

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 26, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Hunt and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending March 26, 2004

DNFSB Activity Summary: W. White was on leave all week. T. Hunt was on leave Friday. A. Matteucci was on site Monday through Thursday providing site representative support. J. DeLoach was on site to review facility representative training and staffing. J. Zelinski was on site to observe a software quality assurance assessment.

Anomalous Component: Operational personnel received an item in a bay for repackaging that was not in the required configuration. The item had a temporary pit tube cap installed contrary to the required permanently sealed cap. There was an administrative hold on these types of pits that should have prevented them from being sent to sealed insert processing. Prior to transferring to the repackaging bay, the pit with the temporary seal may have been inappropriately subjected to a vacuum leak check which could compromise the integrity of the component and allow the release of radioactive material. A potential inadequacy of the safety analysis has been declared and Pantex is awaiting a response from the design agency clarifying the laboratory's position. [I, W3]

Tooling: A critique, held Monday to investigate a discrepancy associated with a joint test assembly (JTA) alignment gage tool, identified several significant concerns regarding the activities for control and documentation of tooling. The only two copies of the subject tool are not physically identical and neither copy agrees with the design drawing. A toggle clamp on one copy of this tooling was modified to allow easier use but there is no record of this modification. During the course of JTA activities that required this tooling over the last few years, the unmodified copy of the tool (the copy that was more difficult to use) was rejected numerous times by the production technicians. When the unmodified tool arrived for use, the production technicians would tag the tool "Do Not Use" and return it to the warehouse. The warehouse, upon receipt of the tagged tooling, verified, although incorrectly, that the tool agreed with the drawing and removed the "Do Not Use" tag. This rejection and tagging by the production technicians and verification by the warehouse that the tooling agreed with its drawing occurred multiple times during the last few years. The modification to the tool to enable easier use appears to have been produced with either a hack saw or a small abrasive cutting wheel, a method of modification not normally used by BWXT machine shop personnel. A significant concern is that the same process to alter the functionality of the JTA special tooling could apply to special tooling used for nuclear explosive operations. There is evidently no difference in the process for tracking and controlling the two tooling categories. Lack of management attention and inadequate engineering support appear to have contributed to the protracted failure to recognize and resolve the issue. [I, E2, E4]

Facility Representative (FR) Program: The staff conducted a review of FR training and staffing at the Pantex Site Office (PXSO). PXSO has recently revised their FR training manual to include a requirement to attend weapon-specific training, if funding is available, where offered. The historically low FR staffing level may limit their ability to perform certain responsibilities. In addition to providing oversight for multiple nuclear facilities, the FRs also participate in readiness reviews, conduct site assessments, serve in the Duty Officer rotation, periodically observe maintenance activities during the swing shift, and devote time for training and requalification. PXSO has requested permission to hire three additional FRs. [I, P1]

