel successfully retrieved and inspected the first Consolidated Edison Uranium Solidification Program canister on Wednesday. The canister was 190 R/hr on contact, and it appeared that shielding and radiation protection protocols kept worker exposure to minimal levels. On a related matter, chemical analysis performed this week on the first two Mound canisters, retrieved in April 2001 for the medical isotope program, indicate that the material was not in a pure oxide form and is partially soluble in water. In addition, the material contained only about half the uranium content indicated in the packing invoice. This further underscores the importance of the inspection program in establishing the form and configuration of materials for their safe disposition in the future. (3-A)

cc: Board Members