

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 28, 2025

TO: Technical Director
FROM: Los Alamos Site Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending February 28, 2025

Plutonium Facility–Criticality Safety: During a nuclear material recycling operation, Triad personnel found the mass of an item did not match the expected mass listed on the associated documentation. A difference between the expected and actual mass is considered a criticality safety potential process deviation and requires further review. Triad determined the documentation had previously been inadvertently swapped with a similar item, which had been processed earlier. The review also determined both items remain in a safe configuration and that the approved mass limit for the area was not exceeded at any time. Triad categorized the event as a process deviation where all criticality safety controls remained intact, which is the lowest level of criticality safety event severity. Triad plans to improve training and add additional verification steps into the procedure.

Plutonium Facility–Conduct of Operations: Last week, Triad personnel discovered a pewter container holding nuclear material had melted when undergoing an overnight drying operation on top of a furnace. Triad determined the situation is stable and glovebox confinement had been maintained. Further review determined the procedure requires use of stainless-steel containers for this operation rather than pewter, which has a lower melting point. Triad plans to provide additional training to personnel and clarify the procedure to more explicitly prohibit low melting point containers. Additionally, Triad plans to clean and restore the impacted equipment.

Plutonium Facility–Radiological Control: On Monday a worker performing size reduction operations found contamination on their personal protective equipment. Self-scanning practices by the worker prevented further contamination spread. Radiological control technicians determined the source of the contamination to be a pea-sized hole in one of the glovebox gloves. The glove was approaching, but had not exceeded, the change out date and had been inspected prior to use. Triad plans to replace the glove and perform forensic analysis to determine the cause for the hole.

Weapons Engineering Tritium Facility–Tritiated Waste: On Tuesday staff at the Weapons Engineering Tritium Facility (WETF) shipped a flanged tritium waste container (FTWC) offsite to Waste Control Specialists (WCS) under a newly approved safety basis for the facility. This FTWC, the first of two that will be shipped to WCS, is different from the FTWCs stored at Area G, as it met all necessary conditions for offsite shipment and burial as low-level waste. This approach is a reliable and safe long term disposal pathway for tritiated waste generated at WETF and will be used for future shipments of FTWCs as well, such as the four currently stored at Area G once they are vented and rendered safe and stable.

Ion Beam Facility–Decommissioning: A contractor review team conducted a follow-up management assessment of the readiness for decommissioning of the Ion Beam Facility (see 1/3/2025 report). While on site, the review team conducted a series of document reviews, interviews with staff, and reviewed work being performed against the relevant procedures. The review team is still compiling their findings; however, based on the content of the verbal out-brief conducted on Wednesday, the review team did not identify any concerns that would prevent further progress on the decommissioning of the Ion Beam Facility.