

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 19, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending July 19, 2002

A. Oak Ridge National Laboratory (ORNL) Radiological Contamination Event: The root cause investigation, determination of source term, and recovery actions are still in progress. (1-C)

B. BWXT Y-12 Enriched Uranium Operations (EUO) Wet Chemistry Restart: This week, the Performance Self Assessment (PSA) team completed evaluations of 3 of the 6 wet chemistry systems being restarted. The Management Self Assessment effort was integrated into the PSA on Wednesday. Coordination of the preliminary findings by the MSA and PSA teams is now on-going. (2-A)

C. BWXT Y-12 EUO Fire Protection: On Thursday, the Site Representative met with BWXT Y-12 personnel to discuss Building 9212 B-1 Wing fire protection issues. There is potential for modification of the B-1 Wing fire protection program and plant operating procedures. This is a result of incorporating new airborne release fraction information (see Weekly Report for May 31, 2002) into the latest revision of the Basis for Interim Operation (BIO), which is being reviewed by YSO. In addition, a new Fire Hazards Analysis (FHA) is in preparation. This FHA will address new assumptions being incorporated into the BIO. Included in this is a baseline assumption change that the fluid mixture in the primary extraction columns contains 10 percent organic solution as opposed to the value of 50 percent previously used in the analysis. BWXT Y-12 staff indicated that this new value bounds the actual operating condition in the columns. They also noted that organic/aqueous mixes containing greater than 10 percent cause a reduced counter-flow that would be apparent via a system upset. There is no direct measurement of the organic/aqueous mixture in the working sections of the primary extraction columns. The total amount of organic solution added to the system of extraction columns is administratively controlled. Significant work to ensure consistency between the revised BIO and FHA and to flow down requirements to the B-1 Wing fire protection program and plant operating procedures remains to be done. (2-A)

D. BWXT Y-12 Assembly and Disassembly: Work commenced in Building 9204-2E to remove wood planks and other combustible components from an out-of-service ultrasonic cleaning station. Full removal of the cleaning station components is contingent on funding during the next fiscal year.

The BWXT Y-12 lifting fixture safety review team (see Weekly Report for May 10, 2002), slated to review below-the-hook tooling used in Building 9204-2E, is awaiting authorization of funds to proceed. This effort, if performed with sufficient rigor, could lead to safety improvements. (2-A)

cc: Board Members