

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 11, 2003

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending April 11, 2003

DNFSB Activity Summary: W. White was on site Monday through Wednesday and was in Albuquerque for the remainder of the week.

Readiness Assessment for B83 Rebuild: In a letter sent to BWXT on Tuesday, NNSA suspended its readiness assessment of the B83 rebuild process. As discussed in last week's report, the procedure for the assembly process could not be performed as written. Rather than attempt to identify a set of pre-start findings that would capture every procedural inadequacy, PXSO appropriately chose to suspend the review and require BWXT to correct the procedure. PXSO noted that in at least six cases, the procedural process could not be performed as written. Sixteen other instances of procedural inadequacies were also identified. In its letter, PXSO asked that a declaration of readiness be resubmitted "when corrective actions have been completed to re-certify the process procedures."

These procedural inadequacies were not corrected either through the readiness verification process or through the contractor readiness assessment process. Observations from the NNSA readiness assessments for the *Fire Protection Basis for Interim Operations*, the W62 seamless safety process (see below), and the B83 rebuild process indicate potential programmatic concerns with the BWXT readiness assessment process. [II.A]

W62 Seamless Safety Process: The nuclear explosive safety study of the new W62 seamless safety process concluded this week. The study resulted in five pre-start findings. For all of these findings, the W62 project team has identified corrective actions that are endorsed by the nuclear explosive safety study group. The findings involve debris buildup during the bore down process, interpretation of differential temperature tests, inadequate controls for electrostatic discharge during disconnection of the aft bulkhead, potential tooling impacts with the high explosive, and concern with the system used to implement electrostatic bonding controls. The study group also identified two post-start findings and numerous observations. Among the observations was praise for the electronic format of input documentation provided to the NESSG and the cooperation demonstrated by the project team.

The readiness assessment team also issued its final report this week. The team noted five pre-start findings: inaccuracies in the W62 procedures, inadequate training for production section managers, inadequate execution of electrostatic bonding, failure to approve proposed radiation exposure goals for the W62 process, and deficiencies with the contractor readiness assessment process. There were also five post-start findings and numerous observations. The readiness assessment team noted the cooperation of the project team and the knowledge and experience of production technicians in a positive manner.

A meeting involving NNSA, BWXT, and the design agencies was held on Thursday to discuss lessons learned from the W62 project, the W62 nuclear explosive safety study, and the W62 NNSA readiness assessment. Of particular interest were lessons learned from conducting various reviews in training facilities as opposed to production facilities. Problems were noted with the perceived lack of formality to some aspects of the reviews when done in training facilities. The review teams noted concerns with simultaneous observation of demonstrations by the study group and the readiness assessment team and suggested separating or staggering the demonstrations for future reviews. Among other topics discussed was the need to improve the fidelity of the W62 trainer, which caused problems for the project team, the study group and the readiness assessment team. [II.A]