DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 3, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending April 3, 2020

COVID-19: Site posture has not changed appreciably since last week (see 3/27/19 report). As of this week, no CNS or subcontractor operations onsite have been paused in response to the pandemic, and the widespread telework policy implemented last week is being used by a limited subset of personnel who can complete their work remotely. CNS emergency management developed a COVID-19 response plan, in alignment with the site's pandemic response plan; however, several elements in the plan require NNSA buy-in prior to implementing. CNS is working to maintain the vendor supply chain for impacted 35-account materials.

Nuclear Explosive Operations: During the course of typical disassembly operations last week, production technicians (PT) noted unusual discoloration on the finish on one unit. At this point, PTs paused for documentation of the discoloration; however, the observed discoloration would not drive action beyond a typical nonconform process. When the PTs resumed operations, they encountered difficulty removing one component and noted an unexpected defect on a cover. The PTs placed the unit into a safe and stable configuration, paused operations, and exited the facility. The unit was subsequently declared anomalous. While investigating the event, tooling engineers confirmed that tooling that mates with the cover could not have reasonably caused the defect noted. Pantex is currently awaiting information from the design agencies to inform a path forward for the unit.

Fire Protection System: Subcontractor personnel cut an incorrect conduit while performing fire protection system upgrades. The subcontractor personnel were installing a new flame detection system within the material access area, and intended to remove an obsolete cabinet and reuse the existing, unenergized conduit for the upgrade project. Instead, the personnel severed a live fiber optic cable that transmitted fire alarm communications for the facility. This resulted in communication failure signals, a system trouble signal, and a telephone line fault signal relayed to the emergency services dispatch center, as well as a disruption of alarm capability for the affected facility. In immediate response to the event, the subcontractor notified the plant shift superintendent and the emergency services dispatch center of the incorrectly cut conduit. The subcontractor paused construction activities within the scope of the contract. Pantex fire department personnel reset the applicable fire alarm control panel and tested communication via a manual pull box alarm. The subcontractor subsequently repaired the damaged conduit, and will develop a corrective action plan that CNS will review and approve.

Over the past year, Pantex has experienced several inadvertently cut conduits or energized systems (see 1/31/20, 12/13/19, and 8/23/19 reports). Previous cases have included issues with configuration control, locator complications and limitations, or formality of locator use; these events typically involved buried conduit that could not be immediately viewed. This most recent event involved conduit within the fire alarm room that was visible without use of locators. Fact finding participants discussed potential communication breakdowns leading to this event; a lack of formality in the work walk-down process may have contributed.