

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 21, 2003

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending February 21, 2003

**DNFSB Activity Summary:** The site office was closed on Monday for the President's Day Holiday. W. White was on leave Tuesday and was on site for the remainder of the week. Staff member D. Nichols and outside experts J. King and L. McGrew were on site Tuesday through Thursday to observe the W62 readiness assessment and nuclear explosive safety study.

**W62:** NNSA continued its readiness assessment (RA) and nuclear explosive safety study (NESS) this week for the W62 seamless safety process. This week, cell operations were demonstrated in the training bay. NESS and RA team members continued to be highly engaged in both their observations of activities and in their deliberations. However, only a few of the RA team members were available to observe cell operations because of travel restrictions and competition for resources. The restricted availability of the RA team members to participate in discussions of observations detracts from the effectiveness of the RA.

Throughout the RA and the NESS, the production technicians have demonstrated exceptional cooperation with the needs of the review teams. However, this week there was a breakdown in the performance of the procedure, in which the contractor appeared to lose control of the process. Several steps in the disassembly process did not work as anticipated as a result of trainer fidelity issues. As required, the production technicians stopped work and the production section manager requested engineering support.

Had the problems occurred during an actual weapon disassembly, a new engineering instruction would have been prepared and reviewed, resulting in a lengthy delay. In this case, however, the tooling designer and procedure writer were on hand for the review and proceeded to troubleshoot the problems on the spot so that the review could proceed. As this happened, review team members became increasingly involved in the activities, and the formality of the demonstrations degraded. The training facility environment, trainer fidelity problems, the intrusiveness of the review teams and the artificial nature of the review contributed to the loss of control that ensued. Each of these detracted from the fidelity of the process being demonstrated.

The steps in the procedure that were not properly demonstrated will be demonstrated for the NESS members next week. Only one RA member will be available for that demonstration. Both the NESS and the RA are expected to continue through at least the next two weeks. [II.A]

**Office of Independent Oversight and Performance Assurance (OA):** Last Friday, PXSO sent OA interim correction action plans (one for PXSO and one for BWXT) for the findings noted in the recent OA inspection at the Pantex Plant. The interim corrective actions address only the emergency management findings from the OA assessment. The findings related to environment, safety, and health will be addressed in a later report.

The PXSO corrective actions include identification of a responsible position for emergency management functions and the establishment of a formal emergency management oversight and assessment program. The more extensive corrective actions identified by BWXT address the range of OA findings related to weaknesses in the BWXT emergency management program. Some of the more significant actions include development of a hazardous material inventory system; development of a process for performing and maintaining the emergency hazards assessment; completion of a new emergency hazards assessment that incorporates information from a formal, comprehensive hazards survey; and the implementation of a schedule for self-assessments of emergency management. [II.A]