

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 19, 2001

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** H. Waugh and W. White, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Activity Report for Week Ending October 19, 2001

**DNFSB Activity Summary:** H. Waugh and W. White were on site all week. All Members of the Board were on site Wednesday to review implementation of seamless safety programs for W62, W78, and W88 operations. Members of the Board's staff were on site Tuesday through Thursday to support the Board.

**W78 Milestone 3 meeting:** The Standing Management Team conducted the Milestone III review (Readiness to Proceed to Independent Review) of the W78 Step 1 startup program on October 16, 2001, at Pantex. The review addressed the implementation of required safety criteria and verification items to ensure these safety criteria had been met. The Standing Management Team conducting the review stated that all pre-start findings from the contractor readiness assessment are to be closed before BWXT declares readiness to proceed (expected to occur within about two weeks). One project team member asserted during the review that the W78 Step 1 goal to achieve significant progress toward the Step 2 program had been attained, although there was disagreement as to the exact amount of progress made.

Prior to the review, the W78 Weapon Safety Specification update, Issue B, was released and the W78 Weapon Response Bases document was finalized; however, the design agency requirements drawings were not finalized. NNSA/AAO stated that the authorization agreement would not be signed prior to finalization of requirements drawings to ensure consistent flow down of requirements into operational procedures.

The W78 contractor readiness assessment had been postponed when the first attempt identified numerous readiness problems. At the Milestone III review, BWXT presented several lessons learned from the first attempt. On Wednesday, these lessons learned were promulgated throughout DOE via DOE's lessons learned program. BWXT continues to work towards closure of the pre-start findings from its contractor readiness assessment. Provided these findings are closed in a timely manner, the NNSA nuclear explosive safety study and readiness assessment are scheduled to begin in early November. [II.A]

**B83 Electrical Testing:** On Tuesday, NNSA/AL requested that a nuclear explosive safety review team be formed to evaluate additional electrical testing for a B83 unit at Pantex. The additional electrical testing to be reviewed was proposed by Sandia National Laboratories through a special instruction engineering release. The unit to be tested originally failed certain electrical tests in April 2001 and failed subsequent tests in June 2001.

The request for a nuclear explosive safety review team was issued at the behest of NNSA/AAO. According to NNSA/AAO line management personnel, the tests are justified given the prior nuclear explosive safety approval of the equipment involved, the current limiting features of the tester to be used, and the fact that the circuits under test are not directly connected to the rest of the bomb's electrical system. NNSA/AAO's letter supporting the additional testing follows a similar BWXT request to NNSA/AAO in which BWXT claimed "the unit is safe in its present condition . . . However, further disassembly could potentially be unsafe without confirmation of valve position." [II.A]