

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Timothy Hunt and Rory Rauch, Pantex Site Representatives  
**DATE:** 10 July 2009  
**SUBJECT:** Pantex Plant Weekly Report

**Potential Inadequacy in the Documented Safety Analysis (PISA):** B&W Pantex declared a PISA this week after an authorization basis analyst discovered weapon response frequencies for a specific set of accident scenarios that are not bounded by the frequencies used in the current documented safety analysis (DSA). Before performing the unreviewed safety question determination on the PISA, B&W Pantex must seek confirmation from the design agency that the newly discovered weapon response applies. Specifically, the design agency must reconcile the fact that the newly discovered weapon response uses lower impact parameters than the parameters currently listed in the DSA. Confirmation by the design agency is also required because B&W Pantex had derived the weapon response used in the DSA by re-applying weapon response intended for other similar accident scenarios. The newly discovered weapon response had been formally issued by the design agency at least two years ago and it is not clear why action has not been taken to resolve this discrepancy until now. The subject weapon program is not operating and the DSA will be updated before operations restart.

**Technical Safety Requirements (TSR) Validations:** B&W Pantex management has directed that all TSR controls will be self-assessed by the control owners—most are in the engineering division—to ensure they are being implemented properly, effectively maintained, and still meet their functional requirements. The 96 TSR assessments scheduled for FY09 began in January and 54 have been completed to date. Numerous weaknesses and observations were noted in the assessment reports and most have been assigned to the corrective action tracking system. For specific administrative controls, these assessments serve as the periodic revalidations required by DOE Standard 1186, *Specific Administrative Controls*.

**Nuclear Explosive Safety (NES) Exemption:** B&W Pantex issued an impact evaluation of DOE Order 452.2D, *Nuclear Explosive Safety*, and requested an exemption to the requirement that prohibits the transportation or staging of a nuclear explosive with any other assembly that could be mistaken for a nuclear explosive. According to the evaluation, implementation of this requirement for Vacuum Chamber and Non-destructive Evaluation operations would cause unnecessary cost and schedule delays. B&W Pantex referenced conclusions from the Special Purpose Facilities, Support Activities, and Transportation NES Master Studies as justification for the exemption. PXS0 plans to fully evaluate the current level of compliance with this requirement before it makes a decision on whether to forward the exemption request to NA-10 for approval.

**Hoist Malfunction:** Technicians were in the process of hoisting a nuclear explosive from a transportation cart to a fixture when the 1-ton pneumatic hoist began to stall intermittently. After the step was completed, crafts evaluated the hoist and found the pneumatic pressure at the proper setting, but general wear of the hoist, which has exceeded its service life, was preventing smooth movement at that setting. The problem was alleviated by increasing the available pneumatic pressure by 10 psi. B&W Pantex plans to replace this hoist with a new 2-ton ASME NUM-1 hoist when facility and crafts availability allows.