

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2003

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Donald Owen, Oak Ridge Site Representative  
**SUBJ:** Activity Report for Week Ending August 1, 2003

Board members John Mansfield and R. Bruce Matthews and staff members Fortenberry, Hunt and Linzau visited Y-12 to review Y-12 and ORNL operations and safety issues.

A. Board Visit to Y-12. YSO, DOE-ORO and BWXT personnel briefed the Board members on progress and issues for a range of areas including: planned Y-12 weapon component assembly/disassembly work; Y-12 wet chemistry operations; Y-12 enriched uranium metal production and enriched uranium storage; Y-12 new/revised authorization bases (ABs) under 10 CFR 830; Y-12 modernization initiatives, ORNL uranium-233 programs and Melton Valley radioactive waste project. The Board members also toured several defense nuclear facilities at Y-12. Some noteworthy items from the visit include:

- BWXT management noted near-term and long-term actions to improve overall Conduct of Operations in the major nuclear facilities (see last week's report). The staff will review the planned actions to organizationally separate production operations crews from personnel charged with overall facility safety and maintenance.

- YSO and BWXT discussed options for addressing fire suppression concerns in the B-1 Wing of Building 9212 (a wet chemistry operations area, see site rep. reports of May 9<sup>th</sup> and June 6<sup>th</sup>). In addition to the main options of installing fixed fire suppression in B-1 Wing or relying on an enriched uranium modernization strategy, other potential actions to reduce the spread of a fire in B-1 Wing were discussed. At this point, however, Y-12 management continues to work with NNSA Headquarters and no decisions have been reached.

- Regarding independent validation of implementation of new/revised AB safety controls (an issue noted in the Board's March 18<sup>th</sup> letter regarding Pantex AB controls), YSO and BWXT have each decided to institute independent validation protocols. Adjunct sections to the YSO and BWXT procedures/manuals for conducting activity startup/restart readiness reviews will be developed to govern teams performing these independent validation assessments.

- Substantial progress in reducing the quantities of combustible, excess/unnecessary materials in the E Wing basement area of Building 9212 was noted (see site rep. report of June 27<sup>th</sup>). Additional combustible materials are to be removed and the staff will review BWXT actions to control combustible material loadings in the E Wing basement area going forward. (1-C)

B. Y-12 Activity-Level Work Planning. As reported on June 20<sup>th</sup> and July 2<sup>nd</sup>, the site rep. had provided observations to YSO and BWXT management concerning the work planning for a maintenance evolution on a 150-ton hydraulic press in Building 9212. No job hazard analysis (JHA) had been required as the screening questions determining the need for a JHA establish a high hazard threshold. YSO management had informed the site rep. that improvement actions regarding the JHA screening process were warranted. During the last few weeks, YSO has provided BWXT with their preliminary assessment of the issue (a final assessment will not be provided until mid-August) and BWXT management noted to the site rep. that action is warranted. The time-frame for determining and implementing specific, long-term action was not clear, however, but could be months. The site rep. suggested to YSO management that interim, compensatory actions may be warranted in this situation. (1-C)