

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 19, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending June 19, 2020

COVID-19: On Monday, CNS began transitioning to stage two of its COVID-19 recovery plan. The transition involves a significant increase in onsite personnel. Stage two activities include a slow ramp up to full operational status and a restart of any paused construction. Each organization worked to a detailed checklist for startup; the majority of organizations have completed their checklists. CNS anticipates completing stage two transition activities next week.

Nuclear Explosive Safety (NES): Last week, NNSA held a NES change evaluation (NCE) for first production capability units (FPCU) for one weapon program. Last month, NNSA authorized readiness activities for two FPCU options—one of which involves a nuclear explosive configuration (see 5/15/20 report). The NCE evaluated the adherence of the nuclear explosive FPCU to DOE directives for NES. The NCE concluded with no findings, no deliberation topics, and no minority opinions. However, the NES study group noted the expectation that the facility would only allow a single-unit setup for the duration of operations.

Conduct of Operations: Over the past two weeks, CNS experienced a number of events resulting from either a technician error or a procedural issue. Several of these events involved facilities or operations that were previously paused due to COVID-19 reduction in operations. However, a few of the issues were longstanding and likely discovered due to the methodical restart process laid out in stage two recovery actions.

- Quality assurance technicians broke a glass scintillator in the Confined Large Optical Scintillator Screen Imaging System while performing typical maintenance activities. The event resulted in a pause in operations and radiation and industrial safety surveys of the broken glass. During the fact finding, participants noted that they would typically have design agency onsite support for the maintenance, but worked with the design agency to perform the operations without onsite support to eliminate the need for travel.
- CNS personnel determined that they had worked to a nuclear explosive operating procedure for approximately a year that called out a revision of tooling that had never been manufactured and issued. The tooling was used for one program and interfaced with high explosive; the procedure indicated lining the tooling with a wipe to prevent direct contact. Fact finding participants traced the revision to a design agency comment that the original issue tooling material did not have any pedigree associated with it, and the use of specified 35-account material would be more appropriate; however, participants did not discover a safety concern with either revision and determined that revising the procedure to reference the original tooling issue was an appropriate path forward. Participants believed this issue was caught as a direct result of the stage two recovery actions.
- Last week, production technicians performed steps out of order in a special nuclear material facility. The procedure did not require verification that previous steps had been completed, and technicians did not perform this verification, which led to missed steps.