

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 2003

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Tim Hunt, Oak Ridge Site Cognizant Engineer  
**SUBJ:** Activity Report for Week Ending February 7, 2003

Staff member Matt Moury was on site this week providing site representative coverage. Outside expert Ralph West was on site to observe the wet chemistry operational readiness review (ORR). Staff members Ajit Gwal, Bill Linzau, Brett Broderick and outside experts John Stephenson and Paul Rizzo were on site to review the status of the Highly Enriched Uranium Materials Facility (HEUMF) project.

A. BWXT Y-12 Enriched Uranium Operations (EUO) Wet Chemistry Restart Preparations: The site representative and outside expert observed the continuation of the National Nuclear Security Administration (NNSA) ORR that started last week. The review was completed on Thursday with an out-brief to Y-12 Site Office (YSO) and EUO personnel. The ORR team developed 7 prestart and 4 post-start findings and 5 observations. The team concluded that the reviewed activities would be ready to restart following correction of concerns noted by the YSO manager in the letter authorizing start of the NNSA ORR and the prestart findings. The preexisting YSO concerns involved inconsistencies between the Basis for Interim Operation (BIO) and the Fire Hazard Analysis (FHA) for the bounding fire scenario in Building 9212 and issues with the demonstration of the wiped film evaporator. The prestart findings included deficiencies with the control of changes to the wiring of a process cabinet; the unreviewed safety question (USQ) screening process; caution tagging practices; documentation of open maintenance actions prior to restarting a process; quality of abnormal operating procedures and alarm response procedures; and training of supervisors and managers on the startup and initial operations plans. The other prestart finding concerned the existence of potentially unsafe conditions to personnel and equipment as the result of severe water leakage from the roof of Building 9212 onto personnel and equipment in B-1 Wing. No findings were generated in the functional areas of facility safety, fire protection, management, and NNSA-YSO. The ORR team was thorough and its findings provide a valid set of issues to correct prior to restart. The performance of EUO personnel during the review and the extent of findings developed by the ORR team indicate that the processes were prepared adequately after the previous failure of the initial contractor ORR, the subsequent corrective action program, and a second contractor ORR. (2-A)

B. BWXT Y-12 HEUMF Project: The staff and outside experts reviewed the status of the electrical systems design and the geotechnical, structural, and soil-structure interaction work. The electrical design work is proceeding in a logical manner. Significant effort is ongoing to finalize fundamental design issues with the foundation and structure. The entire confinement strategy is currently undergoing review by YSO and BWXT Y-12 in response to the Board's letter dated December 27, 2002. Changes in this strategy could have a significant impact on many elements of the design. (1-C)