

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 11 August 2006
SUBJECT: Pantex Plant Weekly Report

B83 SS-21 Startup: A recent weapon response from the design agency indicates previously unanalyzed electrostatic discharge (ESD) concerns exist during disassembly and rebuild operations. B83 nuclear explosive operations have been suspended more than a year. There is currently no mitigation strategy for a couple scenarios involving the separation of certain components. The new information will likely compel BWXT to redesign or modify some tooling to alleviate the concerns. The design agency is suggesting engineered controls like having tooling in constant contact with a particular component and reducing spark gaps between a potentially charged component and tooling. The Nuclear Explosive Safety Change Evaluation and readiness reviews have been postponed indefinitely while corrective actions are developed and implemented.

Production Manpower: BWXT Manufacturing Division is experiencing a manpower shortage. Programs and facilities are ready to work but cannot be manned due to a shortage of qualified production technicians (PTs). Scheduling commitments for the B61 program have forced PTs to work 72 hour weeks (6 days, 12 hours). BWXT's internal procedures limit employees to 72 hours in a 7-day period, unless exempted by written approval of the Division Manager. BWXT management is closely observing the technicians for signs of excessive mental and physical fatigue. A tooling shortage has set the training of additional PTs behind. The next class of graduates is expected to double the number of available B61 program PTs by 1 September and relieve some of the staffing pressure.

Multi-Unit Operations: The Assistant Deputy Administrator for Military Application and Stockpile Operations (NA-12) formally concluded last week that the analyses and control set developed to support weapon staging in a nuclear explosive bay during W78 disassembly operations meet the intent of applicable nuclear explosive safety standards. NA-12 also expressed confidence, based on recent design agency analyses, that the implementation of administrative or engineered (barrier) controls would be sufficient to allow multi-unit operations to extend to all other nuclear explosive programs and facilities.

Emergency Management Exercise: This week, representatives from Pantex, state and local jurisdictions, and DOE Headquarters participated in a full field exercise to evaluate the capabilities of the plant to respond to an emergency scenario. The scenario was a possible threat to Pantex from a train derailment at the southern border to the plant and resultant locomotive fire, as well as a potential flammable and toxic chemical release from railcars. This exercise was the first time a shift turnover within the Emergency Response Organization was conducted and operations were relocated to the Alternate Emergency Operations Center. Personnel directly involved in nuclear operations did not participate in the exercise.

Justifications for Continued Operations (JCOs): BWXT recently issued a proposed revision to the Pantex Integrated Safety Management Authorization Basis Manual (AB Manual) that is meant to assure JCOs will be compliant with DOE-STD-3009-93, *Preparation Guide for Nuclear Facility Documented Safety Analyses*. It includes enhancements to the requirements that govern JCO format and methodology. The Manufacturing Division also issued guidance on implementing JCO requirements and assigning a representative to support development of JCOs.