DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 5 May 2006
SUBJECT: Pantex Plant Weekly Report

BWXT-Pantex Deputy General Manager: BWXT recently named Greg Meyer as Deputy General Manager for Pantex. His responsibilities include supervising program management activities, maintaining cognizance of operational activities, and providing general management oversight in the general manager's absence.

B61 Nuclear Explosive Safety Study (NESS): During the past several weeks, a NESS group evaluated proposed B61 disassembly, inspection, and rebuild operations. Two distinctive highlights of the proposed activities are multi-unit operations and the use of a static dissipative environment. The NESS Chairman briefed PXSO management on the preliminary results of the study. The three pre-start findings – dealing with procedures, multi-unit operations, and emergency response associated with a special weapon process – should be relatively easy to close. The final report is expected to contain a minority opinion that the proposed operations are adequately controlled in all weapon configurations to prevent nearby explosions. The NESS group is also expected to recommend that four nuclear explosive safety rules be developed to protect against potential electrostatic discharge insults.

Justification for Continued Operations (JCO): This week, BWXT submitted a JCO to PXSO for approval to clean, inspect, and repackage a potentially damaged pit. New procedures and tooling will be prepared to support radiographic inspection of the pit. The pit was temporarily packaged into a non-sealed insert container in January 2005 with compensatory measures implemented that provided a secondary containment. If the radiograph shows the pit to be intact, a permanent control will be installed and the pit will be repackaged into a sealed insert container.

Manufacturing Resource Planning (MRP) Software Replacement: The MRP system, which serves many functions including planning and tracking material moves, was first implemented at Pantex in the mid-1980's. BWXT has initiated activities to upgrade the system hardware (including the IBM mainframe platform). BWXT is beginning long-term planning to replace the MRP software. The MRP software replacement project will be managed per DOE Order 413.3, *Program and Project Management for Acquisition of Capital Assets*. BWXT is expecting to submit Critical Decision-0, mission needs, to PXSO by 30 September for approval.

High Pressure Fire Loop (HPFL) Assessment: Last month, PXSO system engineering conducted an assessment of the HPFL. The review team's final report concluded that the HPFL was properly configured to perform its intended safety function. However, the report also noted the following issues: minor drawing discrepancies, BWXT's checklist for performing vital safety assessments of the HPFL do not include a verification of valve position, and some equipment used to perform surveillance testing was not appropriately calibrated. PXSO also performed an HPFL Vulnerability Assessment in August 2005. That report recommended that the Limiting Condition of Operation (LCO) be expanded to address the basis for continuing nuclear explosive operations after receiving notification of an HPFL leak, but before the location of the leak is identified and the leak is isolated. PXSO re-communicated this recommendation in its most recent report.