

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Rory Rauch, Pantex Site Representatives  
**DATE:** 30 May 2008  
**SUBJECT:** Pantex Plant Weekly Report

**W76 Operational Status:** Electrostatic discharge (ESD) subject matter experts (SMEs) and the W76 engineering team from B&W Pantex gathered earlier this week to discuss possible options for resolving the ESD concerns that led to the suspension of W76 operations. After briefing the options to PXSO, it was decided that the W76 engineering team should pursue two options in parallel. First, as the preferred long-term solution, B&W Pantex plans to implement a partial ESD environment by using available FY08 funds to install static dissipative flooring in four facilities. However, there is currently no funding available (amounting to a shortfall of approximately 5 million dollars) to install static dissipative flooring in the remainder of the facilities needed to support projected W76 throughput demands. Therefore, the W76 project team plans to submit a temporary safety basis change—possibly in the form of a justification for continued operations—to restart W76 operations in the non-static dissipative facilities using an administratively controlled environment. To minimize the reliance on administrative measures in this environment, Los Alamos National Laboratory will conduct tests to demonstrate that a specific component can adequately prevent certain postulated electrical paths. The goal is to have these parallel actions completed by the end of July.

**Degraded Deluge System:** B&W Pantex failed to immediately respond to a fire alarm control panel signal that indicated a problem with the deluge system in an operational bay. Because of a failure to follow written procedures, the appropriate facility and production personnel were not notified of the ultra-violet detector problem until three hours after the trouble signal was received by the emergency services dispatch center. The incorrect limiting conditions for operation were subsequently initiated—for a planned rather than unplanned impairment—and a fire watch was eventually established. The event was reported as a technical safety requirement violation.

**Laboratory Support of Pantex:** Lawrence Livermore National Laboratory (LLNL) recently laid off its lone Pantex Tri-Lab Project Office representative in a cost cutting measure. As a liaison between Pantex and LLNL, the representative's responsibilities included responding to off-normal events, providing on-site engineering oversight, approving procedures, and supporting weapon surveillance activities. There are no plans to permanently backfill the position; it is expected that an LLNL engineer will rotate through periodically.

**PXSO Facility Representatives (FRs):** Two individuals passed their oral board this week, bringing the total number of fully qualified FRs to eight. Each FR was given three scenarios with several permutations and the response actions were evaluated by a panel of three PXSO managers and a senior FR. The FRs demonstrated extensive knowledge of facilities, systems, processes and procedures during their methodical and deliberate responses.

**Safety System Functional Assessments (SSFAs):** PXSO recently completed an assessment of the actions taken by the B&W Pantex System Engineering department to close corrective actions from the SSFAs conducted by PXSO in FY07. PXSO identified two findings during the assessment. First, of the 71 deficiencies (43 findings and 28 weaknesses) reviewed during this assessment, three had been closed prematurely. Second, corrective actions were not being completed by the dates specified in the approved corrective action plan. PXSO recognized that emergent issues may divert priority and prevent completing the specified corrective action by the approved completion date, but requested to be notified by B&W Pantex when such instances arise. PXSO requested a reply within 30 days that takes comprehensive corrective action to the findings from this assessment.