

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 4, 2002

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Matt Forsbacka and Paul Gubanc, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending January 4, 2002

The Site Reps were not on-site on Monday and Tuesday for the New Year's holiday.

### A. Y-12 Startups:

1. Closure of pre-start findings from the NNSA Readiness Assessment (RA) for a new disassembly campaign is on-going and expected to support first-use the week of January 14. Redesign and successful demonstration of a modified lifting fixture remains the long-lead action to complete.
2. The NNSA Operational Readiness Review (ORR) for the Building 9206 thermal stabilization process is currently scheduled to commence on January 14, pending BWXT's closure of BWXT ORR pre-start findings and declaration of readiness. The NNSA ORR will be led by Donna Riggs of DOE-ORO who is a former Y-12 Area Office employee with prior experience in Building 9206. She will be supported by Mr. Bob Baeder as the ORR's Senior Technical Advisor. (2-A, 3-A)

B. Y-12 Enriched Uranium Reduction Vessel: On Thursday, BWXT and ORNL held a meeting to coordinate a potential effort to examine precursors of crack growth in the pressure vessel used in the reduction process. In scoping the elements of this study, a variety of non-destructive and destructive testing methods were discussed. BWXT indicated that they had in-house capability to perform dye penetrant testing to screen vessels for cracks. Among ORNL's capabilities are scanning electron microscope examinations of surfaces and metallographic analyses of cross sections (including welds). The extent of vessel examination has not been finalized, but it is anticipated that one of the 1989 vintage vessels from the current reduction campaign and an older vessel with significant use will be used for the destructive testing. Due to the high cost of the destructive testing, engineering judgment will be critical in selecting the correct number of samples to confirm the integrity of the vessels. Reduction operations remain suspended. (2-A)

C. DOE Oak Ridge Operations - Environmental Management (DOE-ORO/EM): Next week, Dae Chung and his DOE-HQ team will again visit Oak Ridge to complete the field performance portion of their review of ORO and Bechtel Jacobs (BJC) performance relative to the use and maintenance of authorization bases (AB). We have suggested to ORO and BJC corporate management that the following should occur next week:

1. ORO and BJC should clearly articulate to DOE-HQ an integrated path forward for dealing with the array of issues revealed in the Board's October 15<sup>th</sup> letter and subsequent reviews.
2. ORO and BJC should demonstrate to DOE-HQ that the on-going joint ORO/BJC AB implementation review team has conducted reviews of sufficient quality and has the resources and processes to conduct credible reviews in the future. (1-C)

cc: Board Members