

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 19, 2013

MEMO To: Steven Stokes, Acting Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending July 19, 2013

Issue G Weapon Response: Babcock & Wilcox Pantex (B&W) upgraded the Potential Inadequacy of the Safety Analysis (PISA) issued last week based on the release of high-quality draft weapon responses for the W76 mechanical bay operations, to a positive Unreviewed Safety Question (USQ) determination. (See report for 7/12/2013.) B&W's basis for upgrading to a positive USQ was due to the increase in the probability and the consequences of an accident previously evaluated in the facility's existing safety analysis, an increase in the possibility of an accident of a different type, and a reduction in the margin of safety. W76 mechanical bay operations and satellite operations remain paused, however, cell operations were not impacted.

Inadvertent Siren Activation: A subcontractor to B&W recently installed a new outdoor warning system at the Pantex plant. This system is connected to several outdoor warning systems in surrounding communities within the Pantex emergency planning zone. The Pantex plant has the ability to activate the outdoor warning system sirens in the surrounding communities in the event of an emergency. In the process of troubleshooting issues identified by B&W with the new system, the subcontractor inadvertently and unknowingly activated the sirens in two neighboring counties. The sirens were activated twice before the issue was identified and corrected. The subcontractor had assumed that one of the function signals that is sent to the signal processor turns off the sirens at Pantex; however, it was discovered that the function signal also turned on the sirens in the two surrounding counties. B&W held an event critique, entered the issue into the Problem Evaluation Request system, and is planning to hold a causal analysis-mistake proofing meeting.

Electro-Static Dissipative (ESD) Flooring: B&W has been repairing and installing ESD flooring in nuclear explosive operating facilities as funding is available. Recently, one of the resurfaced floors failed the acceptance test. (See report for 6/28/13.) Since then, the subcontractor repaired the localized spots that failed the test, and the floor is ready to be retested. This week, a newly installed ESD floor in a different facility failed an acceptance test by being too conductive. The facility was approximately 10°F warmer than other facilities where the subcontractor had installed new flooring. B&W and the subcontractor suspect that this is the reason the floor failed and the subcontractor is performing small-scale testing at their facility to verify this hypothesis. B&W and the subcontractor are still evaluating the cause of the failure and the path forward to repair the floor.

Integrated Program Planning and Execution System (IPRO) Cutover: B&W is on schedule to perform the IPRO cutover on July 22, 2013. (See report for 7/12/2013.) This week, B&W completed USQ determinations and Contractor Nuclear Explosive Safety Change Evaluations (CNCE) for the numerous procedure changes that are related to the cutover. All USQ determinations have been negative, and there have been no nuclear explosive safety concerns stemming from the CNCEs.