

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 September 18, 2009

DNFSB Staff Activity: T. Hunt has completed his assignment as Pantex site representative.

Fiscal Year (FY) 2010 Performance Evaluation Plan (PEP): The FY10 PEP incentivizes several safety system improvements, including: the installation of six ASME NUM-1 hoists, the completion of upgrades to the emergency lighting systems in nuclear explosive cells, and the seismic qualification of the ceiling-mounted appurtenances in six nuclear explosive bays.

SS-21 Startups: The W84 SS-21 project team has formally adjusted its schedule to reflect the addition of disassembly and inspection activities to the operational scope. In general, the schedule changes were minor and the September 2010 authorization date was unaffected. In support of this schedule, the Hazard Analysis Task Team (HATT) performed its final process evaluation this week. No significant new hazards or other issues with the process or tooling were found and authorization basis personnel are now free to begin writing the hazard and accident analyses section of the hazard analysis report (HAR). The next major milestone for the project team is submittal of the HAR to PXSO, which is scheduled to occur in March 2010.

The B53 SS-21 project team has also adjusted its schedule in response to an accident scenario that was postulated during final HATT evaluations in May. Authorization is now delayed approximately eight months—to September 2010—while the project team makes the tooling and process changes necessary to control the new scenario.

B83 Nuclear Explosive Operations: Production technicians were hoisting special tooling onto a B83 subassembly when the detonator cable assembly was caught underneath the tooling and damaged. The technicians are trained to eliminate the slack in this cable to prevent such an occurrence, but were briefly distracted when they began to have difficulty working around a protrusion on the subassembly. Operations were immediately suspended. Lawrence Livermore National Laboratory (LLNL) evaluated the configuration and determined weapon response is not required; rather, LLNL will require the application of kapton tape prior to restart. This particular hoist is one of several dozen hoists of tooling, components, and subassemblies that will be eliminated by the process redesign supporting the B83 tooling upgrade project, which is scheduled for completion in FY11.

Emergency Lighting (E-light) System Upgrades: B&W is in the process of replacing the E-light systems in nuclear explosive cells. The new systems are qualified to performance category-3 seismic criteria and exceed by a greater margin the functional requirement to provide 0.5 ft-candle of illumination at the working surface. B&W recently installed new E-light systems in building 12-44, cells 5-6, leaving cells 12-85 and 12-96 as the only remaining cells with the older emergency lighting system.

PXSO Staffing: PXSO officially selected the former safety basis supervisor as the Assistant Manager for Nuclear Engineering last week. Critical remaining open positions include the Assistant Manager for Oversight and Assessments, the safety basis supervisor, and the fire protection engineer.