

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 10, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** A. Holloway and C. Stott, Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending May 10, 2024

**Nuclear Explosive Safety (NES):** This week, members of the writing team for NNSA Supplemental Directive 452.2, *Nuclear Explosive Safety Evaluation Processes*, convened at Pantex to discuss proposed changes to the document. Participants included NES representatives from NNSA; Los Alamos, Lawrence Livermore, and Sandia National Laboratories; Pantex; and the resident inspectors. NNSA is proposing a revision to the directive, and meeting participants discussed potential changes that will be incorporated into the next revision, including lessons learned from previous NES evaluations and recent challenges. The writing team intends to hold additional meetings in the future.

Last week, CNS received formal notifications from design agencies regarding issues related to certain weapon components manufactured at the Kansas City National Security Campus. One design agency identified components requiring replacement at Pantex, and another design agency noted a potentially redundant electrical test in the replacement activities. A NES study group (NESSG) conducted a NES change evaluation (NCE) this week to assess this concern. The resident inspectors were in attendance. After determining the aforementioned electrical test was not redundant, the NESSG did not identify any deficiencies with the proposed operations. The NESSG noted that these results are only applicable to the specific units evaluated in this NCE.

**Vehicle Impact with Transportation Route Structure:** Last week, a CNS employee impacted the wall of an approved transportation route—i.e., a rampway—with a pickup truck, causing damage to both the wall and the vehicle. The impact caused a portion of the wall material inside the rampway to become dislodged, exposing insulation fibers that are likely asbestos. Currently, CNS has not restricted access to the transportation route since the damage is not to structurally supportive components of the affected rampway. The resident inspectors note that no material of concern was involved in the event.

**Unplanned Power Outages:** Last week, CNS discovered that a total of thirty facilities lost electrical power due to a failed electrical connection. CNS identified the failed connection due to a manhole cover displaced during the electrical discharge. Following repair of the affected connection, CNS energized and tested the cable in order to return it to service. CNS originally categorized this event as a management concern that does not meet any other reporting criteria. This week, CNS discovered that a separate electrical connection failed—in a different manhole—causing other multiple facilities to lose power. Due to the vicinity of this connection to other energized cables, CNS cannot perform a repair until a separate planned electrical outage occurs next month. Until that time, the site has restored power to all affected facilities with a single electrical feed. CNS has merged these two occurrences into a single issue and recategorized them as a discovery of any defective item or material whose failure could present a hazard to public or worker health and safety. The resident inspectors note that both failed electrical connectors occurred in different locations than the incident that caused the unplanned electrical outage last year (see 9/22/23 report).