

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 15, 2000

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Paul F. Gubanc and David T. Moyle, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending December 15, 2000

On December 13-14, an uncontrolled fluorine release occurred at the ETP. The Site Reps observed portions of the emergency response and provided their observations to DOE-ORO for their use.

A. Y-12 Enriched Uranium Operations (EUO): On December 6, a daily check of the stack 33 exhaust filters identified out of range differential pressure (d/p) indications. The roundsheet clearly identified some of these d/p indications as criticality safety requirement (CSR) related (i.e., a filter loading control). The review of the roundsheet by the shift manager that day, and every day afterward, did not recognize the CSR implications. On Dec. 7<sup>th</sup>, the weekly CSR surveillance (overdue since Dec. 4<sup>th</sup>) was performed and declared "UNSAT". The shift manager's review of this CSR surveillance on Dec. 8<sup>th</sup>, resulted in no corrective action and systems serviced by stack 33 remained on-line. In parallel with this, an engineering justification was prepared to permit operation exceeding the d/p limits with again no apparent recognition of the CSR implications. On Dec. 13<sup>th</sup>, a Shift Technical Advisor reviewed the UNSAT CSR surveillance and recognized the need for corrective action. The critique on Dec. 14<sup>th</sup> was well conducted and the involved individuals fully acknowledged their roles. While we are pleased with EUO's self-identification and introspection, the fact that a CSR requirement was missed for so long is unsettling. We will monitor EUO's response. (1-C)

B. Y-12 Fire Protection: For three weeks now we have reported on impaired (i.e., painted over) heat detectors in the Building 9201-5, 7W fire sprinkler system and the apparent inadequacy of the compensatory measure (i.e., fire department response to a Supervisory Low Air Alarm). Having observed no resolution by the cognizant YAO and BWXT managers, we elevated the concern to the responsible senior managers Monday this week. While they did initiate much needed action on the broader issue of fire alarm responsiveness, no resolution of the specific issue was achieved as of Friday morning. After some additional communications of our disappointment with the lack of definitive action, additional compensatory measures were identified and implemented today. (1-C)

C. Y-12 Building 9215 HEPA-filtered Exhaust: In February 1998, an unreviewed safety question was identified regarding unfiltered exhaust from Building 9215. YAO's March 1998 safety evaluation report (SER) directed correction of this issue by September 1998. A project was initiated to install a HEPA-filtered exhaust (Stack 979). SER Revision 1, issued March 1999, acknowledged the original due date had slipped, accepted a proposed compensatory measure, and directed correction by May 1999. SER revisions 2, 3 and 4, successively slipped the operational due date to November 2000. Stack 979 has now been complete for over a year. On December 12, revision 5 of the SER extended the operational due date for this "defense-in-depth" system to March 31, 2001, to support production needs. We will discuss with YAO the basis for their tepid commitment to this safety-related system. (1-C)

D. Y-12 Integrated Safety Management (ISM): On December 11, YAO formally accepted BWXT's Management Plan for addressing the DOE ISM Phase-2 verification findings. The YAO letter also identified that BWXT is to deliver a corrective action plan by December 15 to deal with the specific issues (e.g., fire protection) identified by the verification. We'll review this plan once issued. (1-C)

cc: Board Members