DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 26, 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 January 26, 2001

DNFSB Activity Summary: H. Waugh was on site Monday through Thursday. W. White was on site all week.

Robotic Weigh and Leak Check System: The robotic weigh and leak check system (WALS) in Building 12-116 started operations this week. Manual operations began on Monday with the leak check of a W87 pit. Automated operations began Tuesday morning with the weighing operation for a W80 pit. Automated operations ran into difficulty almost as soon as they began. Initially, weighing operations were suspended when database errors occurred. After this problem was resolved, the control software for the robot had difficulty with its imaging control. At the direction of Sandia National Laboratories personnel, software parameters were adjusted to improve imaging control, and WALS personnel completed the W80 weighing operation. The modification to the software parameters received a negative USQ screen, and the software was run through a test exercise with mock material. On Friday, WALS personnel attempted an automated leak check for a W68 pit. During the operation, however, Building 12-116 lost electrical power. Automated operations should resume next week. [II.A]

W76 Disassembly and Inspection Operations: W76 cell operations were suspended last month after a vacuum lifting fixture failed to hold the vacuum level required during an inspection prior to use. Pantex personnel considered several options (including modifying the vacuum testing requirement) to return the vacuum lifting fixture to operation, but ultimately decided on what appears to be the most reasonable path forward: modifying the vacuum lifting fixture to make it more robust. The equipment has been modified, and W76 procedures have been changed to incorporate the use of the altered equipment. Operations may resume as early as next week after design laboratory reviews of the equipment modification are complete. [II.A]

Lightning Protection Issues: Within the past two weeks, three potential inadequacies in the safety analysis have been raised with respect to lightning protection controls for nuclear explosive facilities. These potential inadequacies include spare penetrations through the wall that are not bonded, floor drains in the cells that are not bonded, and nylon lifting slings with identification tags that may affect the electrical isolation characteristics of the sling. MHC has taken action to bond the spare penetrations through the wall. MHC was to begin facility modifications to address the floor drains over the weekend. The potential issue related to the nylon slings is being evaluated. [II.A]

Pit Repackaging Operations: Pit repackaging efforts continued on a pace to meet DOE's performance objectives through the end of February (500 pits repackaged for FY01 or 100 pits repackaged per month). As of Friday, 115 pits had been repackaged in sealed-insert containers for the month of January, with a total of 426 pits repackaged for the fiscal year. [II.A]

Contract Transition: Contract transition activities continued with transition to the new contractor (BWXT) still scheduled for Thursday, February 1. Senior managers for BWXT are expected to greet plant employees at the plant entrances as they arrive at work on Thursday. Preliminary organizational charts have been released, and performance objectives for the remainder of the fiscal year for the new contractor are in the final stages of approval. Of interest, a significant percentage of contract incentives (through performance-based incentives or award fee) will likely revolve around start up of various satellite operations and facilities, including computer tomography and paint bay operations in Building 12-104A. [II.A]