

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 7, 2005

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Activity Report for Week Ending January 7, 2005

**DNFSB Staff Activities.** Board Member R. B. Matthews was on-site this week discussing integrated safety management with site management and technicians. A. Matteucci provided staff support for the review.

**Cell Gaps.** This past September, BWXT committed to the Board to complete welding of the gaps around the cell equipment doors by the end of 2004. All the gaps have been welded except those around one door in a cell. Another safety issue needs to be resolved before the gaps around the last door can be welded and the commitment can be closed.

**Justification of Continued Operations Expiration.** PX-JCO-04-07, *Justification for Continued Operations of Nuclear Explosives Operations in Building 12-44*, was allowed to expire on December 31, 2004 based on a Sandia National Laboratories report dated December 10, 2004. The Sandia report concluded that future results from testing the lightning protection system will likely require detailed electromagnetic analysis due to the number of unknown and uncontrolled parameters. On January 4, 2005, as part of the Unreviewed Safety Question Evaluation process to evaluate the impact of this report on the current safety basis, the Nuclear Explosive Safety Department concluded that the change was trivial and further evaluation of potential safety impacts was unnecessary.

**Tooling Program.** BWXT submitted a proposed Tooling Improvement Plan this week that supersedes all previous plans. The Pantex Site Office is in the process of providing feedback to the contractor. The site representatives have raised questions regarding the ongoing corrective actions from the previous tooling improvement plans. The contractor has set a goal to clarify and simplify the processes that support the special tooling program. One key attribute of the new program is expected to be the use of tool-specific Design Requirements Documents to establish a clear linkage of tooling design, functional testing, and safety basis credited requirements of tooling. A management led root cause analysis of tooling program deficiencies is underway. The contractor has targeted January 24, 2005 to declare program readiness and begin a contractor readiness verification. In addition, the site office has committed to conduct a management review of BWXT actions in mid-January to assess progress toward effective implementation of special tooling program corrective actions.

**Potential Inadequacy of the Safety Analysis.** On Monday, BWXT discovered an unanalyzed event that involved an unreviewed safety question for nuclear facilities that handle flammable liquids. The safety analysis does not address the use of transient flammable solvents in certain areas of the facilities. BWXT has submitted an authorization basis change request to allow the use of flammable liquids in nuclear explosive facilities while work is performed away from the weapon.