

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 21, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending March 21, 2014

Suspect Fire Penetration Seals: Babcock & Wilcox Technical Services Pantex, LLC (B&W) completed an evaluation of suspect fire penetration seals and submitted a Justification for Continued Operations (JCO) to the NNSA Production Office (NPO). The JCO was submitted as a result of a Positive Unreviewed Safety Question for the discovery of discrepant as-found fire penetration seals. (See report for 2/21/2014 and 2/28/2014.) B&W discovered discrepant as-found penetrations seals in the exterior walls of five nuclear facilities in one building and four nuclear facilities in another building. B&W has implemented compensatory measures in the form of a Standing Order for both buildings. The compensatory measures for both buildings establish a five-foot combustible free exclusion area on either the external or internal side of the external walls, inspection criteria for each facility prior to resuming operations with Hazard Category 3 or greater quantities of nuclear material, and a two-week inspection cycle to verify compliance with the combustible controls. The second building has an additional compensatory measure to prevent large transient combustibles (i.e., vehicles) from being staged within an exclusion region of 20 feet from two of the external walls.

NPO issued a Safety Evaluation Report (SER) approving the JCO with no Conditions of Approval or Technical Review Comments, based on the compensatory measures identified in the Standing Order. NPO directed B&W to verify that the Standing Order is still in force and effective at an interval not to exceed three weeks. The JCO will expire on September 30, 2014.

High Pressure Fire Loop (HPFL) Lead-in Leak: B&W was performing a flow test of the HPFL in the High Explosive Pressing Facility, still under construction, when the Emergency Services Dispatch Center received a water flow alarm which set off the fire alarms in three buildings. Approximately six hours later, the HPFL Facility Representative reported that after the flow test a leak was discovered in the lead-in of one facility in a building in which the fire alarm had not activated. This facility was in maintenance mode for the installation of an electrostatic dissipative floor at the time of the leak. B&W is categorizing the discovery as a performance degradation of a safety-class control when not required to be operable. B&W fire protection personnel were able to isolate this one facility from the HPFL and B&W will begin repair on the lead-in immediately.

Ultra-Violet (UV) Flame Detector Sensitivity Setting: B&W has been placing nuclear explosive operating facilities in maintenance mode to verify the sensitivity setting of the UV flame detectors. B&W is verifying the settings as part of an extent of condition review following the discovery of an incorrect sensitivity setting. (See report for 3/7/2014.)

Pause in Nuclear Explosive Operations in Two Facilities: B&W paused operations in two facilities when the Production Technicians (PTs) noticed a difference in the degree to which two hand knobs needed to be tightened on a newly designed lifting and rotating fixture. B&W tooling engineers went to the facility and verified that there was nothing wrong with the tool, but rather there was a difference between what the PTs were told in training and the way the tool is designed to function.