

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 29, 2025

TO: Technical Director
FROM: Los Alamos Site Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending August 29, 2025

Plutonium Facility–Glovebox Safety: Glovebox safety personnel have been performing an extent-of-condition review of new glovebox window gaskets following the discovery of a degraded gasket with contamination seeping out (see 8/8/2025 report). They have discovered several other gloveboxes with degraded window gaskets, or gloves that have discolored due to contact with the gaskets. Workers have not identified any other contamination spreads, and glovebox engineers have performed an operability determination that concluded gloveboxes with the new gaskets can still meet their credited confinement function. These new gaskets are all from the same supplier, which is a qualified vendor, but is not the usual supplier of glovebox window gaskets. The new gaskets that have not been issued for use are under control in warehouses while those that have been issued for installation or installed are being evaluated. Triad personnel are performing chemical analysis of the gaskets and working with the supplier to determine what is causing the issue. Initial results from the chemical testing are showing differences between these gaskets and older models. Weapons Production management stood up an issue response team to ensure resources are focused on resolving this situation. The team's goals are to determine the cause of reactions between gaskets and gloves, determine if discolored gloves are an operability concern, and confirm that current acceptance criteria for gasket procurement satisfy performance requirements.

Plutonium Facility–Safety Basis: On Monday, the NNSA Field Office approved the 2025 Annual Update of the Plutonium Facility documented safety analysis. The annual update this year incorporated changes associated with an evaluation of the safety of the situation and justification for continued operations from 2024 related to an identified issue of potential chemical incompatibility in transuranic waste drums due to nitrated spent ion exchange resin (see 3/22/2024 report).

Plutonium Facility–Operations: On August 23rd there was a momentary loss of power at the Plutonium Facility that resulted in an unexpected loss of ventilation within the facility. Operations staff made appropriate notifications, declared an orderly exit of workers from the facility, and entered the relevant limiting conditions for operation. Backup power was available, and after approximately five hours the facility had fully recovered from the loss of power. This week, Triad conducted a post job discussion of the incident and confirmed that their response was appropriate; however, they did identify some system adjustments and procedure improvements that will help in responding to future loss of power incidents.

Area G–Infrastructure: Heavy rains washed out a section of the east access road into Area G. This road is not routinely used but provides an alternative route for emergency vehicle access or personnel egress. N3B personnel notified Triad emergency management personnel that the road is not currently suitable for vehicle traffic until repairs have been completed. Normal operations in Area G are not impacted.