

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 4 November 2005
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: Technical Director J. K. Fortenberry was on-site this week to meet with PXSO and BWXT management and to observe operations.

Emerging Information: Two weeks ago, a design agency issued an Information Engineering Release (IER) to Pantex that discusses an emerging issue regarding aging of a specific weapon program's main charge high explosive. This week, design agency and service center personnel traveled to Pantex to meet with BWXT and PXSO to discuss the IER and potential disassembly process improvement options. Currently, the weapon program in question is not undergoing operations that would be impacted by the issues discussed in the IER. This emerging issue could delay the Seamless Safety for the 21st Century (SS-21) process start-up for this weapon program.

W62 Nuclear Explosive Safety Study (NESS) Validation: When the NESS group reviewed the W62 SS-21 disassembly and inspection (D&I) process in May 2003, it noted many issues regarding the trainer fidelity and expressed additional concerns regarding differences between the training bay, which was used to demonstrate operations to the NESS group, and actual operating facilities. In response, BWXT developed a transition plan that included a NESS group validation of the process during the first five surveillance units because some of operational processes were not adequately demonstrated during the May 2003 NESS. Many units have been processed since the SS-21 D&I process was implemented, but the NESS follow-up validation has not occurred. Since the W62 process is transitioning to a dismantlement program with the concomitant process changes, it may now make sense for NES to perform a more formal operational safety review.

W70 Component Disposition: In early September, BWXT resumed W70 component disposition operations after completing the contractor readiness assessment (W70 operations were suspended in 1998 due to funding issues). Since September, W70 operations have experienced numerous tooling issues. In addition, W70 operations were shut down two weeks ago for a conduct of operations related violation. Based on material limit criteria in DOE Standard 1027, *Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23*, W70 component operations are considered a non-nuclear operation. BWXT and PXSO determined that an NNSA readiness assessment was not warranted.

Readiness Reviews: Many upcoming activities will require contractor and/or PXSO readiness reviews. There are presently nine contractor readiness reviews – both programmatic and facility – and five NNSA reviews planned for the next three months. Based on current staffing levels, it appears that it will be a significant challenge to achieve the proposed start-up schedules. The planned levels of the reviews appear to be appropriate based on the scope of operations.

Integrated Safety Management (ISM): BWXT has recently taken steps to revitalize ISM at Pantex in accordance with the Department of Energy Implementation Plan (June 2005). One of the goals is to fully implement the five core functions and seven guiding principles to ensure all workers are aware of the hazards associated with their work and understand the controls in place that ensure safety. BWXT also plans to integrate its corporate Human Performance Improvement (HPI) initiative into the ISM system. The HPI initiative is intended to promote behaviors that support safe and reliable operations and, if applied effectively, could reduce the number of human factors related errors experienced during conduct of operations.