

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 31, 2003

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending January 31, 2003

**DNFSB Activity Summary:** W. White was on site all week.

**12-44 Fire Protection Upgrade Project:** On Wednesday, BWXT declared itself ready to proceed to an NNSA readiness assessment of the 12-44 cells following completion of a project to upgrade the fire alarm and suppression systems in those cells. In response to Recommendation 98-2, *Safety Management at the Pantex Plant*, NNSA had committed to modifying the fire detection and suppression system in the 12-44 cells to provide an ultraviolet-activated deluge capability. A recent change to the Implementation Plan for Recommendation 98-2 modified the NNSA commitment from an ultraviolet-activated system to an infrared-activated system.

The BWXT readiness assessment of the 12-44 fire protection upgrade identified a single pre-start finding. A surveillance requirement to conduct an interior inspection of the water delivery system had not been accomplished or flowed down into plant procedures. A Board letter in June 2001 raised a concern regarding the use of an interior inspection of the water delivery system in lieu of the periodic water flow testing required in NFPA standards. BWXT subsequently discovered obstructed deluge lines while conducting flow tests for the 12-44 cells. A project was initiated to conduct initial water flow tests for all nuclear explosive facilities. However, PXSO and BWXT are still negotiating how to capture flow testing and/or interior inspections of the water delivery systems as surveillance requirements. To address the finding from the contractor readiness assessment, BWXT submitted (and PXSO approved) a change to the TSRs that delays implementation of the surveillance requirement until the issue with periodic flow testing is resolved.

Following restart of the 12-44 cells, all nuclear explosive assembly and disassembly facilities at the Pantex Plant will have deluge fire suppression systems that are automatically activated by either infrared or ultraviolet detectors. [II.A]

**Pit Repackaging:** In December 2002, BWXT sent a letter to PXSO identifying the need for an additional \$2.1 million to support container procurement for FY03. Given the long lead time needed to procure containers, failure to fund container procurement in FY03 will lead to a significant shortfall of containers in FY04. Without adequate container funding in FY03, BWXT will be able to repackage only 1200-1800 pits into sealed-insert containers in FY04 (depending on FY04 funding), a number well short of the repackaging rate NNSA committed to the Board. An additional \$356,000 borrowed from the repackaging program to support container initiatives at other NNSA sites brings the potential funding shortfall to \$2.4 million.

Earlier this week, in response to a request by PXSO, BWXT identified two scenarios to support container procurement from available Pantex Plant funds. In the first scenario, BWXT would eliminate surveillance of containers for material other than pits, postpone pit cleaning operations for the W56 program, postpone implementation of sealed inserts for AL-R8 2040 containers, reduce off-site transportation packaging, and eliminate visual surveillance on containers to verify absence of corrosion from a laser etching process. According to BWXT, the second scenario, which eliminates planned staffing increases for fire department dispatchers and other fire protection personnel, "shows significant impact to critical activities needed to address Fire Department Baseline Needs Assessment (BNA) weaknesses and NNSA commitments to DNFSB." [II.A]