DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending August 21, 2020

Technical Safety Requirement (TSR) Violation: CNS conducted a fact finding and critique this week for a TSR violation in a special nuclear material (SNM) facility. CNS electronics technicians brought a tool bag into the facility to repair equipment. Upon leaving for lunch, the technicians left the bag unattended in the facility, constituting a violation of the combustible controls, which require maintaining direct control of transient combustibles. Late last month, CNS reported a violation of the combustible loading TSR in a different room of the same SNM facility (see 7/31/20 report). One of the actions CNS took as a result of the previous TSR violation was a department-wide briefing for operations personnel on TSR requirements; however, the electronics technicians are in a separate department and did not receive the briefing.

Emergency Management: Last week, CNS conducted a full scale emergency exercise, the first since NPO and CNS implemented COVID-19 restrictions and precautions in March. The exercise served a dual purpose: first, to test CNS's capability to respond with limited number of personnel to an operational emergency and maintain COVID-19 restrictions for the safe conduct of an exercise; and second, to maintain site proficiency in responding to events, particularly given that CNS's prior exercise was a tabletop (see 1/10/20 report). The scenario chosen for the exercise—a fire in a nuclear material staging area, with no release of material—is simpler than previous exercises performed at Pantex. However, the exercise was largely effective at demonstrating its goals. The emergency operations center was able to perform adequately with limited number of in-person responders. Field responders were able to perform their duties while wearing masks as required by the site's standing order, but some activities, such as responder dress-out and frisking for radiological contamination, preclude the ability to maintain six feet of separation between personnel (see 5/15/20 report). The resident inspector also notes that the choice of exercise location and material types was timely and appropriate. CNS emergency management has not conducted an exercise in the chosen area for over five years, and CNS recently requested to startup repackaging of the material type involved in the scenario.

Enhanced Transportation Carts (ETC): CNS production technicians noticed a loose handle on an in-use ETC-II. Tooling and machine design (TMD) engineers determined that the fasteners for the ETC-II handle were broken, resulting in the loose handle. CNS paused all ETC-II use, and tagged out all copies until an extent of condition review could be completed. In investigating the event further, TMD engineers concluded that other ETC-IIs similarly had loosened fasteners connecting the handles to the body of the carts. CNS drafted an engineering evaluation to evaluate the safety of, and allow for manual movement of, affected ETC-IIs. These carts will only remain in service until they can be emptied, at which point the ETC-IIs will be returned to production tooling for repair. CNS is actively working this process. ETC-IIs are subject to both annual and quarterly preventive maintenance; neither of these maintenance activities specifically require an evaluation of the fasteners that secure the handle to the cart. However, the general manual for special tooling operations does include criteria for visual inspections of fasteners.