

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 12 September 2008
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: Staff members D. Andersen and C. Martin were onsite this week to observe the nuclear explosive safety master study for special purpose facilities and the nuclear explosive safety change evaluation for W76 operations in a static dissipative environment. Outside expert D. Boyd was onsite to review technical procedures and conduct of operations.

Fiscal Year (FY) 2009 Performance Evaluation Plan (PEP): Last week, PXSO issued the PEP for FY 2009. The following safety-related performance objectives have been incentivized for B&W Pantex: authorize W88 cell and B53 SS-21 operations, address electrostatic discharge (ESD) issues in support of W78 operations, perform a backfit analysis of all safety basis-critical safety systems, establish safety system availability metrics, install static dissipative flooring in nuclear explosive facilities, complete the seismic qualification of ceiling mounted equipment in nuclear facilities, install seismically qualified hoists in nuclear explosive facilities, develop and execute a plan to reduce the movement and tracking issues associated with onsite and offsite material moves, improve the lightning detection and warning system, improve the fidelity of W88 trainer units, and develop and implement a prototype closed circuit television system to integrate with the deluge fire suppression system automated detection and initiation capability.

W76-1 First Production Unit (FPU): A supplemental procedure was exercised this week on the initial FPU assembly that experienced problems with the potting material last week. The unit was put into a configuration that allowed it to be transported to a staging facility to await dismantlement. Work subsequently commenced on the second attempt to complete an FPU. The goal remains to complete the FPU by 30 September.

Technical Procedures and Conduct of Operations: The staff observed execution of the B61 dismantlement procedures this week. Three crews were observed performing the nuclear explosive and nuclear operations in three bays. Two of the crews exhibited excellent knowledge and skill during the dismantlement activities. Enhancements to the three procedures evaluated will be provided to the B&W engineering staff responsible for the B61 process development. The staff also began a procedure review of the W76-1 assembly process and will complete the review in the near future.

Static Dissipative Environment for W76 Operations: A nuclear explosive safety change evaluation (NCE) was held this week to assess the implementation of a static dissipative environment as a control scheme for W76 operations. The static dissipative environment—maintained through the use of dissipative flooring, conductive footwear, and some tooling modifications—limits the maximum voltage for any object that can approach a sensitive component. The NCE resulted in no findings or minority opinions. However, with the approval of the proposed control scheme, the NCE group discussed the fact that four W76-0/1 processes will be approved for multiple ESD control schemes. To avoid confusion, the NCE group recommended that only one ESD control scheme be allowed to process the same unit in a given facility.