

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 2 November 2007
SUBJECT: Pantex Plant Weekly Report

Weapon Trainer Fidelity: There were three instances in the past two weeks where poor trainer fidelity contributed to W80 work being suspended as a result of tooling issues. In the first event, a cable was too short to be positioned so as not to interfere with installation of a fixture. The trainer used during start-up had a longer cable. In the second event, it was discovered during radiography operations that a component was misaligned. The component was on a W80-0 weapon, but all start-up activities were performed using a trainer unit with W80-1 parts. Another tooling issue was found when a vacuum fixture was installed on a weapon but it would not seat properly. It was determined that the trainer unit was not in the same condition as the war reserve unit. The W80-1 trainer unit has been known to be of poor fidelity and in need of an overhaul.

Procedure Adherence: During gas sampling operations on a W84 joint test assembly, production technicians (PTs) inadvertently skipped two pages of the procedure. The two pages that stuck together contained direction for the PTs to document a pressure gauge reading and to close a purge valve. Engineering personnel promptly responded to the subject facility and determined performing the steps out of sequence did not introduce any safety concerns. One potential contributor to this situation is that the subject procedure contains several groups of steps that can be performed at any time. Therefore, the PTs frequently flip back and forth through the procedure to complete the steps.

Conduct of Operations: Last week, PTs, on two occasions, performed incorrect actions due to inattention to detail. During one event, the PTs installed a piece of tooling that was stamped with the incorrect tooling number. Although it was the correct tool, the PTs relied on visual recognition and did not verify the number matched that required by procedure. In a separate operation, the PTs misinterpreted a general instruction that led to mistakenly repositioning the unit for a step where it was not authorized. The PTs were briefed by supervision on performance expectations.

PXSO Technical Procedures Review: PXSO recently completed a review of the adequacy of technical procedures. The team of PXSO facility representatives evaluated seven (of more than 200) technical procedures and generated zero findings and three weaknesses. The weaknesses involved a failure to obtain PXSO approval prior to changing a table, discrepancies between a procedure and design agency drawings, and a failure to adequately communicate changes in procedure terminology to the personnel responsible for implementing them. The team concluded that procedure quality is inconsistent but, in general, the procedures are technically correct and adequate for use in nuclear explosive operations. The team plans to conduct reviews of 24 more procedures during FY08.

Shipment of Radioisotopic Thermoelectric Generators (RTGs): NNSA completed its checklist-level readiness assessment for the start-up of RTG repackaging operations this week with no findings. The activity consists of unpacking the RTGs from the current storage containers, repackaging into 9977 containers, leak testing the seal, and shipping off-site for surveillance. The first off-site shipment of four RTGs is planned for next week.

W80 SS-21 Disassembly and Inspection: Operations were authorized in late-September and disassembly of the first W80 unit using the SS-21 process was completed this week.

Secretary of Energy Visit: SOE Bodman was at Pantex to recognize recent production achievements by NNSA. He also toured training bays and met with PTs and program managers.