

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 22, 2025

**TO:** Technical Director  
**FROM:** Los Alamos Site Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for the Week Ending August 22, 2025

**Plutonium Facility–Glovebox Safety:** The Triad internal investigation team completed its final report on the contaminated puncture wound event at the Plutonium Facility (see 8/1/2025 report). On Thursday, the team presented the report to the Weapons Production Management Review Board, and they will present to other organizational review boards shortly. The Institutional Management Review Board will assign responsibilities to develop corrective actions. The review team identified two root causes with five contributing factors. The first root cause was that packaging is not considered a new tool or process change so is not evaluated for hazards. In this event, the sharp welding electrode popped through its packaging into the worker's hand. The second root cause was that the document review process relies on manual entries into the document approval system. Due to human error, there was no sharps review by the glovebox safety team during development of the procedure in use during the incident. The investigation team developed 19 Judgements of Need to support development of corrective actions. They split these into two phases. Phase 1 needs, which include establishing puncture-proof electrode packaging and evaluating other areas that use inappropriate sharps packaging, must be addressed prior to resuming welding operations. Phase 2 needs, which include improving the document review process and ensuring that introduction of all items into gloveboxes undergo sharps and other hazard review, can be completed on a longer time frame.

**Area G–Fire Protection:** On Tuesday, maintenance crews were working in Dome 230 when they inadvertently actuated the fire suppression pre-action system valve. A pre-action system does not have water in it unless the valve is actuated. Several hundred gallons of water leaked out of pipe joints at the ceiling level wetting the floor and the radiological waste containers in the area before maintenance crews were able to stop the water flow. Radiological control technicians responded and determined no spread of contamination occurred. The contractor does not currently have the resources to repair the leaks and is operating the system under a fire code variance submitted to NNSA by the prior operator of the facility around 2011.

**Federal Oversight–Fire Protection:** The NNSA Field Office recently non-concurred with Triad's corrective action plan and causal analysis addressing findings from a 2024 assessment of the Fire Protection Program for the Transuranic Waste Facility performed by the DOE Office of Enterprise Assessment (DOE-EA). DOE-EA had previously determined the fire protection program had several issues involving fire hydrant maintenance, procedures, training, and combustible loading. Reasons for the non-concurrence included premature development of corrective actions prior to completion of the causal analysis, the corrective action plan did not address all the apparent causal factors identified in the causal analysis, and the analysis in both documents was insufficient to lead to process improvements and prevent future recurrence. The Field Office directed Triad to submit revised documents for concurrence within 60 days. On a related note, the Field Office recently transmitted an assessment plan for a review of the fire protection safety management programs at Hazard Category 3 nuclear facilities. The review will specifically look at PF-400, the Radioactive Liquid Waste Treatment Facility, and the Waste Characterization, Reduction, and Repackaging Facility.