

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: Friday, April 8, 2005
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: M. Merritt and R. Rosen observed the fourth week of the B83 NESS. F. Bamdad and B. Jones reviewed facility upgrade and new construction activities.

Cracked High Explosive Recovery: Utilizing a Nuclear Explosive Engineering Procedure approved by National Nuclear Security Administration, Los Alamos National Laboratory representatives, and the Nuclear Explosive Safety department, BWXT successfully completed disassembly and packaging of the subject cracked high explosive (see 4/1/05 Pantex weekly). The appropriate supervisory, engineering, and laboratory expertise was present in the cell when the process resumed. The production technicians were well trained and assiduously executed the procedure. The explosive charge has been sent to Applied Technology for determination of cracking cause and analysis of foreign material in the crack.

Disassembly Abnormality: During separation of a weapon subassembly, a component snapped and the tooling applied a force to a main charge in excess of the procedural limit (see 4/1/05 Pantex weekly). BWXT is awaiting weapon response from the design agency relating to electrostatic discharge, high explosive sensitivity, and application of fluid to facilitate component separation. This response will be used to support unreviewed safety question evaluations of the adequacy of the current safety analysis and procedure changes for continued operations. BWXT is planning to set up a trainer unit to duplicate the tooling configuration and operation at the time of the incident.

Container Contamination Incidents: There were two incidents this week potentially involving contamination of legacy material and storage containers. The first incident involved production technicians opening a 55-gallon storage drum that contained classified parts and mercury contamination. The subject drum was mislabeled "empty" and was incorrectly categorized as a DT-16 container in the site inventory. The second incident involved production technicians opening 15 large drums that contained parts potentially contaminated with beryllium. Neither the parts nor the container were labeled as a Beryllium Hazard. Personnel involved in both incidents were slow to communicate with the Pantex Operations Center.

Tooling Program Assessment: BWXT has completed its independent assessment of the rebaselined special tooling program (see 3/18/05 Pantex weekly). The team preliminarily concluded that improved tooling processes are in place and that the functionality and organization of the tooling related work spaces has been upgraded. The team also noted that procedural compliance and conduct of operations need to be emphasized in the months ahead and that additional plant personnel should be trained on the changes to the overall tooling program. Other issues identified by the team include the following: mismanagement of the Do Not Use tag, no clear guidance in some areas regarding how to handle "blanks" on forms, procedural inconsistencies, inaccuracies in the tooling inventory, and inadequacies related to tooling deviation documentation. The team's final report is expected to be issued next week.