

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**DATE:** 12 October 2007  
**SUBJECT:** Pantex Plant Weekly Report

**Bays and Cells Nuclear Explosive Safety (NES) Master Study:** In July, NNSA concluded the NES master study. The draft NES study report shows one pre-start and nine post-start findings. Last week, PXSO provided comments to the report approval authority, NA-12, disagreeing with several of the findings. The pre-start finding stated that compensatory measures are needed to protect against a lightning scenario involving the task exhaust, work stand, dissipative flooring, and an electro-sensitive device. PXSO recommended that this finding be downgraded to a deliberation topic on the basis that the scenario had already been evaluated by PXSO during its review of the W80 hazard analysis report and it accepted that the likelihood of the scenario occurring is sufficiently low. Several of the post-start findings involved the adequacy of the safety analysis or the assessed risk of operations, which PXSO believes is outside the scope of NES. Therefore, PXSO recommended that review authority for closure of several of these findings should be delegated to the PXSO Manager.

**Multi-unit Operations:** In August 2006, PXSO directed BWXT to develop a technical safety requirement (TSR) that would disallow the collocation of specific weapon configurations unless barriers are implemented. Last week, BWXT formally responded to this request by stating that, in general, the configurations of concern are limited to single unit operations by the TSRs and authorization agreement. The configurations of interest may be collocated during transportation and satellite operations, but BWXT believes appropriate barriers are in place.

**W84 Joint Test Assemblies (JTAs):** The contractor and site office recently completed readiness assessments (RAs)—with four and two pre-start findings, respectively—for the start-up of the non-SS-21 W84 JTA disassembly and inspection (D&I) operations. The RAs were required because the units contain a quantity of radioactive material that exceeds the DOE Standard 1027-92, *Hazard Categorization and Accident Analysis Techniques*, Category 2 threshold. Once this material is removed, which occurs early in the D&I process, the work is no longer a Category 2 hazard activity. The subject D&I operations began last week.

**Defense Science Board (DSB) Task Force Review:** The DSB was on-site this week to assess progress Pantex has made since the 1998-99 review on maintaining nuclear weapons expertise. The DSB met with a cross-section of employees to determine how well Pantex is recruiting, retaining and developing nuclear weapons related scientists, engineers and technical personnel that have the appropriate critical skills related to project management, safety and security. BWXT indicated that it has difficulty retaining and recruiting toolmakers, process and authorization basis engineers, and high explosive technicians. PXSO is not projecting any recruiting or retention problems for critical skill positions.

**Fiscal Year (FY) 2008 Performance Evaluation Plan (PEP):** Last month, PXSO issued the PEP for FY 2008. Among many others, the FY 2008 PEP includes the following safety-related, incentivized performance objectives for BWXT: achieve configuration control of sitewide 10CFR830-compliant documented safety analyses, complete a limited number of W88 rebuild units, close NES findings, improve the unreviewed safety question program and associated new information process, improve trainer unit fidelity, make progress on the HPFL replacement and associated lead-in replacement projects, complete the transition to a single central fire receiving station monitoring system, continue to install electrically dissipative flooring in nuclear explosive facilities, improve the seismic qualification of ceiling mounted equipment in nuclear explosive cells, and continue to install seismically qualified hoists in nuclear explosive facilities.