

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Timothy Hunt and Rory Rauch, Pantex Site Representatives  
**DATE:** 27 March 2009  
**SUBJECT:** Pantex Plant Weekly Report

**DNFSB Staff Activity:** B. Laake was on-site to attend the kickoff meeting for the Support Activities nuclear explosive safety (NES) master study.

**Technical Safety Requirement (TSR) Violations:** PXSO and B&W Pantex are coordinating an effort to reduce the number of TSR violations at the plant. B&W Pantex recently issued a memo describing the general framework it plans to use to accomplish this objective. The framework comprises four strategic areas: sensitizing employees on the importance of TSRs, developing a robust control owner program, ensuring TSRs controls are binned at a level commensurate with their safety significance, and evaluating the current cause analysis process for adjustments that would improve the evaluation of events that have led to TSR violations. B&W Pantex will coordinate specific actions with PXSO and will issue a final plan to reduce the number of TSR violations by the end of the month.

**Code Management System (CMS) NES change evaluation (NCE):** This week, the NNSA conducted an NCE of B61 CMS operations. Specifically, the NCE group was tasked to evaluate CMS operations on a B61 unit co-located with another B61 in any assembly/disassembly configuration in a static dissipative environment, and CMS operations on a B61 unit staged with any weapon in an approved transportation configuration. The NCE group determined that the proposed operations pose no threat to NES. Of note, the NCE group discussed the NES implications of a lightning-induced current on the loop created when the CMS tester connects to the bomb. This issue had been deliberated during previous CMS NES evaluations and PXSO has decided to accept the associated risk while the nuclear weapon complex electromagnetic committee evaluates the credibility of the hazard. For this reason, the NCE group did not attempt to resolve this issue. B&W Pantex suspends CMS operations during lightning warnings to mitigate the risk associated with lightning-induced loop currents.

**Special Nuclear Material (SNM) Transportation:** There is a TSR that prohibits the movement of SNM (e.g., canned subassemblies (CSAs), nuclear explosives) past three particular contiguous bays when certain explosive-only operations are in process. The operator aids painted on the floor and posted on the wall at each end of the subject group of facilities failed to include CSAs as prohibited items. The requirement and operator aid were implemented about a year ago upon approval of the external explosion analysis. There happens to be an operational CSA leak check bay next to the three explosive-only bays but there is currently no evidence that CSAs have been transported in front of any of the subject bays when certain weapon-like configurations were inside. B&W Pantex took quick action to correct the operator aids following discovery of the deficient postings and markings and briefed the material handlers on the prohibited movements.

**PXSO Facility Representative (FR) Program:** The PXSO FR organization recently completed the triennial assessment of its program. Overall, it determined that the requirements of DOE-STD-1063-2006, *Facility Representatives*, are being met in the areas of training, oversight, assessment and feedback, coverage, and management support. The one identified weakness dealt with the lack of an off-site peer review of the self-assessment results. Three of the five documented observations were related to management support. These included the shortage of training and developmental opportunities, the absence of an incentive program for the FR staff, and the lack of regular communications between the FRs and some key site office organizations. The lone noted strength was the priority given by the PXSO manager to replacing departed FRs.