

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 28, 2015

MEMO TO: Steven Stokes, Technical Director
FROM: Zachery Beauvais, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending August 28, 2015

DNFSB Staff Activity: D. Andersen was onsite to augment the site representative's coverage.

Verification of Safe and Stable: The Board staff member observed personnel from Consolidated Nuclear Security, LLC (CNS) Nuclear and Explosive Surety, Safety Analysis and Engineering, and Process Engineering departments walk down nuclear explosive areas to verify that production technicians (PT) have placed most units in a transportable configuration and all operations in a safe and stable configuration. CNS took these actions in preparation for a possible stoppage of programmatic work. The current collective bargaining agreement between CNS and the unions representing Pantex bargaining unit employees expires on August 28, 2015.

Cut and Cap Operations: On August 24, 2015, the site representative and Board staff member observed a CNS Production Manager conduct a briefing on the Standing Order to resume nuclear explosive operations in the facility impacted by an impaired High Pressure Fire Loop (HPFL) lead-in (see 8/14/15 report). Since the facility had a disabled fire water supply, the Standing Order stipulated compensatory measures including a fire watch within the facility and having firefighting personnel stationed outside the facility, at a post indicator valve (PIV), to manually activate the facility deluge system if a detection alarm was received at the Emergency Services Dispatch Center. The facility affected by the HPFL lead-in leak contained a unit that required cut and cap operations to address an issue with the removal of a detonator cable assembly (see 2/13/15 report). On August 25, 2015, CNS performed inspection activities and resumed disassembly operations on the affected unit. As required by the Standing Order, CNS engineers visually inspected the facility electro-static dissipative flooring and structure for cracks and confirmed adequate water pressure levels at the PIV after opening an upstream valve. The Board staff member observed resumption of the nuclear explosive operations. PTs completed the operation without the need for additional cut and cap operations, as allowed by the procedure. The site representative notes that this activity was completed over two months after the Nuclear Explosive Safety Study Group identified a concern with leaving the unit in an unprotected configuration for an extended period of time (see 6/19/15 report). Now that the disassembly is completed, CNS plans to place the facility into maintenance mode to repair the HPFL.

Fire Protection: This week, CNS personnel discovered multiple conditions affecting safety controls related to fire protection. (1) CNS personnel discovered water leaking from a lead-in for the wet pipe fire suppression system. The leak was determined to affect the operability of the fire suppression system installed in the adjacent ramp. CNS personnel have limited combustible materials and restricted nuclear explosive movements through the ramp. (2) As part of an ongoing review of fire penetration seals, CNS fire protection engineers discovered an unknown material in three seals located in a warehouse facility. CNS will replace the seals and report discovery of the discrepant as-found condition in the DOE Occurrence Reporting and Processing System. (3) CNS determined that doors credited to provide a 1-hour barrier to prevent the spread of fires within a special nuclear material facility did not meet applicable requirements. The doors in question include a rubber bladder that could potentially allow a fire to propagate. CNS has declared a Potential Inadequacy of the Safety Analysis related to this condition and has implemented a 5-foot standoff from the doors and restricted material movements in the facility.