

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 24, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** D. Gutowski, Resident Inspector  
**SUBJECT:** Los Alamos Activity Report for the Week Ending May 24, 2024

**Staff Activity:** A. Boussouf was on site Tuesday and Wednesday to observe the site annual emergency exercise and to provide resident inspector support.

**Emergency Management:** On Wednesday, the site held the annual full-scale emergency preparedness exercise. The scenario was a truck crash at Technical Area 60, a hazardous waste facility. The crash caused several worker fatalities, injuries to many other workers, the breach of a chlorine cylinder, and damage to other waste containers in the building. Headquarters personnel from NNSA's Office of Emergency Preparedness and the DOE's Office of Enterprise Assessments were on site to observe the exercise. Triad is self-assessing exercise performance.

**Area G–Safety Basis:** Last Friday, N3B management paused all material at risk (MAR) movements at Area G pending resolution on the treatment of uncertainty used for MAR values in the current safety basis. While finalizing the new safety basis for Area G, N3B and DOE personnel questioned how the current safety basis incorporates uncertainty in MAR values. Management paused all MAR movement until this question was satisfactorily resolved. The current approach at Area G is to use two-sigma uncertainty added to nominal fissile gram equivalent values for criticality safety purposes, but not to use this uncertainty for MAR values used in the safety basis. Nominal values recorded in the waste tracking database do incorporate some uncertainty. N3B personnel concluded this approach is consistent with other DOE transuranic waste facilities and resumed operations on Monday.

**Plutonium Facility–Continuous Improvement:** This week, Triad started training fissile material handlers on a major revision to the procedure used for performing fissile material moves. This revision is intended to address corrective actions from several events involving material moves such as the 2021 pyrophoric event during waste loading and various criticality safety infractions where material moves were involved. Major changes to the procedure include: lowering the mass threshold for required use of a specific procedure attachment, adding provisions to address the hazards for movement of potentially pyrophoric materials, and addition of a new attachment to support all movements of enclosures such as gloveboxes out of the building during decontamination and decommissioning activities. Full implementation of the new procedure is expected once the training rollout is completed.

**Weapons Engineering Tritium Facility (WETF):** Last Thursday, during the annual inspection of safety-class fire walls at WETF, personnel discovered an unsealed penetration through one wall. They immediately established a fire watch as required by a specific administrative control. They subsequently determined that conduit installation activities for a recent upgrade project had unsealed this penetration, and that the required fire watch had not been established during the installation activities. Facility management determined this was a violation of the facility's technical safety requirements. The penetration has been resealed.