

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy Dwyer, Technical Director  
**FROM:** Matthew Duncan and Rory Rauch, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Report for Week Ending October 14, 2011

**Process Anomaly:** The PXSO manager approved the nuclear explosive safety change evaluation (NCE) of the proposed process for disassembling the remainder of a unit with a damaged detonator cable assembly (DCA, see last week's report). The NCE group did not document any findings, but did drive a procedure change requiring a high explosive subject matter expert to inspect the DCA before cutting it in order to ensure that the target area is free of high explosive residue. B&W received authorization from PXSO to perform the recovery operation and successfully removed the DCA. The site rep observed excellent conduct of operations by the technicians.

**Pit Staging:** PXSO recently completed its readiness assessment (RA) for "Stage Right" pit staging operations in a certain bay. "Stage Right" operations—already used in some magazines and facilities at Pantex—provide a significantly denser pit staging configuration than that used in other bays. In addition, the interlock will be used to stage pits for the first time. The RA team identified one pre-start finding, two post-start findings, and eight observations. The pre-start finding was that the team could not find any evidence that the outer blast door provided a two-hour fire barrier as required by the documented safety analysis. In response, B&W provided a new engineering evaluation that closed the finding. The first post-start finding was that the pre-operational checklist was only required to be performed annually and that the procedure to inspect the facility's structure did not include the interlock. The second post-start finding was that the drill preparation and the performance of participating personnel were not satisfactory.

**Emergency Management:** There have been repeated issues with drills during both contractor and NNSA RAs since at least early 2009, when a team identified issues during a W88 RA. In the letter transmitting the "Stage Right" RA report to B&W, PXSO noted that "startup activities consistently note a lack of appropriate level of difficulty and proficiency in emergency preparedness drills and/or exercises for that particular facility/activity. The drills and exercises are predictable, exhibit coordination and communications problems, and do not challenge the performance of plant personnel, safety systems or other functional area programs, such as radiation protection and security." PXSO asked for a corrective action plan within 30 days that describes the actions being taken to improve the emergency preparedness drill program.

**Verification Program:** Last week, B&W issued a memo responding to a PXSO request for a review of the verification processes used during operations at Pantex. B&W concluded that a more uniform, developed program for performing independent verification, as well as other forms of verification (e.g., over-the-shoulder verification), is warranted to support Pantex operations. To that end, B&W proposed to develop and implement an Independent Verification Program during the course of fiscal year (FY) 2012. The key actions in this proposal include a rewrite of the independent verification chapter of the *Pantex Plant Conduct of Operations Manual*, to include a set of definitions for all of the types of verifications used at Pantex and a matrix identifying the appropriate type of verification for a given activity; the development of a training curriculum for the new program; and an independent assessment of the new program by the B&W performance assurance department. B&W expects to complete the implementation of this program in FY 2013.