DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 24, 2026

Pantex Plant Resident Inspectors Activity Report for Week Ending July 24, 2026

Seismic Activity: On Thursday, a magnitude 5.0 earthquake occurred approximately 50 miles northeast of Pantex. PXD paused operations but resumed after reporting no plant issues.

Combustible Controls: Recently, the resident inspectors reviewed previously completed inspections that satisfy the semi-annual surveillance requirement associated with the combustible controls limiting condition for operations (LCO). PXD uses this LCO to ensure combustible materials are controlled to designated levels within all defense nuclear facilities inside a material access area, including rampways, corridors, and specific loading docks. PXD records the completion of this surveillance requirement on a combustible control surveillance form. The resident inspectors note that the form includes an allowance for PXD to bypass completing this activity if no material of concern is present at the time of the inspection. While PXD uses rampways, corridors, and loading docks to transport this material, its presence is only temporary. As a result, the resident inspectors found that the last two completed surveillance activities were marked such that the surveillance was not required to be performed.

The resident inspectors walked down the applicable areas and found large amounts of combustible material stored along these transportation routes. In the opinion of the resident inspectors, the observed combustible loading approached the PXD-prescribed levels that could negatively impact fire barriers to defense nuclear facilities during fire events and may warrant evaluation. Additionally, after questioning several PXD personnel from various organizations that use or store material in these areas, the resident inspectors found a general lack of knowledge regarding combustible limits for these areas. In discussions with PFO and PXD personnel, the resident inspectors relayed their concerns with the inadequate implementation of the surveillance requirement along with the general lack of knowledge regarding combustible limits for these areas, which may degrade the effectiveness of this control.

Anomalous Unit Determination: This week, PXD production technicians noted the results of a nuclear explosive electrical test were outside of acceptable limits; PXD subsequently paused operations and placed the unit in a safe and stable configuration. Per DOE Order 452.2, *Nuclear Explosive Safety*, PXD and design agency representatives convened an anomalous unit determination to assess the nuclear explosive. These personnel determined that the condition represented an unanalyzed configuration or one not covered by a nuclear explosive safety evaluation. Therefore, these personnel declared that the nuclear explosive met the criteria to be considered an anomalous unit, requiring further assessment before continuing operations.

Potential Inadequacy of the Safety Analysis: This week, during a review of safety basis documentation for a certain weapon program, PXD safety analysis engineers determined that a certain hazard scenario had not been evaluated. PXD determined that the unanalyzed hazard scenario constituted a potential inadequacy of the safety analysis. PXD asserts that no operational restrictions are necessary because of an overarching control that is already in place related to worker evacuation during radioactive material release scenarios.