

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 9, 2025

**TO:** Technical Director  
**FROM:** Los Alamos Site Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for the Week Ending May 9, 2025

**Plutonium Facility–Radiological Control:** In April, there were two separate, but related, contamination events in the basement of the Plutonium Facility. In each of these events, workers identified the contamination spread during routine radioactive contamination control practices, such as surveying hands and feet upon leaving an area. Radiological control technicians responded to both events, identifying the extent of the contamination and proceeding with decontamination efforts. An attempt to identify the precise source of the contamination is ongoing, but a collection of low-level waste bags from three different rooms that were stored together in the basement is believed to be the source of the contamination. The contamination is heat-source plutonium. However, the bags contain low-level waste from rooms with minimal or no known quantities of heat-source plutonium. During a fact-finding meeting, Triad staff discussed a number of possible concerns, including the waste packaging, handling, and storage practices. Triad is continuing to look at corrective actions and steps they can take to improve waste handling and management practices for low-level waste in the Plutonium Facility.

**Plutonium Facility–Criticality Safety:** Criticality safety personnel have been developing standardized criticality safety limits for pit production operations in the Plutonium Facility. The first two new criticality safety evaluations have been implemented, and several more evaluations with the new limits have been issued and are awaiting implementation. The intent of these limits is to make criticality safety compliance easier for workers in the plant by providing a consistent limit set across numerous processes as opposed to the current practice with most processes having unique controls.

**Plutonium Facility–Operations:** Triad personnel continue to perform newly restarted aqueous nitrate operations under additional management oversight (see 4/11/2025 report). The resident inspectors observed portions of the initial dissolution activity.

**Weapons Engineering Tritium Facility (WETF):** On Monday, a worker was manipulating a valve to drain water from an air compressor system when the valve sheared off. The air compressor is not a credited safety system, but it provides air flow to the safety-significant tritium monitoring system. Operations center personnel saw that the tritium monitoring system lost flow and entered the appropriate limiting condition for operation. They informed the sole individual in the tritium processing area to exit and placed the tritium monitoring system out of service. Later that day, facility personnel re-established the system's operability using a backup nitrogen system to replace the lost air flow. Facility management plans to perform repairs, replacements, and additional evaluations of the air compressor system to avoid future impacts to credited systems.

**Training:** A resident inspector observed onsite training on radioactive waste management sponsored by the Department of Energy. The training focused on DOE Order 435.1, *Radioactive Waste Management*, and covered key elements of the history of waste activities, current requirements, and provided insight into proposed revisions to the order.