## **DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

TO:	Technical Director
FROM:	Pantex Plant Resident Inspectors
SUBJECT:	Pantex Plant Activity Report for Week Ending April 11, 2025

**Safety Basis:** This week, PXD discovered a discrepancy within the safety basis during an annual update of the hazard analysis report for one weapon program. The discrepancy involves a tool permitted for use in certain nuclear explosive operating procedures that has not been evaluated for potential electrostatic discharge hazard scenarios. Although the tool is listed in the setup section of the procedures, it is not specified in the subsequent operational steps, and PXD personnel have been unable to locate any physical copies of it. PXD safety analysis engineering personnel declared a potential inadequacy of the safety analysis, and PXD process engineering is currently removing the tool from the procedures. PXD issued an operational restriction to prohibit use of the tool until the procedure updates have been completed.

**Technical Safety Requirements:** Recently, while observing a shift turnover in a nuclear explosive cell, resident inspectors noted a facility logbook entry from the previous day stating that a limiting condition for operations (LCO) had been entered due to an inoperable personnel blast door interlock system. The required actions for this LCO condition include placing the nuclear explosive in a safe and stable configuration, prohibiting movement of certain material into or out of the cell, and administratively controlling the personnel doors. Since the doors were not being administratively controlled and there was no logbook entry describing the exit from the LCO condition, the resident inspectors questioned the status of the facility. The off-going technicians stated that the facility no longer met the LCO condition because they had neither observed nor been directed by a PXD facility representative to administratively control the blast doors during their shift. The on-coming technicians verified with the PXD facility representative that the facility was not in any LCOs.

The PXD facility representative supervisor subsequently clarified to resident inspectors that the LCO had been entered the prior morning, as stated in the Pantex Plant Shift Superintendent (PSS) logbook. After becoming aware that the personnel doors would not unlock, the PXD facility representative appropriately entered the LCO and had PXD mechanics perform maintenance on the blast door interlock system. After the maintenance and subsequent testing were complete, the PXD facility representative informed the technicians that the cell was under normal operating conditions. However, the PXD facility representative never formally exited the LCO in the PSS logbook, although a subsequent entry in the PSS logbook noted that the LCO had been exited that morning. The only facility logbook entry on the topic is for entering the LCO, listed at a time after the LCO was exited according to the subsequent PSS logbook entry. The resident inspectors note that Pantex procedures specify a requirement for notification to the PSS along with a PSS logbook entry for all LCO entries; however, the procedures do not specify that a logbook entry must be made for exiting LCOs. The resident inspectors are currently evaluating the following: (1) the process of determining that operations are safe to be performed in facilities without a requirement to log when an LCO is exited and (2) how PXD addresses the communication challenges to coordinate between multiple PXD facility representatives and PSSs that could be involved in LCO entry and exit declarations.