

## **DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**DATE:** 3 March 2006  
**SUBJECT:** Pantex Plant Weekly Report

**DNFSB Staff Activity:** R. Rauch was onsite to observe the fourth week of the W87 Nuclear Explosive Safety Study (NESS).

**Initiation of Immediate Action Procedures (IAPs):** This week, production technicians in a nuclear explosive cell initiated IAPs in response to discovering an anomalous condition of a weapon component. The production technicians evacuated the facility. As required per procedure after the initiation of IAPs, radiation safety and nuclear explosive safety personnel evaluated the unit, production technicians, and facility before the resumption of activities was approved. Although special nuclear material was present in the facility during the incident, nuclear explosives were not. Production technicians have completed disassembling the subject unit and the major components have been packaged.

**Gas Heater Fire:** Last weekend, a gas heater suspended from the ceiling of a warehouse in Zone 11 caught fire. The fire suppression and notification systems functioned as designed. The suppression system dumped approximately 300 gallons of water. BWXT is still investigating the cause. The warehouse is used to store empty containers, transportation carts, and minor weapon components (limited to low level explosive and radiological contamination hazards).

**Nuclear Safety Requirements Applicable at Pantex:** Last September, in response to the Department of Energy Action Plan, *Lessons Learned from the Columbia Space Shuttle Accident and Davis-Besse Reactor Pressure-Vessel Head Corrosion Event*, NNSA requested that each site office manager provide the following to the Central Technical Authority (CTA) by 28 February 2006: a list of DOE Orders and Manuals relating to nuclear safety that are applicable at the site, a list of exemptions that have been granted to nuclear safety requirements specified in DOE rules, and a list of known areas in which the site is not compliant with a DOE nuclear safety rule. This week, the Pantex Site Office fulfilled that request and identified exemptions to requirements for criticality alarms/systems and requirements for seismic monitoring, both of which are associated with DOE Order 420.1, *Facility Safety*. In addition, in January, NNSA released a process description for the CTA that governs Management of Nuclear Safety Requirements. This process requires CTA concurrence before NNSA site office managers grant exemptions to nuclear safety requirements contained in applicable DOE Orders, Manuals, Notices, and Rules.

**Procedure Revision Approval Process:** Last week, BWXT personnel discovered that a revision of a nuclear explosive operating procedure had been released for use despite that authorization basis personnel had not completed an Unreviewed Safety Question (USQ) evaluation of the revised procedure. It appears that authorization basis personnel signed the change request form associated with the procedure revision, which they believed represented the need to perform a USQ evaluation, but process engineering personnel interpreted the signature as confirmation that the USQ evaluation had been completed. Operations involving the subject procedure were suspended upon discovery of the error. The USQ evaluation was subsequently completed and was negative. BWXT has reviewed all ongoing USQ evaluations to ensure that no other technical procedures have been released without the USQ evaluation being completed.