

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 18, 2025

**TO:** Technical Director  
**FROM:** Pantex Plant Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending April 18, 2025

**Staff Activity:** This week, the Associate Technical Director for Nuclear Weapon Programs, the Pantex Cognizant Engineer, and a member of the Technical Staff from DNFSB headquarters joined the DNFSB Acting Chair to visit the Pantex Plant.

**Emergency Exercise:** This week, Pantex conducted an emergency exercise involving damage to two nuclear explosives, caused by a postulated security event in a loading dock within a material access area. The exercise plan involved response and coordination from various onsite and offsite organizations to combat the resulting concurrent security and offsite radiological release events. Specific topics evaluated by the DNFSB staff during the emergency exercise included (1) communication between Pantex and offsite organizations, (2) transition of command and control at the event scene, (3) activation and standup of the emergency response organization, and (4) response to a damaged nuclear explosive and radiological contamination.

**Nuclear Explosive Safety:** PXD relies on the use of high-explosive move windows as an administrative control to prevent the transportation of high explosives concurrent with special nuclear material or nuclear explosives.

Last week, a PXD plant shift superintendent (PSS) opened a high-explosive move window to allow the transportation of conventional high explosives during the movement of a nuclear explosive within a material access area. Approximately fifteen minutes before opening the high explosive move window, the PSS de-selected the option to allow new nuclear material moves within the designated database. The PSS did not save this change, thus failing to make the limitation known to those who access the database to plan material transportation. After verifying that there did not appear to be any ongoing moves of nuclear material, the PSS opened the high explosive move window. The PSS soon received a call from a material handler stating that a nuclear explosive was being transported when the high explosive move window was initiated. During the event critique, PXD noted contributing factors for the event, including that (1) the active moves screen within the database only refreshes every five minutes and (2) there is no interlock within the database to prevent the initiation of a high-explosive move window during active nuclear material transportation. PXD decided to address this event by briefing all PSSs on (1) this occurrence, (2) the need for all nuclear material to be in a facility prior to a high explosive move window, and (3) the expected steps to follow when opening or closing high explosive move windows.

**Nuclear Explosive Operating Procedures:** Last week, PXD production technicians paused operations after discovering that the procedure did not include a required step to connect special tooling to a nuclear explosive. PXD noted that the procedure had recently been updated and that the step had been inadvertently removed. After placing the unit in a safe and stable configuration, PXD removed the procedure from active status. PXD has revised the procedure to include the necessary step, and operations have resumed.