

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 15 February 2008
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: C. Martin was on-site observing the second week of the transportation and staging nuclear explosive safety master study. W. Von Holle and C. Martin were on-site to discuss the Pantex safety basis.

Fire Protection System: A water leak was recently discovered in a concrete valve box that houses four high pressure fire loop (HPFL) post indicator valves (PIVs) and associated lead-in pipes that service nuclear explosive facilities. The valve box was found overflowing with water during routine rounds by utility personnel. The water had to be drained from the box so the source of the leak could be pinpointed and repairs made. It was determined that two PIVs had leakage around the gland seals of the gate valves and the packing was replaced. B&W Pantex elected not to isolate the subject section of the HPFL or cut water supply to the affected bays upon initial discovery of the leaks for the following reasons: the pressure in the HPFL was holding steady at 145 psi, there were no pump starts due to pressure loss in the HPFL, and B&W Pantex did not want to impair fire systems to critical bays and cells that could have critical items in them.

High Pressure Fire Loop (HPFL) Upgrades: B&W Pantex has suspended project work on the HPFL Zone 12 South Material Access Area (MAA) project until full funding for this project is authorized. The scope of the HPFL project includes replacing 16,000 feet of deteriorating ductile iron piping, valves, and hydrants, which will enhance the reliability of sitewide safety-class fire suppression systems. Upgrades to the HPFL lead-in piping—identified in an August 2005 assessment by the PXSO systems engineering group as the most vulnerable component of the HPFL—are not included in the scope of this project. These upgrades will be addressed through a separate line item project, for which funding has not been authorized. There have been 21 HPFL failures since 1995 caused by external corrosion of the iron piping.

Graveyard Shift Operations: The W80 began graveyard shift operations (2300 - 0730) this week. One bay will initially be operational for this program. This is in addition to the already long-standing graveyard shift for radiography operations. Graveyard shift for the W80 was originally scheduled to commence last week. However, this was delayed until operational awareness enhancements were implemented. Some specific actions taken for the graveyard shift included briefings with the technicians and supervisor on conservative decision making, shift turn-over, and communications. Additional oversight during the first few weeks will be provided by production management and nuclear safety officers.

Metal Trades Council (MTC) Contract: The MTC labor contract expires on 18 February. Management presence in the production areas was increased this week to assure facilities and equipment are in safe configurations. B&W Pantex has completed an interruption of work assessment on weapon production activities and identified potential effects on operations in the event of a four to eight week stoppage. Management personnel will accomplish all surveillances, in-service inspections, and preventive maintenance on all nuclear facilities and safety systems required to support ongoing work. Critical work will be performed by trained and qualified non-MTC personnel. It is anticipated that recovery actions to restart full-scale weapons production after a relatively short work interruption would take at least a couple weeks.