DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 8, 2025

TO: Technical Director
FROM: Pantex Plant Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending August 8, 2025

Contractor Readiness Assessment (CRA): This week, PXD commenced the CRA for startup of radiographic evaluation activities of certain nuclear weapon components within a particular facility. One resident inspector attended CRA activities, including a facility walkdown, operational demonstrations, and an emergency drill simulating an earthquake during operations. After the demonstrations and drill were completed, the resident inspector provided observations to the PXD technicians and project team, noting several opportunities to improve the operating procedures. The resident inspector also highlighted that, when the emergency drill began, the technicians responded without hesitation and immediately took action to prevent and mitigate potential hazards. Communication between the technicians was clear and concise, and they demonstrated excellent teamwork, which significantly enhanced the efficiency of their actions and enabled them to rapidly respond to the simulated emergency.

Last week, a different PXD CRA team briefed the results of the CRA for startup of special nuclear material operations within a recently renovated facility (see 7/18/2025 report). During the CRA operational demonstrations, PXD personnel simulated a radiological event, which required facility occupants to evacuate. The CRA team identified that the technicians had left both equipment doors open after evacuating the facility. Unlike other nearby facilities, these doors are not interlocked, which would prevent both doors from being open at the same time. The CRA team identified this condition as a finding, since at least one door must remain shut according to the applicable Technical Safety Requirements. A finding represents a significant failure that could result in unacceptable impact to the safety of the facility, general public, or environment during nuclear operations. PXD plans to address this finding by conducting a causal analysis and implementing corrective actions prior to commencing operations. Additionally, the CRA team identified several weaknesses that will require a corrective action plan. Weaknesses represent a noncompliance with a regulation or other requirement. The CRA team identified one such weakness after observing technicians perform steps of the procedure—i.e., preparing a radiation detector—prior to completing pre-operational checks of the facility. Pre-operational checks are required before conducting active operations. Recently, PXD conducted a causal analysis to more clearly define active operations and activities that can be performed prior to completion of pre-operational checks (see 7/25/2025 report). The resident inspectors are awaiting the results of this causal analysis.

Fire Alarm Receiving System (FARS): This week, PXD Fire Protection Engineers (FPEs) identified that FARS was not communicating with the emergency services dispatch center. Upon discovery, PXD facility representatives entered the applicable Limiting Conditions for Operations (LCOs) for numerous safety-class systems within or supporting defense nuclear facilities (i.e., the high-pressure fire loop and deluge fire suppression systems). PXD FPEs stated that maintenance was not being performed on FARS at the time of failure. Approximately thirty minutes after FARS was lost, the system reestablished communication without external intervention. Subsequently, PXD exited the LCOs and continued investigating the cause of this perturbance.