

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 10 October 2008
SUBJECT: Pantex Plant Weekly Report

W76 Electrostatic Discharge (ESD) Environment Transition: B&W Pantex recently issued a plan that outlines the scope, schedule, and resources necessary to transition W76-0 and W76-1 operations from a 12 kV ESD operating environment to a 5 kV ESD operating environment. The plan will take effect after the 5 kV environment is approved (an NNSA readiness assessment is scheduled to begin next week and approval is expected by the end of October). B&W Pantex will conduct an implementation verification review for the eight facilities scheduled to undergo this transition. According to the plan, the final 12 kV facility will be taken offline in December.

End State Documented Safety Analysis (ESDSA) Assessment: PXSO recently completed an assessment of the implementation of controls from the ESDSA project. The assessment identified one finding and three weaknesses. The finding was rollup of several DSA deficiencies, most of which involved the failure to document all applicable facilities for a given control. In general, the assessment team concluded that controls were properly implemented in plant procedures and that proper configuration management of documentation was maintained.

Nuclear Criticality Safety (NCS): In September, B&W Pantex completed two self-assessments related to NCS; fissile material handler training and the NCS software quality assurance program. Both areas were determined to be compliant with requirements. One observation during the training review was that the instructor primarily discussed the U-235 isotope, not the worst-case fissile material present at Pantex. In addition, PXSO issued an assessment report that concluded the B&W Pantex NCS program is sound. An assessment of criticality safety evaluations (CSEs)—a previously identified weakness—was not an element of this review since B&W Pantex will consolidate the NCS program technical basis into one CSE by June 2009.

Special Tooling: Operations in a W76 facility have been suspended for several weeks due to the misalignment of a workstand. This problem has required the development of two recovery procedures to implement modifications that add more play to the tooling involved and compensate for the offset. A shifting mechanism on the workstand has been known to gradually cause this misalignment. The technicians have been trained on a shifting technique that should minimize the misalignment. Engineering is evaluating whether a tooling revision is warranted.

Metal Trades Council (MTC): The two open safety officer positions were filled in September. This brings the total number of MTC safety representatives to three.

Continuous Air Monitors (CAMs): B&W Pantex chartered a multi-organizational committee (including an MTC representative) a few months ago to evaluate ways to maximize the efficiency and reliability of the real-time air monitoring system. One of the goals is to optimize the usage of CAMs by removing those from service that are not required by 10CFR835. The first phase of the project has resulted in a proposal to remove 35 alpha monitors and 29 tritium monitors from select storage, training, container processing, and non-nuclear production facilities where radiological release hazards do not presently exist. This creates the potential for a significant reduction in labor and maintenance costs with little to no impact on safety.

Housekeeping: A PXSO investigation discovered significant housekeeping issues outside several buildings in the Zone 12 material access area. Excess equipment, rubbish, compressed gas cylinders, and vegetation pose a fire and safety risk in proximity to nuclear facilities.