

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 22, 2019

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Zachery S. Beauvais and Miranda McCoy, Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending November 22, 2019

**Electric Forklifts:** Earlier this year, an offsite maintenance vendor identified exposed wiring in safety-related forklifts, invalidating their “EE rating” (see 9/27/19 report). Following the identification of this condition, CNS management initiated an extent of condition review wherein system engineers re-inspected all forklifts used for transporting nuclear explosives. Through this review, CNS engineers were able to reauthorize all forklifts that are currently in-use. This week, CNS safety analysis engineering completed an evaluation of the discrepant-as-found condition represented by the exposed wiring and determined that the potential for this degradation represented a potential inadequacy of the safety analysis. CNS safety analysis engineers did not identify the need for any additional operational restrictions, as the potentially impacted forklifts had been recently verified to meet the EE rating.

**Explosives Technology (ExT):** The resident inspectors observed critiques for two events related to explosives-only operations but that presented information relevant to programs and processes applicable to nuclear operations at Pantex. In one event, production technicians (PT) identified damage to an explosive sub-assembly, requiring them to pause operations. CNS ExT later determined that the part should not have been accepted for production use. Through the fact finding process, CNS ExT determined that they had accepted the part based on inconsistent specifications provided by the design agency, implemented at various steps of the manufacturing process. In the other event, explosives manufacturing scientists identified that approved operator aids listing high explosive types authorized for use in certain ovens did not include all relevant explosive types. While heating in the specific ovens did not pose an excess hazard, the operating procedure used by personnel in the facility directs operators to reference the aid before loading explosive parts into the oven. CNS ExT determined that operators had used the ovens with explosive types not listed on the aid on fifteen prior occasions.

**Weapons Operations:** The resident inspectors observed operations on multiple weapon programs, conducted in nuclear explosive bay and cell facilities. The operations conducted in the cell were being performed under enhanced oversight provided by the production section manager (PSM) (see 11/8/19 and 9/13/19 reports). Various operations observed in bays had been released from the enhanced oversight requirements. In two bays, the resident inspectors observed weapons components that require two-person coverage stored in cardboard packaging, staged on the floor or on tables. The resident inspector discussed the applicable combustible standoff requirements with the PTs, the applicable PSM and fire protection engineering. The PTs noted that they previously stored these components in non-combustible metal carts but that practice was prohibited by a recent technical issue (see 5/3/19 report). They also noted that they intentionally did not stage the components in the interlock to prevent inadvertent two-person control violations. The PSM and fire protection engineers walked down the area and confirmed that the staging practices aligned with plant requirements. The resident inspectors note that all observed operations were conducted proficiently.