DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 3, 2026

Pantex Plant Resident Inspectors Activity Report for Week Ending July 3, 2026

Safety Basis: Last month, certain design agencies released updated weapon response information for one weapon program for various electrostatic discharge hazard scenarios. In some cases, the provided weapon response values decreased, potentially allowing consideration of safety control changes moving forward. However, the provided information also led PXD safety analysis engineering personnel to declare a potential inadequacy of the safety analysis (PISA) this week due to a potential unanalyzed hazard associated with the weapon response. In the PISA determination, PXD personnel did not identify any necessary operational restrictions, as electrical bonding cables and shorting plugs already implemented in the nuclear explosive operations will preclude the specific hazard.

Special Tooling: Last month, while preparing to place a nuclear explosive into an enhanced transportation cart inside a special-purpose facility, PXD quality assurance technicians encountered one locking mechanism that detached from the cart during handling. These particular carts are used to transport nuclear explosives—in a nearly fully assembled state—and these locking mechanisms are designed to help restrain the unit when inside the cart. After notification from the technicians, PXD paused the operations and placed the unit in a safe and stable configuration. Later that week, PXD developed and executed a nuclear explosive engineering procedure that removed and replaced the degraded cart. This event mirrors a previous occurrence (see 9/13/2024 report). During the previous event, Pantex determined that this degradation does not negatively affect the safety function of the cart to maintain positive control of the unit. As a result, in this most recent event, PXD did not initiate an extent-of-condition review, prohibit use of the other copies of this cart, or conduct fact-finding meetings.

Conduct of Operations: Last month, PXD production technicians installed a unit into a work cart rotated 180 degrees from procedural instructions. As a result of this error, the technicians also installed the unit incorrectly into a transportation cart prior to sending it to a special-purpose facility, where quality assurance technicians discovered the issue. Due to this configuration, these technicians could not perform their operations as written and returned the unit to the original facility following a procedural allowance. PXD developed and executed a nuclear explosive engineering procedure to reorient the unit to continue operations.

Additionally, last month, PXD production technicians in a different facility installed a tool rotated 180 degrees from procedural instructions onto a workstand during operations. As a result of this issue, the technicians notified all necessary PXD organizations of the event and received concurrence to place the unit into a safe and stable configuration. As a result of the fact-finding meetings for this event, PXD intends to revise the nuclear explosive operating procedure to more clearly define the correct orientation of this special tooling to prevent recurrence.

Qualification Board: This week, a resident inspector attended the oral board for a candidate PFO facility representative. This examination focused on various fields of knowledge required for this position. The board administered a thorough and rigorous assessment of the candidate.