

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending January 8, 2021

NPO Staffing: NPO has experienced high turnover and personnel losses over the past six months in two groups, resulting in an overall decrease in experience level and an increase in training and mentorship needs. The resident inspector discussed oversight staffing concerns with NPO management, who were aware of the issue and working to both onboard additional personnel and consider other solutions, such as use of Y-12 Nuclear Safety and Engineering staff for Pantex oversight.

Conduct of Operations: While performing disassembly operations in a nuclear explosive cell, technicians did not perform specific closeout steps in their procedure, and instead processed the unit further. The steps skipped involved coordination to photograph components for documentation purposes prior to packaging the components. Production technicians identified the discrepancy over a week later during a review of unit folders, and notified their management. CNS is reaching out to the applicable design agency for a path forward. CNS also discovered two errors in conduct of operations specific to non-nuclear, high explosive activities that indicate a continuance of the site-wide conduct of operations error trending that was originally communicated to CNS by NPO last summer (see 1/1/21 report). The two events involved inappropriate packaging and a machining error.

Contractor Readiness Assessment (CRA): CNS performed an outbrief for a CRA regarding startup of assembly and disassembly and inspection operations on one weapon program (see 12/18/20 and 11/20/20 reports). The assessment team presented eight pre-start findings, two weaknesses, and eleven observations. The assessment team positively noted that they observed a low number of conduct of operations errors and have confidence in the production technicians' ability to perform operations adequately. The assessment team ultimately concluded that pending successful closure of the pre-start findings and development of corrective action plans for the weaknesses, the team recommends proceeding to the NNSA federal readiness assessment and asserts that startup activities can proceed safely.

The pre-start findings from CRA include the following:

- The assessment team identified twenty procedural deficiencies.
- Twelve procedures contained issues with bay layout and equipment lists that resulted in unworkable preshift operations, as performed per the procedure.
- Operations performed per a specific procedure demonstrated inadequate safe nuclear operations. These operations demonstrated less rigor in conduct of operations principles.
- The assessment team noted two instances of the interlock door left open for extended, unnecessary periods of time.
- Two fire protection issues were discovered, including a fire extinguisher not mounted per NFPA requirements and holes in a paper barrier designed to protect combustible foam.
- Hose whip controls were not demonstrated with the equipment specified in the documented safety analysis.