DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 25 August 2006
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: R. Rauch was on-site this week to attend the Pantex Throughput Improvement Plan meeting and observe the approved equipment program Nuclear Explosive Safety Master Study.

Multi-Unit Operations (MUO): This week, the Manufacturing Division Manager approved Stage 2 multi-unit operations for the W87 program. Stage 2 consists of authorizing one crew to be able to process two units in a facility. Shifting work from one unit to the other requires production management approval. BWXT plans to implement Stage 2 MUO on the B61 program in the near future. The schedule for progressing to Stage 3 MUO is currently undefined. Stage 3 would allow multiple crews to work concurrently on two units in a facility.

Stockpile Evaluation Transformation: In July 2005, NNSA requested that a leadership team be formed to evaluate potential modifications to the current stockpile surveillance program. In particular, NNSA requested that the team identify potential changes to the stockpile surveillance program that could eliminate or significantly reduce the existing Pantex disassembly and inspection (D&I) backlog and to review specific weapon program D&I processes to identify process steps that do not provide meaningful information for weapon system assessments. The leadership team included personnel representing Sandia National Laboratories, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, NNSA, and BWXT-Pantex. The leadership team has identified several potential D&I process improvements that could create as much as a 30 percent efficiency gain for throughput of some weapon programs. In addition, the team believes that the Pantex D&I backlog can be significantly reduced or eliminated through implementation of a new stockpile surveillance methodology without negatively impacting the ability of the nuclear weapon complex to adequately evaluate and assess the stockpile. Implementation of the new surveillance methodology could reduce the number of D&I's performed at Pantex in FY07 by more than 60 percent.

Pantex Throughput Improvement Plan (PTIP): The Senior Management Team (SMT) met to review PTIP accomplishments and future Pantex production activities. The SMT repeatedly questioned and discussed the allocation of resources (tooling design engineers, safety basis analysts, tooling fabrication vendors, etc.) to competing programmatic priorities. Currently, it appears that the SMT's four highest priority SS-21 process implementation projects are the W88, W76, W80, and B53.

Severe Weather: Due to recent heavy and persistent rainstorms, many facilities in the Material Access Area accumulated standing water. Leaks through facility structure left puddles of water in several nuclear facility interlocks and bays, and equipment rooms that support nuclear operations. No equipment damage or failure was noted. Work requests are being generated to address the observed problem areas. In addition, lightning warnings have had a significant impact on production during the past two months. Recently, lightning warning have occasionally effected production activities for more than 40 consecutive hours. BWXT is evaluating opportunities to minimize the effect of lightning warnings on operations.