

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 4, 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 June 4, 2004

Material Movement: In April, two pits were moved between Zone 4 magazines without the proper authorization (see April 16, 2004, Pantex site rep weekly for details). A subsequent critique determined that poor communication between operations center and transportation personnel was at least partially responsible for the unauthorized nuclear material movement. At the time, BWXT implemented short-term compensatory measures to restrict certain intra- and inter-zone material movements pending development and implementation of formalized corrective actions.

The informal interim measures – management review and approval of material moves and pre-planning meetings prior to material transfers – are still in effect awaiting completion of a controlled process to improve communications between material movement personnel. The backlog of unreviewed safety question evaluations and relatively low priority attached to the transportation communications issue are credited with the slow pace of implementing the formal corrective actions.

In another recent material movement occurrence, nuclear material was sent to a non-nuclear facility in Zone 12. The placard for the facility did not allow the type of material eventually shipped and the move right system twice denied the requested transfer. A nuclear material limit on the placard and parameters in the move right system were inappropriately changed to allow the move to proceed. The maximum limits on the amount of a certain nuclear material allowed in the bay were changed without proper authority. Weak communications between the move originators and recipients contributed to the incident as there was a misunderstanding as to what type of material was being sent. [I, M2]

W78 Seamless Safety Process: BWXT received its final weapon response this week for supplemental equipment (radiation safety equipment, photography equipment, etc.) to the W78 seamless safety process. Prior to beginning W78 operations, BWXT will incorporate the equipment into a safety basis document that lists allowed supplemental equipment. Following startup of W78 seamless safety operations, W88 cell operations will be the only ongoing operations at the Pantex Plant involving conventional high explosives that have not incorporated the new seamless safety tooling.

BWXT has completed closure packages for all pre-start findings from the NNSA readiness assessment and the W78 nuclear explosive safety study. The closure packages for the readiness assessment must be approved by PXSO. The closure packages for the pre-start findings from the nuclear explosive safety study must be approved by either NNSA Service Center personnel or by PXSO (depending on the finding). BWXT expects to begin operations under the new seamless safety process within two weeks. [I, NA]

Pit Repackaging: During May, BWXT repackaged 215 pits into sealed-insert containers. Continued success in meeting the repackaging goals will depend on a number of factors. These include addressing a concern with B54 pits, initiating the sealed-insert process for the AL-R8 2040 containers, activating the pit cleaning process, and resolving a longstanding issue with the leak rate criterion for a certain pit type. BWXT is working to resolve these issues. [I, NA]