

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 9, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Zachery S. Beauvais and Miranda McCoy, Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending August 9, 2019

DNFSB Staff Activity: J. Anderson reviewed federal readiness assessment activities.

Technical Safety Requirement (TSR) Violations: While exiting a facility following an access control system issue, technicians performed a manual override of the blast door interlocks (BDI), rendering the BDI inoperable. Per the TSR, the facility manager should enter a limiting condition for operation (LCO) upon rendering the BDI inoperable. While the facility was locked and secured, the facility manager did not enter the LCO or properly reset the BDI and verify its operability. Day shift technicians noted the discrepancy during shift turnover and made the appropriate notifications.

Fire dampers installed in a warehouse used to stage canned subassemblies are credited as part of the facility structure. The documented safety analysis (DSA) specifies an in-service inspection (ISI) to function test these fire dampers annually. During a recent assessment, CNS fire protection engineers identified an anomaly with the maintenance record from the most recent execution of this ISI. The CNS inspectors who performed the maintenance had marked their procedure with an "X," indicating that there was a deficiency with the ISI, but they did not stop the execution of the procedure and did not contact system engineering to resolve the deficiency. In the work performance record, the inspectors indicated that the affected dampers were inaccessible; however, the dampers had been previously validated as accessible through a major extent of condition effort (see 12/9/16 report). Fire protection engineers did not discover the missed surveillance until after the required ISI interval expired, resulting in a TSR violation.

Conduct of Operations: Since late May, Pantex has had a number of breakdowns in conduct of operations or engineering (see 8/2/19, 7/26/19, 6/21/19, 6/14/19, and 5/31/19 reports), including eight TSR violations or DSA non-compliances in the last ninety days. These events included a compressed gas cylinder moved without a valve cap, two failures to complete in-service-inspections within the required timeframe, a material limit violation, and failure to implement required special tooling. The resident inspectors noted similarities across some of the events:

- An incomplete questioning attitude, wherein workers were either uncomfortable or unfamiliar with actions, but did not follow through with a formal pause work.
- Lack of familiarity with the specific processes, TSRs, or controls due to either newer personnel, personnel performing work outside their typical job functions, or newly-implemented controls.
- Procedures contained latent errors that, while implemented correctly, resulted in issues.

In response to the recent conduct of operations issues, CNS management paused work to brief Operations personnel on recent events, discuss worker responsibilities and reiterate CNS's performance excellence expectations. NPO also began an analysis of the recent events. The briefing slides were provided to other Pantex organizations, including mission engineering.