

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 24 April 2009
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: J. Anderson was onsite to observe the first week of the Support Activities nuclear explosive safety master study.

Electrical Equipment Approval: DOE Manual 452.2-1A, *Nuclear Explosive Safety (NES)*, requires electrical equipment used in nuclear explosive (NE) areas to be controlled at a level commensurate with its electrical threat. Last week, while executing a pre-shift setup procedure, production technicians discovered a piece of electrical equipment in an NE cell that had not been evaluated for its electrical threat potential. A preliminary extent of condition review revealed another copy of the same piece of equipment had been delivered to an NE area without an electrical evaluation. Both copies of the equipment were immediately removed from NE areas. System engineering evaluated the equipment and determined it to be Category 3 Electrical Equipment (the lowest threat level, defined by DOE M 452.2-1A as electrical equipment that cannot come in contact with an NE or HE subassembly). Manufacturing and process engineering immediately performed a comprehensive extent of condition review of all NE areas and procedures and no additional unevaluated equipment was discovered. An initial assessment indicates the electrical evaluation should have been initiated during the procedure change control process, which includes NES change control. As a prompt remedial measure, a standing order was issued to all process engineers reminding them to ensure that electrical equipment has been authorized for use in an NE area before it is approved for use in an NE operating procedure.

Unreviewed Safety Question (USQ) Program: Last September, B&W Pantex initiated a pay-for-performance USQ program in an attempt to reduce the backlog of open evaluations. The program has been successful in significantly reducing the backlog from about 300 to less than 100 open USQs in six months.

Conventional High Explosive (CHE) Separation: This week, manufacturing attempted to execute the final recovery procedure following the charge separation activity from two weeks ago that resulted in significant CHE cracking. Operations were suspended after a few process steps when an unanticipated condition occurred. B&W Pantex plans to attempt a recovery procedure with only minor process deviations as a first recovery step. If the step fails, then more significant process modifications will be required.

Technical Safety Requirement (TSR) Violation: A specific administrative control (SAC) requires verification at the beginning of each shift that facility combustible materials are in approved locations. This requirement was discovered recently to have not been flowed down into implementing procedures for several nuclear facilities nor had the technicians been trained to perform the shiftly verification. Operations were suspended in the affected areas until the requirement can be proceduralized and training of the technicians completed.

Remote Video Monitoring Feasibility Study: The fiscal year 2009 performance evaluation plan contains a performance objective to determine the feasibility of implementing deluge fire suppression system detection and initiation with remote integrated television monitoring capability. The fire protection department issued a report recommending that a video surveillance system not be used for fire detection and initiation because it would not increase the capability or reliability of the current fire protection system. The report indicates that if video surveillance is required for other needs then it should be installed as a stand-alone system.