

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 25, 2025

TO: Technical Director
FROM: Los Alamos Site Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending July 25, 2025

Plutonium Facility–Infrastructure: The Plutonium Facility’s elevator has experienced several mechanical failures over the past few months, most recently with the door interlocking system. The elevator is used for transporting radiological material within the facility, among other uses, and must be maintained in a safe and reliable working condition. Facility management has initiated an issue response team to develop solutions for the continued safe and reliable operation of the elevator. Resident inspectors have discussed these issues and the contractor’s resolution plan with facility personnel and walked down the elevator area to better understand the current challenges.

Area G–Safety Basis: Recently, N3B workers identified a potential violation of the site’s Technical Safety Requirements (TSR) related to combustible loading. N3B staff had placed a waste forklift in a Low Activity Area (LAA) inside Dome 230. The forklift was immediately moved to a safe location once the potential violation was identified. Management reviewed the event and determined there was no TSR violation as LAAs are exempted from the combustible controls as detailed in the TSR. During the review, safety basis personnel identified a potential conflict with the requirements as the LAA was located adjacent to a Defined Area (DA) that is subject to combustible control separation limits. They determined the configuration could potentially result in an unanalyzed condition in which the combustible separation distances applicable to DAs conflict with the exemption allowed for LAAs. Safety basis personnel entered the initial confirmatory process, which later determined the safety analysis did not account for this scenario and represented a potentially inadequate safety analysis. A subsequent review determined this represents an Unreviewed Safety Question. The safety basis team is now working to determine if the existing controls are adequate. N3B personnel determined Dome 230 was the only location where this condition exists and will maintain the more conservative controls within the impacted area until the safety basis and TSR are revised.

Plutonium Facility–Emergency Preparedness: Last Friday, Triad personnel conducted an emergency preparedness drill during the night shift. The scenario was a criticality event, which requires a facility evacuation. To ensure more night shift workers participated in the activity, the chosen time overlapped between two different night shift crews.

Flanged Tritium Waste Containers (FTWC): A team from the NNSA Office of Environment, Safety, and Health was onsite to perform an independent review of the approved plan to mitigate the pressure within FTWCs stored at Area G. This activity recently went through a readiness review that validated the team is ready to perform the activity safely (see 5/16/2025 report). Commencement of the venting and handling process is awaiting DOE approval, which is dependent on external regulatory approval. The hypothetical maximum pressure in the FTWCs is steadily increasing due to the decay of tritium, increasing the likelihood of an uncontrolled pressure release. As the pressure increases, the risk to the workers who will perform the venting activity also increases. The increasing pressure also impacts waste remediation operations at Area G, as standoff distances from the FTWC storage area increase with the calculated maximum possible pressure. Resident inspectors shadowed onsite portions of the team’s visit this week.