

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 14 November 2008
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: T. Spatz was onsite this week to observe the nuclear explosive safety study of W88 SS-21 cell operations.

ALARA Review: The B&W Pantex ALARA committee recently concluded that the Laser Gas Sampling Station (LGSS) in the Special Nuclear Material Component Requalification Facility can be safely operated without a portable shield. The portable shield was intended to reduce the "at the controls area" dose rate of 3-5 millirem per hour for casual observers, but could not be qualified to prevent seismic or tripping man hazards. As a best business practice, B&W Pantex will position a boundary to ensure a 6 foot standoff of casual observers from the LGSS.

Technical Safety Requirement (TSR) Violation: B&W Pantex declared a TSR violation when a security police officer (SPO) drove past a road closure posting during a loading operation at a Zone 4 magazine. Both ends of the access road for the magazine in use are required to be closed while the magazine or transport trailer doors are open. This measure is intended to prevent an impact event between the oncoming vehicle and the item being loaded. In this instance, the SPO did not believe the posting was valid because it had been positioned in an atypical manner. Zone 4 moves were suspended until all applicable personnel could be briefed on the appropriate implementation of the control, such as positioning the posting in the middle of the road and waiting to place the posting until all personnel involved in the operation are ready to begin. B&W Pantex will hold a cause analysis exercise to determine additional corrective actions.

W76 Readiness Assessment (RA): This week, PXSO issued the NNSA RA report for W76 operations in a 5 kV environment. The RA resulted in two pre-start findings, two post-start findings, and four observations. The pre-start findings involved a failure to change applicable operating procedures to reflect the revision of a cart approved for the 5 kV environment and a failure to implement the static dissipative floor covering control consistent with its description in the safety basis. The RA team concluded that personnel were competent and knowledgeable, and processes were adequate to begin W76 operations in a 5 kV environment. PXSO has requested that B&W Pantex convert all W76 facilities to the 5 kV environment after all in-process units have been completed.

Special Tooling: W76 operations were suspended this week when the trunnions of a workstand prematurely locked while an assembly was being lowered. The locking mechanism is intended to activate when the upper trunnions receive a resistance equal to or greater than the weight of the upper trunnion assembly. In this case, the trunnions were moving in free space with no apparent source resistance. A recovery procedure was developed to disengage the interlock and the operation was successfully completed. Tooling is evaluating the workstand to determine the cause of this problem.

Housekeeping: B&W Pantex recently documented the actions taken in response to concerns raised by PXSO regarding areas of poor housekeeping in the Zone 12 material access area (e.g., excess equipment, vegetation, and rubbish). Immediate actions included the removal of excess equipment, trimming of vegetation, and managing and controlling miscellaneous equipment by entering it into a formal material disposition system. In an attempt to prevent future unauthorized storage or dumping, B&W Pantex has restricted access to the subject yard areas.