

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending February 26, 2010

Person-to-Person Coverage Nuclear Explosive Safety Change Evaluation: T. Hunt was at Pantex this week to observe a Nuclear Explosive Safety Change Evaluation for a proposed change to operating procedures to remove the person-to-person designators (“[M]” is put in the margin of every step that requires it) in favor of a system that uses procedural steps to direct the technician to post standardized signs designating person-to-person coverage. B&W suspended the evaluation and expects to restart it in several months after the project team performs a human factors analysis.

W87 Operations: Technicians damaged a component during a W87 disassembly operation. They immediately suspended operations and contacted their supervisor. B&W is awaiting instructions from Lawrence Livermore National Laboratory regarding how to proceed, but does not believe the damage will impact safety for the remainder of the operation. Before performing the next W87 disassembly, B&W will incorporate a tool, which technicians already use during assembly operations, to help prevent recurrence.

Conduct of Maintenance: A work order to tighten loose bolts on a support I-beam for a safety-class structure supporting a dynamic balance and mass properties measurement machine specified bolts that were different than what was actually installed in the field. Upon discovery, the maintenance worker should have stopped work. Instead, the individual tightened the bolts to a torque value based on a reference book, even though different torque values were specified in the work order. The worker also discovered that a bolt was missing and replaced it. B&W suspended the worker’s qualifications. System engineering personnel evaluated the situation and had maintenance personnel install the appropriate bolts.

High Pressure Fire Loop: This ongoing construction project will replace thousands of feet of deteriorating safety-class piping. In a letter to B&W, PXSO noted several recent instances of ineffective quality control and quality assurance in construction execution. Some examples include: (1) installation and subsequent replacement of non-conforming bolts, (2) installation and subsequent replacement of non-conforming flange assemblies for fire hydrants, and (3) receipt and acceptance of non-conforming post indicator valves. In some cases, multiple opportunities to correct these deficiencies were missed throughout the ordering, receipt and inspection, and installation processes.

W88 Operations: Technicians discovered damage to a detonator cable assembly during an assembly (prior to the introduction of any special nuclear material) and suspended operations.

DOE Voluntary Protection Program: B&W Pantex achieved STAR status this week.