

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Tom Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending January 11, 2013

Tooling Technical Safety Requirement (TSR) Violation: This week, B&W Pantex declared a TSR violation related to the discovery that the nuclear explosive operating procedures for one weapon program allowed the use of an incorrect version of a tool. (See report for 1/4/13.) B&W Pantex held both an event critique meeting and a causal analysis-mistake proofing (CA-MP) meeting. The CA-MP team is still collecting data related to the possible causes and will issue their report in the future.

Tritium Alarm Event: This week, B&W Pantex held an event critique following an event where one person did not evacuate during a tritium alarm. This occurred in a nuclear material facility and was not related to nuclear explosive operations. The person that did not evacuate was working alone in part of the building and did not hear the alarm. All personnel in the entire building are required to evacuate during a tritium alarm. The B&W facility representative is trained to make a sweep of the building during a tritium alarm; however, he was not present when the alarm sounded. None of the 24 people that evacuated performed a sweep of the building and there is no requirement for them to do so. Fortunately, there was no tritium release. The key element of the radiation protection program is that personnel must evacuate within five minutes of the alarm sounding. B&W did not declare a TSR violation because the event was not a systemic failure of a key element of the radiation protection program. B&W took immediate action to test the alarm system in the part of the building where the person was working.

High Pressure Fire Loop (HPFL) Leak: This week, the B&W fire protection engineer paused operations in a non-nuclear facility due to a leak in the HPFL. B&W Pantex has been aware of this leak for some time; but this week it worsened to the point where the jockey pump could not maintain pressure in the HPFL causing the diesel pump to run continually. To stop the flow of water, B&W personnel isolated the facility from the rest of the HPFL. B&W Pantex placed operating restrictions on the facility and established a security fire patrol.

Tooling Malfunctions: B&W production technicians (PTs) had to pause operations and place nuclear explosive assemblies in safe and stable configurations in two facilities this week due to special tooling malfunctions. In the first facility, when PTs attempted to move the lower trunnions of the work stand to the prescribed height, only the trunnions on one side of the work stand moved. PTs will need to execute a special nuclear explosive engineering procedure to remove the unit from the work stand. B&W will then move the work stand to the tooling warehouse for repair.

In the second facility, B&W PTs could not install the nuclear explosive component lifting fixture onto the lift arm of the work stand. B&W tooling engineers are modifying the lift arm design. Operations remain paused in both facilities.