

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 14, 2018

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Ramsey P. Arnold and Zachery S. Beauvais, Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending September 14, 2018

**Infrastructure:** The NNSA Office of Safety, Infrastructure, and Operations (NA-50) held a Pantex-focused Master Asset Plan Deep Dive. The goal of the Deep Dive was to discuss Pantex's prioritized infrastructure vision, current infrastructure conditions and gaps, and plans to ensure the infrastructure will support future mission requirements. Personnel from multiple NNSA offices and sites throughout the nuclear security enterprise attended meetings and toured facilities. NPO and CNS personnel supported the Deep Dive, providing extensive briefings to attendees on mission-focused facilities, e.g., weapon assembly/disassembly bays and cells; staging facilities; and mission support facilities, such as emergency services and balance of plant facilities. During the meetings, CNS presented progress on ongoing initiatives including bay and cell modernization projects, high pressure fire loop (HPFL) and fire protection system facility lead-in replacements, and electrical distribution system upgrades. HPFL and lead-in breaks continue to cause unplanned facility operational outages due to the loss of the fire protection system's ability to perform its safety-related function. Pantex continues to balance production demands with planned infrastructure safety upgrades, temporarily making facilities unavailable. However, Pantex is using lessons learned from previous facility and HPFL upgrades to decrease outage durations. As part of the execution of the Master Asset Plan, NNSA is compiling infrastructure condition data across the nuclear security enterprise to lead to better informed infrastructure project prioritization. For more information, see the Sandia National Laboratories Report for October 2017, Oak Ridge Activity Report for Week Ending June 8, 2018, and Savannah River Site Activity Report for Week Ending August 17, 2018.

**Vacuum Chamber:** During contractor readiness assessment (CRA) demonstrations for the modular vacuum chamber facility, the CRA team noted that the production technicians had difficulty implementing zone coverage (see 9/7/18 report). Based on the observation, the CNS project team proposed to complete additional demonstrations to sufficiently demonstrate zone coverage. During these activities, the CRA team observed more proficient zone coverage implementation. The CRA team has also provided several procedure enhancements for consideration. The CRA team continues to document their assessment and has not completed the categorization of their observations.