

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 6, 2001

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Paul F. Gubanc and David T. Moyle, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending April 6, 2001

A. Y-12 Disassembly: This week, BWXT conducted its management self-assessment (MSA) on an upcoming disassembly campaign. This campaign had previously received an MSA but due to the substantial findings and fundamental changes to the process, another MSA was judged as necessary.

1. The operators demonstrated a high sensitivity to rigorously complying with the procedures.
2. Due to insufficient mockups, some evolutions were simulated. These simulations could only check that the procedure steps were logical, not that the actual tooling would perform as intended. Full sets of mockups are reserved for the BWXT and NNSA Readiness Assessments.
3. The tooling pots used in the disassembly process were fabricated on-site and have several safety-related attributes. Mr. Gubanc found the process utilized by the facility engineer to design, procure and verify that the pots had these key attributes appeared complete and thorough although unresolved questions arose regarding periodic re-verification of safety-related features and authority to accept fabrication non-conformances. We will follow up. (2-A)

B. Y-12 Certification of Fissionable Material Handlers (FMH): As discussed in our weekly letters of February 9 through March 2, 2001, Y-12 has a significant number of FMH's who are qualified, but not certified, contrary to DOE Order 5480.20A. On February 23, BWXT formally committed to pursue certification of FMH's by April 30, 2001. Mr. Gubanc's review this week found:

1. BWXT is progressing steadily to get its FMH's certified (about 200 personnel) by April 30th.
2. During April 16-25, BWXT training will conduct a self-assessment of the new certifications to assure completeness and consistency across the five operating organizations involved.
3. On March 15, BWXT proposed to YAO a revised methodology for determining whether certain FMH positions require certification versus qualification. This proposal has the same inherent flaw as the previous process which was found unacceptable. YAO's disposition is pending.
4. Over the last six weeks, BWXT management has promulgated two directives on how to proceed with FMH certification which conflict with Y-12 procedures. To date, the procedures have not been amended. We consider this poor conduct of operations and will discuss with BWXT. (1-C)

C. Y-12 Hydrogen Fluoride Supply System (HFSS): This week, Mr. Moyle met with safety basis representatives from YAO and BWXT and discussed the need to settle on a manageable list of credited safety controls for the HFSS from the numerous process controls that are on the system. Much of the complexity of the HFSS is derived from the bandage approach of adding controls to resolve comments. Moyle stressed the need to appropriately scope analyses to determine the subset of controls that are vital to safe operations that in turn should be highlighted and implemented with appropriate rigor. The meeting was productive as EUO is in the process of trying to settle on a design and safety control philosophy. We will continue these discussions. (1-C, 2-A)

D. Y-12 Readiness Verification: A YAO review of the new Building 9215 HEPA exhaust stack 979 identified problems with the as-built configuration. These problems were not caught by the BWXT ORR team, as review of this type is not clearly included in the core requirements for operational readiness reviews in the DOE Order. Based on this and prior experiences, YAO is considering adding a local requirement for system as-built reviews as part of readiness verification. (1-A)

cc: Board Members