

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 8, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** D. Gutowski, Resident Inspector  
**SUBJECT:** Los Alamos Activity Report for the Week Ending March 8, 2024

**Staff Activity:** M. Bradisse and M. Dunlevy were onsite providing resident inspector support. While onsite they met with safety basis personnel regarding proposed changes to allowable operations during limited operations mode at the Plutonium Facility, and with transuranic waste personnel to discuss changes to the enhanced chemical compatibility evaluation process. A staff team provided an outbrief to Triad and NNSA Field Office Personnel regarding the results of their review of the overall health of nuclear criticality safety programs at Los Alamos National Laboratory, the Savannah River Site, and the Y-12 National Security Complex.

**Plutonium Facility–Readiness:** Last Friday, the federal readiness assessment team reviewing restart of aqueous nitrate operations concluded its assessment activities and provided a briefing to site personnel regarding their preliminary conclusions (see 3/1/2024 report). They identified six prestart and eight poststart findings. The prestart findings related to criticality safety postings, approved waste processes for nitrated materials, and fire protection.

**Area G–Radiological Control:** On Wednesday, a radiological control technician identified contamination on a standard waste box (SWB) that had recently been moved into Dome 153. The SWB originated in the Dome 375 Permacon as part of corrugated metal pipe size reduction operations. Workers had not performed the required radiological surveys upon removing the SWB from the contamination area in the Permacon. The informal communications methods used during shift turnover appear to have been a major contributor to this omission. Facility personnel posted Dome 153 as a contamination area and performed additional surveys of that dome and other SWBs coming from Dome 375. They identified no additional contamination. As an immediate corrective action, radiological control personnel implemented a logbook to track surveys out of the contamination area.

**Emergency Management:** On Thursday, site personnel conducted an emergency preparedness drill at the Emergency Operations Center. The scenario was a lightning induced wildfire starting in Technical Area 14 near a high explosive firing site. Simulated meteorological conditions had the fire traveling north near underground potential release sites on a path leading to eventual collision with the high density of personnel and nuclear facilities in and around Technical Area 55. Key aspects of the drill included evaluating optimum evacuation timing for different parts of the laboratory, coordinating airspace usage for simulated airborne firefighting assets, and evaluating hazards from potential release sites for local and supplemental fire-fighting personnel.

**Weapons Engineering Tritium Facility:** On Tuesday, a valve failed to close during maintenance on a non-safety related air drier system. This led to a brief loss of operability of the safety-significant Tritium Monitoring System. Facility personnel entered the appropriate limiting condition for operation and performed all surveillances to confirm system operability and exit the condition. No personnel were performing tritium operations while the system was inoperable. Safety basis personnel entered the new information process for this event.