

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 13, 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 April 13, 2001

DNFSB Activity Summary: H. Waugh was on site all week. W. White was on sick leave Wednesday and was on site for the remainder of the week. The Pantex Plant was closed on Friday, April 13, for the Good Friday holiday.

B83 and W87 Electrical Test Failures: Last week, a B83 unit failed an electrical test. Similar to the W87 electrical test failure in January 2001, this indicated that the B83 unit in question had a small probability of being in a less than optimal state for disassembly. Sandia engineers have concluded that retesting of the B83 unit may be necessary. Unlike the W87 unit, there has been no radiograph that confirms the safe state of the unit. However, radiation safety personnel have completed other evaluations. As of Friday, the unit remained in the bay awaiting a definite path forward from Sandia. The preferred option appears to be a retest of the unit, which would be initiated through an engineering release from Sandia. As with the W87 unit, any new or repeated electrical tests will require nuclear explosive safety review and, potentially, a nuclear explosive safety study.

The W87 unit in question was moved to a new facility this week to allow preventive maintenance work to be conducted on facility systems in the affected W87 bay. The current engineering release from Sandia had restricted personnel access in the vicinity of the affected unit. It is not clear why Sandia (through an engineering release) allowed the movement of the W87 unit given their existing justification for electrical testing which claims some uncertainty exists with respect to the safe state of the unit. The risks involved in transportation, either from a safety perspective or from disturbing the integrity of any future tests done for reliability reasons, appear more significant than the risks involved in conducting preventive maintenance on nearby facility systems. The DOE Albuquerque nuclear explosive safety review of the electrical tests requested by Sandia for the W87 unit is on hold pending additional information from Sandia. DOE Albuquerque has asked Sandia to perform an independent assessment of the nuclear explosive safety implications of the proposed tests. [II.A]

Work Planning: BWXT expanded the scope of its accident investigation of the recent beryllium work planning incident to include the water valve incident discussed in last week's report. The team is now tasked with evaluating common causes of failure for BWXT work planning occurrences. As discussed last week, a separate accident investigation team is evaluating three recent occurrences involving work planning activities for non-BWXT personnel. This team concluded its investigation this week, and a final report from the team should be available next week. Preliminary findings include the need to evaluate the integrated safety management systems of non-BWXT organizations performing work at Pantex. In particular, personnel doing the work planning failed to recognize the hazards involved and thus failed to implement appropriate controls. [II.A]

Pit Repackaging: After repackaging over 170 pits in March, BWXT continues to strive towards a goal of 200 pits repackaged per month. For the first eight work days in April, approximately 75 pits were repackaged. Of particular note, 17 pits were repackaged in one day on April 11. A repackaging rate exceeding 200 pits per month would result in a shortage of sealed-insert containers since the procurement cycles (with a significant lead time) assume a repackaging rate of 200 pits per month. [II.A]