

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Timothy Hunt and Rory Rauch, Pantex Site Representatives  
**DATE:** 13 June 2008  
**SUBJECT:** Pantex Plant Weekly Report

**Control of High Explosives:** While emptying a nuclear explosive facility to transition it from an operational to repair mode, *non*-residual pieces of conventional high explosives (CHE) were found in a waste can. Non-residual HE, as defined in the authorization basis, is detonable. When chips, flakes and fragments of CHE are generated during the W76 disassembly process, they are placed in a specific waste receptacle (W-25) in accordance with an approved procedure. It is possible for significant quantities of CHE to accumulate over time in the waste cans which are not robust, authorized storage containers. Other CHE programs disposition the HE fragments with the bulk HE in approved cans. B&W Pantex has discontinued the use of the W-25 waste stream and will apply the methodology used for other CHE programs to the W76.

**W76-1 Processing:** Components delivered to Pantex in support of weapon work are expected to be available on site for inventory and processing about 90 days prior to unit delivery dates, per the D&P Manual. NNSA has requested that B&W Pantex support W76-1 production schedules with shipment lead-ins of as little as 30 days. The B&W Pantex position is that a compressed assembly process cannot be supported even with a seven-day per week work schedule.

**W80 Nuclear Explosive Safety Change Evaluation (NCE):** An NCE to evaluate proposed changes to material limits and code management system (CMS) operations was suspended for an unrelated issue. During the CMS NES study in January, information was presented that indicated an isolation pad between the tester and cart would limit the threat from an induced current. Recent calculations show the pad being more conductive than originally inferred, which significantly increases the current through an induced loop. This information was presented to the lightning committee, which drafted a memo—signed by a member from each lab and B&W Pantex—stating that the induced current is not a hazard because the weapon is shielded (i.e., in a Faraday Cage configuration) and the operation is not performed during lightning warnings.

**Hoist Replacement Project:** B&W Pantex recently completed installation of the eighth and final NUM 1B rated hoist scheduled for FY08; bringing the total number for the upgrade project to 17 of 66 planned. Current plans are to install 13 additional hoists during both FY09 and FY10. There are 25 hoists that have been stored in the warehouse since 2006 or earlier. The manufacturer must periodically replace the fluid in the hoist reservoirs to prevent corrosion.

**Voluntary Protection Program (VPP):** The B&W Pantex General Manager has set a goal of obtaining Star status in the VPP. VPP is an Occupational Safety and Health Administration program that recognizes workplaces with excellent safety and health management systems. The Department of Energy has designed a program specifically for its plants and laboratories. Pantex is one of the few NNSA sites that have not yet earned VPP Star status.

**Manufacturing Division Management:** B&W Pantex announced this week that Todd Ailes will take over as manager of the Manufacturing Division, effective 23 June. He was most recently division manager of Quality and Performance Assurance.

**Electrostatic Discharge (ESD) Socks:** For employees who have difficulty in passing the conductivity tests when preparing to enter a facility with ESD flooring, B&W Pantex is now providing X-Static Socks® to wear with ESD safety shoes. These socks have a silver thread woven into the fabric to increase the electrical conductivity between the skin and the ESD shoe.