

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 21 October 2005
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: A. Matteucci was on-site this week to support the site representatives and observe operations.

Conduct of Operations: Upon discovery of an anomaly, production technicians (PTs) halted operations and notified the process engineer, and after a short delay, resumed operations. The PTs stated that they were distracted by the presence of numerous individuals observing the operations and assumed that the authorization to resume operations had been provided by the process engineer. Plant Standard P7-2003 reads that only the first line supervisor has the authority to authorize resumption of operations after the discovery of an anomalous condition. BWXT management has re-emphasized the responsibility of PTs to properly address operational anomalies and to maintain control of the operations in their facility, including actively minimizing distractions.

Electrical Near Miss: During construction activities (drilling) in a nuclear explosive facility, a contractor drilled into a energized (120/208 V) conduit which resulted in complete loss of power to the facility. At the critique held on 20 October, several actions were identified that could have prevented this event from occurring including the following: providing the contractor with as-built drawings (drawings that identified the energized conduit were not provided to the sub-contractor), x-ray examination of the concrete, radio frequency tracing of electrical wiring, and conducting facility walk-downs and de-energizing lines prior to conducting work. A scanner was employed prior to this drilling operation but it is only effective to about 3 inches into the concrete. The concrete was being drilled to a depth of 8 inches. All drilling operations on-site have been suspended.

W62 Operations: Similar to an event that occurred last April, cell operations were suspended this week due to the inability to remove a small explosive component from a weapon using the approved procedure. The approved method involves the use of a screw and puller to extract the component from its installed location. The screw stripped out twice and design agency input is needed before another attempt is made to remove the component. Upon review of the procedures by the Board's staff, it was discovered that several steps leading up to the present halted position were not checked off in the operating procedure as would be expected.

Justification for Continued Operations (JCO): During the week of 12 September, while preparing for pit cleaning operations, production technicians discovered a quantity of high explosives (HE) greater than the expected residual amount adhered to a cushion attached to a pit. This week, BWXT submitted a JCO to restart pit packaging and cleaning operations in the facility where the HE was discovered. This facility does not permit the presence of explosives. The JCO states that the conditions necessary to detonate such a small quantity of HE greatly exceed those available in the facility. The JCO purposes that future disassembly operations will include procedural steps to inspect pits for greater than residual amounts of HE prior to packaging the pit. The JCO recommends that pit packaging and cleaning operations in the subject facility should resume. PXS0 is in the process of reviewing the JCO for approval.