

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Tom Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending November 30, 2012

DNFSB Staff Activity: B. Laake was at Pantex this week to observe the W80 Operational Safety Review (OSR).

Technical Safety Requirement (TSR) Violation: This week, B&W Pantex reported a TSR violation when fire protection engineers discovered that thermally sensitive devices were staged within the combustible standoff distance. B&W fire protection engineers, while performing the bi-weekly combustible loading inspection of bay facility interlocks, discovered that combustible material was located too close to thermally sensitive components. The bi-weekly combustible loading inspection of bay facility interlocks is one of the compensatory measures in the Justification for Continued Operation (JCO) resulting from the suspect fire penetration seals. While performing the inspection in the interlock, the B&W fire protection engineer noticed the violation in the bay beyond the interlock. B&W personnel performed an extent of condition review and found one other bay that violated the combustible standoff requirement. This is the second TSR violation this month related to combustible standoff requirements. (See report for 11/16/12.) B&W Pantex paused operations in the affected facilities and held an event critique meeting. B&W management performed a safety stand-down for manufacturing personnel to discuss the combustible loading and standoff requirements.

Fire Penetration Seals Positive Unreviewed Safety Question (USQ): B&W Pantex issued a positive USQ related to suspect penetration seals found in several facilities. B&W fire protection engineers discovered the suspect penetration seals during their annual fire barrier inspection. (See reports for 11/16/12 and 11/23/12.) B&W authorization basis submitted one JCO to NNSA Production Office (NPO) for approval of operations in the seven affected cells. B&W authorization basis will need to submit a second JCO for the affected bays. B&W Pantex continues to pause nuclear explosive operations in the affected facilities until NPO approves the JCO. B&W Pantex is proposing similar compensatory measures as those previously approved in the JCO issued in August, 2012. (See report for 8/24/12.)

Performance Degradation of Safety Class Structure, System, or Component: This week, B&W Pantex reported occurrences of the failure of two different safety class controls. The first failure was related to a Det-Tronics® relay module of the ultra-violet fire detection system. The facility representative placed the facility in maintenance mode and entered the appropriate Limiting Condition for Operations (LCO). (See report on 10/26/12 for previous occurrence.) The second failure was related to the lightning warning system. The operation center issued lightning warnings when the lightning mapping computer and display became inoperable.

Potential Inadequacy in the Safety Analysis (PISA): B&W Pantex issued a PISA this week when tooling and machine design personnel determined that the center of gravity for specific gas bottle carts did not meet the seismic requirements. The W80 OSR team questioned the original calculation (performed by a subcontractor) which initiated the re-calculation this week by B&W tooling and machine design personnel. B&W personnel took immediate action to place "Do Not Use" tags on all the affected carts, and returned them to the tooling warehouse.