

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 9 September 2005
SUBJECT: Pantex Plant Weekly Report

W70 Work Control: During the first erosion cycle on the recently restarted W70 disposition project, a pressurized air hose became disconnected from a ball valve pneumatic actuator on an eroder supply cart. There was an operational history of hoses disconnecting on this tooling during the previous campaign several years ago and during the recent readiness reviews. A deviation to the drawing had been generated to allow the use of clamping devices to strengthen the joint where the vinyl hoses attach to the barbed fittings, but no comprehensive effort was made to ensure all suspect hoses were secured prior to use. The eroder supply cart was fabricated more than 30 years ago and was being reused without a thorough quality and maintenance check of components that may have degraded over time. There was no material spilled or immediate worker safety issue as the hose was located internal to the eroder supply cart. Subsequently, after the eroder system was sent to the warehouse, it was discovered that the instrument technician had an old revision of the drawing for use during repairs. Management has committed to reinforce the expectation that only current drawings should be kept in the work area. On the same program, a manual cutting tool did not perform as designed on two occasions. It appears the tool will need to be modified or the procedure revised to allow continued use.

Lawrence Livermore National Laboratory (LLNL) Weapon Programs: LLNL issued an Information Engineering Release (IER) this week that discusses potential electrostatic discharge (ESD) concerns with four LLNL weapon programs. Although the IER states that there is not an immediate safety concern, other language in the correspondence seems to contradict that assertion. BWXT has interpreted the IER as a notification of ongoing design agency work—with no change in risk—and continues to operate two of the weapon programs. PXSO does not fully understand the intent of several paragraphs in the IER and the site manager has requested a meeting next week with the appropriate LLNL representatives to better understand the bases behind the content of the IER.

Electrostatic Discharge Meeting: An ESD technical team kickoff meeting has been scheduled for next week at Pantex to develop clear tasks and deliverables that address the significant ESD threats posed by potential Pantex insults. Important issues that require resolution by BWXT and the design agencies deal with definitions of the Pantex environment, consistent measurement techniques and ESD methodologies. Establishment of technical bases for energy levels of concern, voltage distribution, tooling capacitance, and multiple insults are also needed.

Modified Wrist Strap Tester: A Nuclear Explosive Safety (NES) Change Evaluation was convened last week to evaluate a modification to the wrist strap tester. The tester modification incorporates a self-test feature to ensure proper functioning of the unit before checking wrist straps. The NES evaluation concluded that the proposed modification does not pose a threat to nuclear explosive safety, but a proposal to adopt this tester for a specific program should go through NES change control.

Recommendation 99-1: In its most productive month since pit repackaging began in fiscal year 1999, BWXT packaged 330 pits in August.