

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 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 July 13, 2001

DNFSB Activity Summary: W. White was on site all week. H. Waugh was on leave for the week. C. Coones and W. Yeniscavich were on site Tuesday and Wednesday to review high pressure fire loop integrity, the fire alarm and detection system, and open issues related to the Fire Protection Basis for Interim Operations. C. Martin, C. Graham, and P. Hanna were on site Tuesday through Thursday to review software quality assurance.

W78 Contractor Readiness Assessment: On Tuesday, BWXT began its contractor readiness assessment (CRA) of the W78 Step 1 Disassembly & Inspection and Repair Process. The technical assist completed by BWXT as a precursor to declaring readiness identified three pre-start items that were not addressed prior to starting the CRA: current procedures require verification of high explosive matting approval, but a program is not in place to allow this verification by production technicians; W78 production technicians and operations managers are trained, but not certified; and conditions of approval from NNSA's safety evaluation report of W78 authorization basis documents (and implementation of controls resulting from those conditions) have not been addressed. The technical assist did not evaluate the implementation of in-service inspections identified to support W78 operations and the required fire controls.

The CRA was temporarily delayed on Wednesday morning when an additional pre-start item was identified: current procedures have not been evaluated to confirm that changes to tooling and configurations do not challenge weapon response assumptions in the authorization basis documents. Closure of this pre-start item will require supporting information from the design agencies. All pre-start items must be closed prior to NNSA's Milestone III review. [II.A]

NOx Release from Building 11-36: On Wednesday, an operational incident in Building 11-36 resulted in the release of a small amount of nitrogen dioxide. The apparent cause of the incident was the failure to turn on the water pump for the facility scrubber system. As a precautionary measure, the Pantex Emergency Response Organization was activated until the full extent of the potential release was determined. There were several issues with the on-site response to the incident. No general announcement was made in a timely fashion to alert all personnel to remain indoors as a precaution. The release occurred over the lunch break, when a significant number of personnel were outdoors. When personnel were finally directed to remain indoors, some facility security systems were automatically locked down, preventing ingress as well as egress. [II.A]

Pit Temperature Limits: BWXT discovered new information this week in an internal Lawrence Livermore National Laboratory memorandum (dated February 2000) that identified temperature limits associated with two pit types as safety limits. The letter also identified at least one additional pit designed by Los Alamos National Laboratory that may be susceptible to the same failure mechanism. Based on this memorandum, BWXT will complete an unreviewed safety question evaluation to determine whether any authorization basis changes are required. Temperature limits are in place for the facilities storing the pit types in question; however, these limits are not currently defined as safety limits in the authorization basis. [II.A]

Pit Repackaging: As of Thursday, 82 pits had been repackaged for the month of July. Starting Monday, July 16, BWXT intends to begin using bolts made with Inconel Alloy 718 in the sealed-insert containers. [II.A]