

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 8, 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 June 8, 2001

**DNFSB Activity Summary:** H. Waugh and W. White were on site all week

**B83 Electrical Test:** BWXT conducted the repeat electrical test for the B83 unit which had failed a prior test in April 2001. The test procedure was well written, and conduct of operations while performing the test was excellent. The test sequence involved finishing the series of tests that were previously in progress and then repeating the failed test. The unit once again failed electrical testing. In this case, the unit failed three of the tests that were previously left undone, but it passed the repeat test of the circuit which had failed.

Based on the nature of the circuits which have failed and prior test results, Sandia National Laboratories personnel expressed confidence that a safety concern is not likely. To completely rule out any potential problem, however, Sandia expects to propose an additional suite of electrical tests. These tests will require review by the DOE Albuquerque Nuclear Explosive Safety Program. In the interim, Sandia personnel have requested that the unit not be moved out of the facility in which it currently resides. Movement within the facility will be allowed to accommodate required surveillance activity for facility safety systems. [II.A]

**W76 Tooling Issues:** Earlier this week, BWXT personnel sent a tool for use in W76 nuclear explosive operations to the W76 operating facility. However, incorrect alignment of tool pins prevented the tool from interfacing with required components. This particular tool, which was made by a vendor off site, had been rejected for use once, but was apparently approved again for use without all necessary repairs and modifications being completed. Several issues exist with respect to this incident: the process for receipt and inspection of tools intended for use in nuclear explosive areas appears deficient; the quality assurance process for tools made by outside vendors may be inadequate; and it may be necessary to implement a requirement that all tools be verified for functionality before being approved for use in nuclear explosive facilities. A post-start finding from the W69 nuclear explosive safety study in 1997 raised a similar issue for tools that support or move nuclear explosives. This finding remains open. [II.A]

**W78 Hazards Analysis:** On June 1, the Safety Basis Review Team provided BWXT with formal comments on the W78 safety basis documents. There were over one hundred comments, including thirteen comments that require resolution before DOE can approve the documents and over thirty comments that are likely to appear as conditions of approval unless they are addressed prior to formal DOE line management review. Many of these comments address concerns raised by the Board's staff during a recent review of the W78 program.

Resolution of these comments will be accomplished through page changes to W78 safety basis documents. Of interest, BWXT intends to start its positive verification tryout on June 12. The W78 Hazards Analysis Report identifies certain accident scenarios as being controlled through the Fire BIO. Since the Fire BIO will not be implemented for the W78 program in the near future, it is not clear how a walk down of control implementation can be accomplished without clearly defined controls for identified fire scenarios. It is also not clear whether required changes to the W78 safety basis can be flowed down into procedures or other documents, if necessary, in time to support an adequate positive verification tryout next week. [II.A]