

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: Friday, April 15, 2005
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: R. Rosen observed the fifth week of the B83 NESS. A. Matteucci provided site representative support.

Conduct of Operations Related Events: During cell operations on Monday, a procedural step was misread and production technicians removed the wrong piece of tooling from the unit. Upon recognizing the error, the unit was lowered and covered until a backout procedure could be developed. Potential contributing factors to this event include a poor turnover between the day and swing shift technicians, inattention to detail and being unaware of the unit configuration, lack of a questioning attitude by the technicians when an unexpected condition arose, starting a section of the procedure near the end of a shift, and not having the tooling number visible on the tool to corroborate that correct tooling was being removed.

It was discovered last week that several legacy drums containing mock items with radioactive and unlabeled hazardous material had been opened by an unqualified material handler. The material handler was relatively new to the facility and was unqualified to remove the lids, which is considered a packaging task; did not have the appropriate radiological training; and did not follow the process whereby contents of drums are identified before opening.

BWXT suspended operations in a disassembly bay this week when an incorrectly installed lifting and rotating fixture containing a unit prevented subsequent steps from being performed. The lifting fixture was 180 degrees out from its procedurally required position and thus could not be loaded into the transportation cart. The lifting fixture is used on several weapon programs. This is another example of tooling that is not designed to preclude improper installation.

PXSO Expectations for Conduct of Operations and Critiques: PXSO personnel met with BWXT management to discuss concerns with a possible emerging trend in conduct of operations related failures. PXSO suggested that a review of internally and externally reported procedural and operational violations over the past several months may indicate a negative trend is developing.

PXSO personnel also met with BWXT management to elucidate its expectations for holding critiques. Although it was generally agreed that the quality of critiques held in the recent past has been adequate, the timeliness and frequency is being questioned. Based on several recent events directly related to weapons work where open critiques were not held, PXSO requested BWXT reevaluate its process for calling critiques, especially when procedural and operational errors occur.

Disassembly Abnormality: BWXT, with technical assistance from Los Alamos National Laboratory, continues to develop its path forward to recover from a previously reported incident where high explosive main charges separated at an unexpected step in the disassembly process. BWXT has made a minor tooling modification and a Nuclear Explosive Safety Change Evaluation has been scheduled for next week.

Broken Tooling: Work was halted in a dismantlement bay this week when a piece of tooling used to separate major weapon components broke. The tool failed at a joint with 24 nylon fasteners. An engineering procedure was written and exercised to remove the piece of tooling that broke away and remained on the unit. Due to technician oversight, the item was later sent to the warehouse as radioactive material without proper authorization in the Move Right system.

Misaligned Unit: Movement of items associated with a transport cart were temporarily suspended for several programs this week when it was discovered that a weapon in a transportation cart was abnormally oriented. An engineering procedure was subsequently prepared which allowed successful withdrawal of the unit from the cart. Engineering is evaluating tooling and procedural improvements to enhance the alignment of the unit in the cart and prevent the incident from recurring.