

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 8, 2003

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending August 8, 2003

DNFSB Activity Summary: W. White was on site all week. C. Keilers was on site Thursday to attend a meeting of the Standing Management Team.

NNSA Assessment of Training: NNSA completed its assessment this week of the personnel selection, training and qualification program at the Pantex Plant. The assessment is required in DOE Order 5480.20A and was completed in response to an April 2003 reporting requirement from the Board related to training issues at the Pantex Plant. The assessment followed the guidance in DOE Standard 1070 and appeared reasonably thorough given the magnitude of the assessment scope and the time period over which it was conducted.

At the start of the evaluation, BWXT presented an assessment of their own training program to the team. The team found this self-assessment to be accurate, but noted that it was not the result of a routine contractor self-assessment program. Instead, the team considered the accurate self-assessment to be the result of focused, reactive assessments that were driven by external oversight. The team also noted that the corrective action plans for both the internal and external assessments were incomplete, with few actions being closed out.

In general, the team noted that the BWXT training program, as defined in BWXT standards, achieved the expectations of DOE Order 5480.20A. The team noted the fundamental program, as defined, was sound and would provide the desired outcome if it were effectively implemented. However, the team noted that the effectiveness of the implementation varied, with the training programs in the infrastructure and engineering divisions having systemic, long-standing weaknesses. The report notes that "in the judgement of the evaluation team, the lack of a robust feedback and improvement program focused on the implementation and effectiveness of the training and qualification Safety Management Program is the most significant issue and the major vulnerability."

A number of specific findings were also identified. Of particular concern is the proposed replacement of the existing software for management of training records (TRAC) with new software (Plateau). Although this is a potential improvement, the team found BWXT was not addressing software quality assurance requirements for the new software, particularly with respect to the many interfaces and interlock functions the training software provides in combination with other plant software systems. Also of note, the team found the fidelity of weapon trainers to be marginally adequate, but noted "if proactive, rather than reactive actions are not taken, NNSA runs a high risk of not being able to certify the safety of a nuclear explosive operation." [II.A]

W88 Seamless Safety Tooling: BWXT began its contractor readiness assessment this week to support implementation of accelerated, seamless safety tooling for W88 bay operations. The CRA in-brief was conducted on Tuesday, but demonstrations of operations were delayed until Thursday to obtain design agency approval of the bay procedures. The assessment is expected to conclude next week.

The W88 project team also briefed the SMT this week on the proposed schedule for completion of seamless safety tooling for all W88 operations. The latest proposal, approved by the SMT, will separate the projects for cell tooling and any remaining bay/satellite tooling. The project to complete cell tooling is to incorporate a new primary assembly process, as requested by the design agency, and is now scheduled for completion in March 2005. The remaining bay and satellite seamless safety initiatives for the W88 program are to be complete in 2004. [II.A]