

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 17, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending December 17, 2004

Pit Surveillance Occurrence. Last week, production technicians discovered during a surveillance activity that the atmosphere inside a sealed insert container was not as expected. BWXT determined that backfill gas was likely not added to the container, as required by procedure, after it was purged during pit repackaging activities in May 2004. BWXT is conservatively assuming that the pit could be breached given that the temperatures experienced by the pit during storage are unknown. A contractor review team has been convened and will be responsible for developing a path forward that should determine the following: the need to accomplish backfilling in the near-term to improve the heat transfer properties of the container, whether temperature monitoring of the pit should be initiated, or if the pit should be repackaged. BWXT also plans to perform a causal analysis, confirm the pit condition, ensure the in-process activity is enveloped by approved procedures, and evaluate the condition of the sealed insert containers containing pits that were repackaged in the same timeframe as the suspect pit.

Hoisting Equipment. BWXT has completed a cross-walk between the requirements of ASME NUM-1, *Rules for Construction of Cranes, Monorails, and Hoists*, and the current configuration of on-site hoisting equipment. ASME NUM-1 is considered a nuclear quality design standard and, given that most of the hoisting equipment at Pantex is decades old, BWXT does not believe the existing hoists can be upgraded to meet the requirements of the standard. PXSO has tasked BWXT to evaluate the impact of incorporating ASME NUM-1 requirements into the contract. BWXT is expecting to replace 96 hoists over the next 5 years with hoists that are certified to ASME NUM-1; therefore, seismically qualified and equipped with enhanced safety features.

Tooling Program. Nuclear explosive operations remain suspended in response to the discovery of fasteners that did not meet the requirements in *Tooling Fabrication and Inspection General Requirements* in load-bearing tooling on the line last week. As part of the action plan to recover from this situation, BWXT is updating the *Tooling Fabrication and Inspection General Requirements* (the current revision was approved in the late 1990's) and conducting additional training on torquing and other procedural requirements. BWXT plans to verify all the accessible fasteners on tooling that will be used to complete operations involving in-process units.

Specific Administrative Controls. PXSO submitted a revision to the Recommendation 2002-3 Implementation Plan deliverable to NA-10 that provides a schedule for reviewing the field implementation of specific administrative controls. There are 140 controls listed on the data sheets, of which 77 have been evaluated. The package also includes a list of lessons learned that have been identified during the control verification process.

Contractor Oversight. As a result of the W56 incident early this year, BWXT established an independent oversight program to review nuclear explosive, explosive, and nuclear safety. The recently issued initial report summarizes findings and corrective actions from three formal oversight assessments performed in fiscal year 2004 and objectives for FY 2005. Findings from the nuclear explosive safety compliance assessment were limited to the electrical tester program.