

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 3, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending May 3, 2002

DNFSB Activity Summary: H. Waugh was on leave Monday and Friday and was on site for the remainder of the week. W. White was on site all week.

UV Detector Alarm: On Monday, a single UV detector activated upon sensing a UV source in a nuclear explosive bay. By design, the deluge system, which requires two detectors to sense a source for 10 seconds, did not actuate. BWXT identified a borescope used in the disassembly and inspection process as the cause of the activation. During implementation of the UV-activated deluge for the facility, BWXT personnel had identified the equipment as a risk for activating the UV detectors. W88 engineering personnel, however, failed to modify their procedures to address the use of this equipment in a facility with UV-activated deluge. [II.A]

Pit Management: On Tuesday, NNSA, BWXT, and design agency personnel met to discuss pit repackaging status, development of a new sealed-insert container (2040), and the disposition path for a few pits deemed unsuitable for packaging in sealed-insert containers. Pit repackaging continues at an acceptable rate. For FY02, BWXT has repackaged an average of 210 pits per month. For April, BWXT repackaged 213 pits despite interruptions from moving the repackaging and surveillance lines to new facilities (different bays in the same building).

BWXT issued a new project management plan for development of a 2040 sealed-insert container. The current 2030 container design will not accommodate all pit types. BWXT was initially working towards a design option that would have required the design agency to modify the holding fixture for one pit type. This option would have minimized differences between the 2030 and 2040 containers and would have allowed utilization of most of the existing sealed-insert repackaging equipment. The design of a new pit holding fixture became more problematic than expected, however, and BWXT chose another design option that will accommodate the pits in their existing holding fixtures. Implementation of the 2040 container is scheduled for November 2003. A primary schedule risk associated with this option is replacement of the Celotex packing material with foam material to reduce corrosion concerns.

NNSA, BWXT and the national laboratories also discussed the path forward for disposition of a limited subset of one pit type. The design agency identified this small group of pits as unsuitable for undergoing the existing repackaging process. Disposition of the pits will be accomplished by double-bagging the pits, packaging them into an FL container, and shipping them to the design agency. This path forward, which has taken years to develop, is still awaiting approval of exceptions by the pit design agency and the FL container design authority and approval of the shipping configuration by NNSA. [II.A]

12-116 Tritium Monitor Inoperable: On Wednesday, production personnel performing pre-operational checks in Building 12-116 identified a range switch out of position on a safety-significant tritium monitor. The monitor would not have functioned as required with the switch out of position. The verification of switch position is a surveillance requirement in the TSRs for the building, and required actions in the facility LCOs were taken until the switch position could be corrected. The reason for the incorrect switch position is unknown, but the most likely candidate is maintenance activity conducted on the monitor two days earlier. If this is the case, maintenance personnel failed to return a safety-significant system to an operable status following maintenance activity and production personnel failed on Tuesday to identify the incorrect position of the switch during TSR surveillance. [II.A]