DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 20, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Zachery S. Beauvais and Miranda McCoy, Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending September 20, 2019

DNFSB Staff Activity: A staff team held a teleconference with NPO personnel and CNS safety analysis engineering, operations, and engineering personnel to discuss technical safety requirements and the occurrence reporting and processing system.

The resident inspectors attended an offsite workshop with NPO and CNS personnel regarding scheduling and resource planning for Pantex safety basis improvements (see 8/2/19 report).

Emergency Preparedness: The resident inspectors observed an offsite drill at a local hospital. The drill focused on training hospital personnel and Pantex Emergency Radiation Treatment Facility (ERTF) personnel and the ability of the hospital and the ERTF to respond to contaminated injured patients. The resident inspectors noted a number of positive practices including realistic simulated injuries and effective contamination control demonstrated by ERTF personnel. The resident inspectors noted that hospital personnel were less familiar with contamination control best practices; in most instances, poor practices were appropriately corrected during the drill. However, the number of in-field corrections may indicate a need for more drill opportunities or supplemental radiation worker training.

Fire Protection System: The resident inspectors investigated recent events affecting the fire protection system at Pantex (see 8/9/19, 7/19/19, 6/21/19, and 1/4/19 reports). The resident inspectors determined that the number of fire protection related events has not been appreciably higher this year compared to previous years, but that the components involved in the events had shifted. Pantex engineering has allocated resources to improving the Det-Tronic control panels and replacing degraded portions of the high pressure fire loop, and the number of events involving these subsystems has decreased significantly over recent years. The majority of recent events involved the LaMarche batteries/battery chargers or miscellaneous hardware, including UV flame detectors. The resident inspectors provided this information to NPO personnel, CNS fire protection engineers, and a DNFSB staff team conducting a fire protection review.

Safety Basis: While performing a review of the sitewide safety analysis report, CNS safety analysis engineering identified a hose whip hazard that was not adequately controlled for one program, and declared a potential inadequacy of the safety analysis. Pantex engineering implemented operational restrictions requiring either the use of restraint devices for hoses during specific operations or adequate distance between hoses and units. Later in the week, safety analysis engineering revised operational restrictions to not authorize operations requiring the use of air hoses with several pieces of equipment during certain operations.

Nuclear Explosive Operations: Production technicians performed a repeated electrical test on a unit following the discovery of a test result recorded as out-of-tolerance (see 9/6/19 report). The repeated electrical test resulted in readings within tolerance, allowing the production technicians to proceed with the unit normally.