

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 8, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Hunt, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending October 8, 2004

Loss of Material Control. This week, BWXT discovered that non-conforming material (1/4" brass rod) procured at acquisition level 1 was used in weapon program special tooling. The material had been placed in a quality hold status in the warehouse upon receipt pending verification of several quality attributes which were not initially provided with the material. The material was used in the machine shop for fabricating parts for horizontal carts. There is no record of the material being released or accepted in the subject facilities and the hold tag has not been found. The carts were not used following the modifications and are on administrative hold in the warehouse pending issue resolution. BWXT committed to review the process for releasing and accepting material and provide training to responsible personnel. BWXT also plans to confirm that all material rejected or on hold in the warehouse is still accounted for.

Integrated Safety Management (ISM). BWXT, with PXS0 participation, recently completed an assessment of the integration of ISM core functions into activity-level work planning and control. The assessment addressed issues cited in the Board letter of May 21, 2004 and focused on maintenance of vital safety systems, manufacturing operations, and high explosive operations. The assessment concluded that BWXT is in compliance with Department of Energy policy, DOE P 450.4; however, several areas for improvement were identified. Among those applicable to nuclear safety are the need to document evidence that work practices are routinely reviewed, ensure employees performing hazard and control evaluations are appropriately trained, and capture lessons learned from activity-level work planning and execution.

Fire Protection Event. In support of scheduled maintenance this week on the high pressure fire loop, the 15-24 and 15-25 electric fire pumps were started by fire system technicians. Computer records indicate startup of the 15-25 electric pump did not generate a signal to the Fire Department alarm room as expected, even though the dispatcher stated verbally to the technician that he received signals from both pumps. There is evidence that signals from both pumps went to the automatic dialer in the pump facility but the signal from pump 15-25 was not sent to the computer in the alarm room. Troubleshooting the communications link between the dialer and computer and procedural changes to minimize potential for erroneously confirming receipt of startup signals are necessary.

Documented Safety Analysis Inadequacy. It was reported this week that a positive unreviewed safety question (USQ) existed with respect to a Sandia National Laboratories facility bonded voltage calculation for two bays of Building 12-84. It appears that the original analysis may have used an inappropriate lightning attachment point during development of the calculation. The bonded voltage for the facilities has been increased as well as the standoff distance.

Design Agency Support. BWXT awaits the W88 final weapon response from Sandia National Laboratories and Los Alamos National Laboratory (LANL) to support completion of the Hazard Analysis Report (HAR). LANL restarted the applicable classified material operations this week and both the weapon response and formal approval are needed by next week to allow finalization of the HAR and timely submittal to NNSA.