

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 26 June 2009
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: M. Duncan was onsite to observe operations.

W78 Readiness Assessment (RA): NNSA recently completed an RA of W78 disassembly and inspection (D&I) operations. The RA team identified one pre-start finding regarding three procedure steps that could not be performed as written. The finding has since been closed and authorization to perform W78 D&I operations for the first time since April 2008 is expected next week. Operational restart was delayed in part by a newly identified electrostatic discharge hazard that led to process, tooling, and facility modifications.

Specific Administrative Controls (SACs): As a part of the corrective action plan from a recent SAC implementation review by PXSO, B&W Pantex has committed to designating all SACs in procedures as critical steps. This activity is scheduled to begin in October after B&W Pantex completes the SAC conversion project.

Electromagnetic Radiation Emitting Equipment: Certain communications equipment used at Pantex has sufficient output energy to potentially initiate low-energy electro-explosive devices. There is a requirement to post signs at the entries to the material access areas (MAA) reminding couriers to turn off communications equipment before entering the secure areas. It was found this week that the sign at the entry point to the Zone 4 MAA was positioned so that it was not visible from the normal convoy route. The B&W Pantex nuclear explosive safety department evaluated the situation and contacted responsible personnel to correctly position the sign.

Cell Blast Door Structure: This week, while technicians were opening the inner equipment room blast door to receive a unit, the spring-loaded floor gasket located along the bottom of the door became disconnected and slammed to the floor. The floor gasket is considered part of the facility structure credited with reducing the leak path area between the door and floor in the event of a material release in the cell. The gasket normally remains raised when the door is opened and lowers to the floor when the door is closed, so in this case the gasket failed in the safe (down) position. There is a required annual surveillance that inspects the gasket assembly for signs of abnormal wear or damage. Maintenance technicians repaired the gasket to its original configuration. The gasket assemblies in other cells have hardware that prevents the kind of unthreading that occurred in this case.

Special Tooling Welds: During an NNSA assessment of the B&W Pantex welding program, a team member found a small crack in a weld on a piece of special tooling in the warehouse. The transfer cart is used on two programs to hold and transport main charges and pits during assembly operations. Work was suspended in the production facilities that were using the carts and an extent-of-condition inspection found that three in-service carts, including one that was loaded, also had cracked welds. The cracks discovered were not on load bearing parts of the carts. These carts were accepted for use several years ago before B&W Pantex took action to ensure that any vendors performing welds are compliant with American Weld Society standards. B&W Pantex engineering is determining a path forward.