

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 7, 2013

MEMO To: Steven Stokes, Acting Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending June 7, 2013

Board Staff Activities: This week, J. Mercier and R. Arnold were at the Pantex Plant to observe two different Nuclear Explosive Safety evaluation activities.

Anomalous Unit Update: B&W Pantex (B&W) has paused operations in one facility since late February 2013 due to an anomalous unit. (See report for 4/26/2013.) Last week, B&W received a Special Instruction Engineering Release (SIER) from the Design Agency (DA) to prepare the unit for radiography. As part of the SIER, the DA gave several potential scenarios for the popping sound the production technicians heard. (See report for 3/1/2013.) B&W paused all operations on the weapon program after receiving the SIER due to the concern that the potential scenarios could apply to the entire program. The DA sent a revised SIER that removed the potential scenarios and gave numerous explanations for the popping sound that apply specifically to this unit. B&W has resumed operations on the weapon program. B&W has not performed radiography of the anomalous unit.

Pause in Operations for Individual Facilities: This week, B&W paused operations in several individual facilities for the following concerns.

- During disassembly of one unit, B&W Production Technicians (PTs) discovered a discrepancy with a detonator cable assembly. The PTs initiated immediate action procedures to place the unit in a safe and stable configuration. B&W is determining the path forward.
- During disassembly of one unit, the PTs could not lock the tooling into a particular configuration due to a component alignment issue. The PTs placed the unit in a safe and stable configuration. B&W process engineers wrote a Nuclear Explosive Engineering Procedure (NEEP) to properly align the component.
- During assembly of one unit, the PTs paused operations when they realized they had made a measurement error related to component stack-up by not resetting a calculator. B&W process engineers wrote a NEEP to back out of the process.
- During disassembly of one unit, the PTs paused when they observed two components separating in a manner different from what they had typically observed. B&W contacted the DA to determine if the existing weapon response was still bounding. The DA replied that the adhesive that holds these two components together is an assembly aid not relied on for disassembly, and that the weapon response was valid. Operations have resumed.
- B&W recently installed risers on the Linear Accelerator radiography turntable as shown on the original assembly drawing. This resulted in an 11.5” step up onto the radiography turntable, increasing the chance of falls or dropped components. B&W personnel paused operations on the component of concern and plan to remove the risers.

Conduct of Operations—Product Definition: This week, B&W held an event critique for an event where a technician processed a component that was not covered by the procedure. B&W received this component on a unit in August 2012, and had not fully prepared for processing of this component. (See report from 8/17/2012.)