

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: Friday, August 12, 2005
SUBJECT: Pantex Plant Weekly Report

Special Tooling - Loose Fasteners: On 10 December 2004, BWXT suspended nuclear explosive (NE) operations at Pantex after production technicians discovered loose fasteners on an assembly stand and management subsequently lost confidence that a sitewide requirement in Drawing 10666, *General Requirements, Tooling Fabrication and Inspection*, which specifies general fastener tightness, was being met. Last weekend, during NE operations, production technicians discovered two loose screws (load bearing) and a loose jam nut on lifting and rotating fixtures being used in two separate NE bays. The tooling drawing does not specify a torque value for the fasteners, therefore the fasteners are subject to the torque requirements contained in Drawing 10666. Although BWXT performs a yearly visual inspection of the lifting and rotating fixtures, as recommended in DOE Standard 1090, *Hoisting and Rigging*, there is not a requirement to perform periodic preventive maintenance on this tool. This week, BWXT inspected the fasteners on all the lifting and rotating fixtures being used in NE operations. On a related note, the NNSA tooling review is expected to resume the week of 19 September.

Master Authorization Agreement (MAA) and Standards/Requirements Identification Document (S/RID): Two weeks ago, PXSO informed BWXT that the configuration management process for maintaining the MAA appeared to be inadequate given that the MAA authorized operations in five cells of a facility despite that three of the cells are undergoing major modifications. In the future, if PXSO restart approval is necessary for a facility start-up, BWXT will remove the facility from the MAA prior to transitioning the facility to repair mode.

In a memorandum dated 27 May 2004, PXSO requested that BWXT update the S/RID during the next annual update to reflect compliance with requirements contained in DOE Order 420.1A, *Facility Safety*. Currently, the Facility Engineering & Construction section of the S/RID reads that "exception is taken to all Design and Construction references [Sections 4.1, 4.2, 4.3, 4.4]" in DOE Order 420.1. In the meantime, BWXT continues to use equivalent DOE requirements to address criticality and explosive safety, fire protection and general design criteria.

Radioisotopic Thermoelectric Generators (RTGs): BWXT recently revisited its earlier proposal to partially disassemble RTGs containing Pu-238 oxide at the Pantex Plant. BWXT concluded that the activity would fall outside the currently approved operational scope and Pantex should not be considered an option for this mission assignment. Pantex does not presently have the facilities, process equipment, tooling, nor trained personnel to safely perform the dismantlement. Although not currently a storage safety concern for Pantex, it would be prudent for the site to pursue development and approval of a shipping container to remove this hazard to a better equipped location.

Conduct of Operations: Over the past three months, BWXT has reached four milestones in an effort to improve conduct of operations at Pantex. Three of the four milestones relate to enhancing the training of first-line supervisors (production section managers). As part of these actions, BWXT is in the process of developing both an Authorization and Safety Basis training course and a Conservative Decision Making course for the supervisors. This training is expected to be expanded to include the production technicians.

Integrated Weapons Activity Plan (IWAP): Last week, the National Nuclear Security Administration released Issue J of the IWAP. Issue J reflects the current expectations for the ongoing and remaining Seamless Safety for the Twenty-First Century (SS-21) programs.