DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending August 26, 2011

Process Anomaly: Technicians successfully executed a temporary procedure to recover from last week's process anomaly involving a housing and a physics package that unexpectedly remained attached to one another during a separation activity (see last week's report). The temporary procedure directed the technicians to slowly raise the housing (using hand knobs) while providing manual resistance to the physics package (through holes in the housing). The unreviewed safety question determination for the temporary procedure referenced an ergonomics study in order to demonstrate that the force applied by the technicians to the physics package was well below weapon response screening thresholds.

B53 Operations: The B&W Pantex manual for planning and conducting readiness reviews contains a site-specific prerequisite applicable to any contractor readiness review that requires B&W to provide PXSO with the specific set of technical safety requirements (TSRs) applicable to the proposed operation. The intent of this prerequisite is to provide PXSO assurance that B&W has distilled the applicable control set for the proposed operation into a readily identifiable form. B&W must resolve any of PXSO's comments on the information provided for the prerequisite to be met. This week, while B&W was performing the contractor readiness assessment (CRA) of transportation operations involving B53 partial assemblies, PXSO issued a memo stating that the subject prerequisite had not been met; the specific set of TSRs for the proposed operation could not be readily discerned from the information provided by B&W. PXSO requested that B&W resubmit the specific set of TSRs for the proposed operation and provided several suggestions for how B&W could reformat the submittal to meet the subject prerequisite. The CRA team is currently finalizing its report and plans to capture the issue as a pre-start finding.

Nuclear Explosive Operations: During procedure steps related to a pressure test of a component, technicians noticed that the connection between the work stand and the vacuum hose was leaking. After suspending the operation and disconnecting the hose, technicians observed visible damage on the work stand's vacuum connection. Process engineering wrote a temporary procedure to allow mechanics to repair the work stand with the nuclear explosive present on the work stand.

Conduct of Operations: This week, material movers were delayed in completing a move of canned subassemblies (CSAs) after personnel in the receiving facility identified a discrepancy between a serial number listed on the material move authorization form and the serial number shown in the electronic material move tracking system. The receiver and initiator immediately resolved the discrepancy over the phone and the move was completed. It appears the discrepancy in question was introduced because the serial number for one of the CSAs did not initially match the serial number on the material move authorization form or the electronic dispatch screen. The move initiator identified the discrepancy during the final transfer checks for the move, corrected the form, and signed off on the form while attempting to update the electronic material move tracking system with the new serial number. However, the serial number in the electronic system could not be updated at that time because another move was in progress. When the system was available again, the move initiator and independent checker forgot to update the electronic material move system and initiated the move. Per the B&W Pantex procedure for performing material moves, the move initiator and independent checker shall not sign off on the material move authorization form until all checks have been completed.