

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 24, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Hunt, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending September 24, 2004

W56 Cell Operations Restart. PXSO validated the closure this week of several W56 contractor readiness assessment issues and briefed the Board on additional actions taken to safely resume dismantlement operations. BWXT restarted cell operations Friday morning after being shutdown for more than eight months.

PXSO Readiness Assessment of Safety Controls. A PXSO readiness assessment began this week that will validate the implementation of 31 effective safety controls. Twenty-five of the controls are technical safety requirements (TSRs) and six are important to safety (ITS). Most of the controls are derived from the Sitewide Safety Analysis Report (SAR) with others from the transportation, nuclear material, bay and cell, and satellite facilities SARs.

Hoisting Violation. BWXT recently discovered that an assembly stand with a history of failures had been lifted and positioned at least twice in a bay containing a weapon, in violation of a general instruction step of the operating procedure. None of the personnel involved in troubleshooting the tooling failure were familiar with the requirement to remove the unit from the bay prior to lifting and removing the assembly stand, an unanalyzed hazard.

Unauthorized Container for Nuclear Material. A pit container that had been thought to no longer exist at Pantex was discovered last week when it was sent to the sealed insert (SI) bay for repackaging. The container had lost its over-the-road certification several years ago and was not recognized in the Approved Container Manual for plant use. This 2030-1 container is very similar to the AL-R8 except that it has an additional containment vessel inside and the inscription on the exterior is different. Two TSR controls are applicable to this occurrence: (1) an administrative control (AC) programmatic requirement to assure nuclear material is shipped and staged in approved containers, and (2) an AC specific requirement that containers are identified and qualified for use in nuclear facilities and captured in approved Pantex manuals. BWXT has committed to update the Approved Container Manual to add the 2030-1 and issued a standing order to inspect labels on containers prior to movement. BWXT has an additional action to review packaging histories for pits, radioisotopic thermoelectric generators, and tritium reservoirs to determine if there could be any other anomalous containers not currently in the manual.

Electrical Distribution System Upgrade. PXSO received approval for Critical Decision 1 last week to begin preliminary design and baseline development of the electrical distribution system upgrade to improve its reliability. The primary problem with the existing system is the inability to ensure the safe, reliable delivery of power due to aging distribution equipment for which replacement parts are increasingly scarce. Included in the scope are alleviation of short circuit and ground fault vulnerabilities, replacement of 8 facility generators and 4 uninterruptible power sources, and replacement of overhead lines and underground conductors. The design contract is to be awarded in December 2004 with operability targeted in 2008.