

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 25, 2002

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending October 25, 2002

**DNFSB Activity Summary:** W. White was on leave Monday and was on site for the remainder of the week.

**Calibration of Radiation Counters:** On Tuesday, October 22, BWXT discovered the calibration of a low background radiation counter, used for facility and operational radiological swipes, had expired on October 17, 2002. The counter had been in use on multiple occasions and by two different technicians during the time period its calibration was expired.

In a similar occurrence in April 2001, technicians used a counter whose calibration had expired. Following the April incident, BWXT personnel implemented three corrective actions: a revision to the daily quality control printout to indicate when the calibration date had been exceeded, a revision to the *Radiological Measurements Laboratory Manual* (MNL-180697) to include a specific requirement for technicians to check calibration status of instruments prior to use, and additional training to inform personnel of the need to verify calibration due dates prior to use of the equipment. BWXT identified all corrective actions as closed when the non-conformance report associated with the incident was closed in November 2001.

However, since the closure of that non-conformance report, two of the three corrective actions taken have been reversed. A software revision implemented recently appears to have eliminated the notification on the quality control printout that was to occur if the calibration date is exceeded. BWXT removed the requirement for technicians to verify equipment calibration status prior to use in a subsequent revision of MNL-180697.

The current path forward for BWXT is to reinstate the verification requirement in MNL-180697, re-implement the calibration date notification on the daily quality control printout, and re-emphasize to technicians the need to verify calibration status of calibrated equipment prior to use. BWXT also intends to examine software quality assurance concerns for software associated with the counters. [II.A]

**Enhanced Transportation Carts:** As of Friday, enhanced transportation carts have been implemented at Pantex for the B61, W76, W78, and W88 programs. The carts will be in place for the W62 program when that program resumes operations following implementation of seamless-safety tooling enhancements next year. The cart is not yet implemented for the W80, B83, W84, and W87 programs.

- S Implementation of the ETC for the W80 program is delayed by concerns identified by Sandia National Laboratories. To address those concerns, the W80 program is now revising its interface tooling to allow transportation of the W80 in the smaller ETC II cart, used for physics package transportation on other programs.
- S Implementation on the B83 program is expected within the next few months.
- S For the W84 program, it remains unclear whether NNSA intends to meet its prior commitment to the Board to implement the ETC before operations begin on the next cycle of units.
- S Implementation on the W87 program has been delayed by an engineering evaluation release from Lawrence Livermore National Laboratory and Sandia National Laboratories that raises concerns related to the vibration environment in the cart as well as the temperature seen by the unit during ramp transportation. Efforts to resolve these concerns have delayed implementation of the ETC for the W87 program indefinitely. [II.A]