DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 17, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending October 17, 2014

Vacuum Hose Failure on Work Stand: Consolidated Nuclear Security, LLC (CNS) Production Technicians (PTs) were disconnecting a vacuum fixture, no longer needed in the process, from the work stand when the brass nipple holding the quick-disconnect fitting broke off at the work stand. The PTs were preparing to hand-carry the vacuum fixture to the work bench and the vacuum fixture was not supporting a weapon component when the fitting broke. The PTs paused work and notified the production section manager; who in turn notified the process engineer, authorization basis analyst, and nuclear explosive surety personnel, who all concurred that the unit was in a safe and stable configuration. The work stand/vacuum fitting failure occurred late in the disassembly process; however vacuum was still required to complete the process. Process engineers wrote a nuclear explosive engineering procedure to complete the process by using the vacuum hose connected directly to the supply on the facility wall. During normal operations, the hose from the wall is connected to the base of the work stand. The PTs completed the disassembly without further incident. CNS has visually inspected the vacuum fitting and connecting pieces on all work stands currently in use. CNS is evaluating the cause of the failure.

Conduct of Maintenance Event: CNS special mechanic inspectors (SMIs) were performing planned maintenance on the deluge system for one facility when they inadvertently dumped several gallons of water into the facility. The facility was in maintenance mode and did not contain a nuclear explosive at the time of the event. The radiation alarm monitoring system and the Argus access terminal were damaged and needed to be replaced. The maintenance is performed under a general-use procedure with specific instructions using the reader-worker-checker system. The SMIs are allowed to perform sections of the procedure out of sequence. The SMIs need security police officer assistance to access the post indicator valve, which must be opened and closed several times in the procedure. The SMIs started the procedure without the security police officer assistance by performing the parts of the procedure that did not require access to the post indicator valve. However, the SMIs skipped a part of the procedure that instructed them to close the post indicator valve. When they performed the following section of the procedure approximately ten gallons of water was dumped into the facility before the SMIs could close the outside stem and yoke valve located within the facility. CNS will perform a causal analysis and mistake proofing meeting to determine the causes and corrective actions.

Falling Man Awareness Training: CNS has implemented *Falling Man Awareness Training*. The training is required for all personnel with unescorted access into the Material Access Area. The training instructs personnel to plan their approach to the nuclear explosive, minimize approaches, ensure the area is clear of tripping hazards, and to approach at a reasonable pace. The training also gives instructions for maintenance personnel and personnel performing escort duties.