

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 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 May 7, 2004

DNFSB Activity Summary: T. Hunt was on site all week. W. White was on leave Wednesday and on site for the remainder of the week.

Uncontrolled Radioactive Material. Radioactive material was discovered in a non-radioactive material storage area during an activity to reconcile discrepancies between two material databases. One database had the items identified as nuclear explosive subassemblies while the other database did not include the items. The reconciliation activity continues to ensure there are no other mis-identified items being stored inappropriately.

In this particular case, the items identified in one database as nuclear explosive subassemblies were actually five B53 cases (not nuclear explosives) with internal contamination. These items were located in a sea-land container. Swipe results showed contamination levels on the inner foam lining that required, per Pantex procedures, the cases to be labeled as radioactive material and the trailer to be posted as a radioactive material area. These items have been stored as non-radioactive material for at least 15 years. The cases were subsequently labeled as radioactive material, and the trailer was padlocked and posted as a radioactive material area. Disposition of these legacy items may be similar to that proposed for hundreds of B28 cases: shipment to the Y-12 National Security Complex for sanitizing and material recovery. [I, M8]

Tooling Preventive Maintenance. There was an occurrence this week involving a nuclear explosive placed and transferred in an enhanced transportation cart (ETC-I) that had an expired quarterly preventive maintenance sticker. The preventive maintenance that had expired was a required in-service inspection specified for the ETC-I in the *Technical Safety Requirements for Pantex Facilities*. There are three identical preventive maintenance stickers on each ETC: one each for the quarterly, annual, and triennial inspections.

The incident was discovered after the nuclear explosive had been shipped between bays. The unit was removed from the expired cart as allowed by procedure, and a new cart was sent to the bay. Immediately prior to the expired sticker being noted, the cart had been used to transport the unit between two other bays where the procedures require that the pre-shift setup verify the maintenance stickers are current. The production technicians in both bays failed to recognize that the sticker in question was more than two months past the maintenance due date. It is unclear how many times the cart has been used with the expired sticker prior to this discovery since the use of the carts is not tracked by copy number. The process to track and recall equipment and tooling that is approaching a due date or overdue for maintenance is relatively informal. Overall, there are more than 900 tools located in the warehouse or on the line that are delinquent with preventive maintenance.

There is no administrative or computer-based system that ensures tooling that requires preventive maintenance is removed from use on the line. Since ETC's are issued for general use and assigned to a parking location on the ramps – unlike other tools which are assigned to a bay or cell – no individual has direct responsibility for their maintenance. A subsequent inspection revealed that more than half the ETC-I's and ETC-II's currently have expired maintenance stickers. Most ETC's with expired stickers have been tagged out of service pending maintenance. [I, E1, M2, P3A]