

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 28, 2025

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

Waste Characterization, Reduction, and Repackaging Facility (WCRRF)–Readiness: On Monday, NNSA personnel began a federal readiness assessment (FRA) for the restart of the WCRRF as a Hazard Category 3 nuclear facility (see 11/22/2024 report). The FRA is required before WCRRF can begin processing contaminated gloveboxes from the Plutonium Facility for size reduction and packaging, prior to shipment offsite for permanent disposal. Throughout the week, the federal team conducted a wide range of activities, including a kick-off meeting, a facility walkdown, observations of work demonstrations, and interviews with contractor staff. A report summarizing any findings or issues will be released by the federal team only after the FRA concludes next week.

Plutonium Facility–Emergency Response: On Thursday last week, a small fire occurred in a glovebox at the Plutonium Facility. Workers were cutting samples using a saw when they observed sparks and a fire on the saw blade. Workers quickly put the material into a safe configuration, initiated the fire alarm, and proceeded with an orderly evacuation of the room. The operations center made necessary notifications and initiated evacuations, and the Los Alamos Fire Department responded. DNFSB resident inspectors were in the facility and observed the emergency response firsthand. The steps taken by the workers and facility staff adhered to the relevant procedures and demonstrated an appropriate and well-coordinated emergency response to the event. Based on available information, the fire appears to have resulted from the use of ethanol as a cooling fluid for the saw. The amount of ethanol used in the glovebox was consistent with the existing fire hazards evaluation, which is more generic; however, a newer, operation-specific, fire hazards evaluation has not been completed. The use of ethanol was approved by management to avoid chemical contamination of the samples and was consistent with current procedures. Triad staff are continuing discussions of this event to determine steps to prevent reoccurrence (e.g., using different cooling fluids, inerting the environment of the glovebox if using ethanol).

Flanged Tritium Waste Containers (FTWCs): Throughout this week, Triad personnel conducted practice demonstrations of the venting procedure for the FTWCs currently stored in TA-54 Area G. Staff from N3B and the EM field office also attended portions of the demonstrations to observe and ask questions as Triad and N3B prepare for the upcoming operations. The procedure will be finalized prior to the start of the management self-assessment, followed by separate contractor and federal readiness assessments. A DNFSB resident inspector observed portions of the demonstrations, and the performance of participating contractor staff appeared satisfactory. Furthermore, last week, the NNSA field office (NA-LA) received confirmation from the Environmental Protection Agency that all necessary steps have been satisfied prior to the issuance of pre-startup notifications. NA-LA is working with the New Mexico Environment Department to obtain required state approvals before commencing the venting activities in the coming months, once readiness activities have been completed.