

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy Dwyer, Technical Director  
**FROM:** Tom Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending September 28, 2012

**DBFSB Management Activity:** R. Tontodonato was at Pantex this week.

**Tooling Malfunction:** Last week, B&W Pantex paused operations on one weapon program when the unit rotated without the Production Technicians (PTs) squeezing the anti-rotation handles. (See report for 9/21/12.) The B&W tooling engineer discovered that a pivot pin which secures the anti-rotation feature to the fixture had worked loose causing the feature not to engage. This week, B&W Pantex paused operations on three other programs that use a similarly designed lifting and rotating fixture as part of an extent-of-condition review. The pause only affects those operations that use the lifting and rotating fixture. The Hazard Analysis Reports (HARs) for these three weapon programs identify the lifting and rotating fixture as one of the tools credited as the first layer of defense for mechanical insults, and a safety-class control.

NNSA was performing a Nuclear Explosive Safety Change Evaluation (NCE) on the process to transfer the unit from the failed lifting and rotating fixture to a good lifting and rotating fixture, when the NCE was suspended. The NCE team realized that they could not approve the Nuclear Explosive Engineering Procedure (NEEP) as written because the last two steps in the NEEP involved rotating the unit. B&W authorization basis will not allow rotation of the unit until the new information process is complete; however B&W tooling engineers need this fixture to determine the cause of the failure. B&W process engineering is revising the NEEP to eliminate the last two steps so that the NCE can be completed, and the broken fixture returned to the tooling warehouse to determine the failure mechanism.

**Conduct of Operations:** This week, B&W Pantex transportation department had a technical safety requirement (TSR) violation when a quantity of high explosives greater than 1280 pounds was moved prior to the material handler receiving authorization to perform the move. At the event critique, B&W authorization basis personnel stated that the specific administrative control (SAC) clearly states that authorization is required prior to initiating a move of this quantity and type of explosives. The material handler was sent to the explosives transfer point to move the trailer containing the explosives at approximately the same time the operations center was notified to open the >1280 pound high explosives move window. The material handler received no further instruction until after he had moved the trailer; approximately 20 minutes before authorization was given. B&W Pantex is planning to perform a causal analysis-mistake proofing next week.

**Formality of Operations Refresh:** This week the NNSA Production Office (NPO) sent a letter to the B&W manufacturing division manager expressing concern with a downward trend in formality of operations. The NPO cited four recent events which occurred in a short period of time that involved tasks that should be ingrained in the work habits of personnel performing nuclear explosive operations. NPO requested action be taken to assure that manufacturing division personnel are mindful of their responsibilities and the risks of performing nuclear explosive operations. NPO further requested a briefing and update by November 1, 2012.