

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Matthew Duncan and Rory Rauch, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Report for Week Ending January 15, 2010

**Special Tooling:** B&W recently discovered that a tool did not match its bill of materials; the length of a piece part was shorter than specified. The tool, which had been used for approximately 18 months in nuclear explosive operations, was immediately removed from service. B&W has concluded that there were no safety concerns as a result of this discrepancy. Subsequent research revealed that other copies of this tool were found to be similarly discrepant when they arrived from the vendor (Sandia National Laboratories, SNL) several years ago. The discrepancy was corrected on some of the tools, but no extent of condition review was initiated. As a result, the subject copy of the tool was never recalled from the line. B&W has initiated a full bill of materials inspection on all tools manufactured by SNL. Further, tooling acceptance is determining the best method to ensure that extent of condition reviews are initiated in all appropriate instances in the future. It should be noted that SNL no longer manufactures special tooling for Pantex.

**Potential Inadequacy in the Documented Safety Analysis (PISA):** B&W declared a PISA this week to reflect the discovery of an unanalyzed hazard scenario in the W78 Hazard Analysis Report (HAR). The scenario was first postulated in early November, but B&W was awaiting a formal response from the design agency to determine whether the scenario was credible enough to warrant a PISA declaration. B&W requires new information to be closed within 10 working days of its discovery unless the engineering division manager approves an extension. In this case, an extension was granted to the end of this month because the design agency indicated informally that the newly postulated hazards would not lead to a weapon response. B&W has yet to receive a formal response from the design agency, but PXSO requested the PISA declaration in advance of this deadline to document why compensatory measures are not required and initiate an evaluation of the safety of the situation.

B&W presented a different unanalyzed hazard scenario that had the potential to affect the W78 HAR to the Board in November. As of last week, the authorization basis department had yet to determine whether the scenario was credible. Therefore, in this instance, the actions taken by B&W did not meet the aforementioned requirements for the processing of new information. B&W plans to declare this hazard a PISA this week.

**Missed Electrical Equipment Evaluations:** The recently completed contractor readiness assessment of B61 command disablement operations led to a pre-start finding to capture the fact that a piece of Category 2 electrical equipment had not been evaluated for its electrical threat potential during the subject operation. DOE Order 452.2D, *Nuclear Explosive Safety*, requires organizations responsible for nuclear explosive operations to verify that all equipment used in nuclear explosive areas be specifically approved for that operation. This is the second recurrence of this issue since April 2009 (see 12/11/09 and 4/24/09 reports), indicating the corrective actions from the first occurrence have been ineffective to date. B&W management is considering ways to prevent further recurrence of the issue.