

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 9, 2003

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending May 9, 2003

Staff members Timothy Dwyer and Don Nichols were at Y-12 to attend a workshop on improving nuclear facility startup/restart efforts.

A. Building 9212 Enriched Uranium Operations (EUO) B-1 Wing Fire Protection. The Board's letter of May 13, 2002 asked NNSA to consider installation of a fixed fire suppression system in B-1 Wing (a wet chemistry area). As part of their response, NNSA briefed the Board on their evaluation in August 2002 concluding that fixed fire suppression needs to be provided for wet chemistry operations. At that time, NNSA indicated that a decision was to be made by April 2003 on whether to proceed with formal planning and budgeting for a design/construction project for providing B-1 Wing fixed fire suppression or to instead rely on a Enriched Uranium Modernization strategy whereby Building 9212 is either modernized or replaced. YSO management informed the site rep. that a decision is still pending at NNSA Headquarters. (1-C)

B. Building 9212 EUO Wet Chemistry Restart. As reported last week, during the "first use" operation of the Primary Intermediate Evaporator (PIE), liquid had concentrated past the desired level as a result of a failure of a control system monitoring density. Other equipment failures and lack of procedural coverage for this situation were evident. The site rep. had inquired with YSO personnel on the need for conducting a more formal review for this situation than was being performed. This week, YSO management informed the site rep. that follow-up including lessons-learned and corrective/improvement actions will be controlled under the Management Review process (a higher level than routine post-job reviews). (2-A)

C. Building 9212 EUO Material Handling. Two violations of criticality safety requirements occurred this week that resulted from non-routine aspects of the respective operations:

- In E-Wing casting operations, a casting support operator moved two stacked assemblies that had been cast from a cool-down area to the stack make-up area violating the posted limit of one loaded stack assembly in the make-up area. The casting support operator was not aware of and had not been trained on this limit as casting support operators do not normally work in the stack make-up area and the posting was overlooked.
- In a special processing hood, several loaded Oxide cans had been moved into the hood in violation of a Criticality Safety Requirements (CSR) document restriction on Oxide cans. This CSR control had been implemented only as a limit on can volume (6.2 liters) in the procedure and posting without an explicit Oxide can restriction. The Oxide cans (about 6.5 liters) were assumed to meet the 6.2 liter limit by the crew but were not physically checked even though this was the first introduction of Oxide cans for this operation.

BWXT is developing procedural, posting and training changes to address these events. (1-C)

D. Nuclear Facility Startup/Restart Workshop. The site rep. and staff attended this 2-day workshop, hosted by BWXT, with personnel from several DOE and NNSA sites and headquarters organizations. The workshop focused on line management operational readiness efforts and the generally accepted issue of premature declarations of readiness. Certain sites presented their recent actions to improve the planning and support for line management readiness efforts. (1-C)