

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 18, 2023

TO: Timothy J. Dwyer, Acting Technical Director
FROM: A. Boussouf and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending August 18, 2023

Staff Activity: Y. Li was on site to attend a Probabilistic Seismic Hazard Update workshop.

N3B–Training: Last week, Environmental Remediation personnel discovered discrepancies in the training qualifications for nuclear facility operations, supervisory, and management personnel. Given the indeterminate training status of required personnel, they stopped all field work in Technical Area 21 and the nuclear environmental sites. These qualification issues also apply to Area G where management paused work this Tuesday and then stopped work on Wednesday morning. All waste domes are currently in warm standby with only minimum safe operations authorized. N3B management is working to ensure that Area G has sufficient qualified personnel to meet minimum staffing requirements in the technical safety requirements and that all the nuclear sites have qualified operations management. They are also developing a matrix of personnel versus gaps with position requirements and working to fix training materials to ensure they cover all requirements from the approved qualification standard and the DOE training order.

Plutonium Facility–Radiological Safety: Last Friday, four continuous air monitors (CAM) alarmed in a laboratory room that processes heat source plutonium. Shortly after, CAMs in an adjacent room alarmed. Workers in the first room were not wearing respiratory protection and evacuated per response protocol; no one was present in the second room. The crew had been replacing glovebox spool doors with the new model that eliminates use of the braided wire cables that caused a puncture in 2018 (see 2/8/2019 report). There was no contamination detected on the individuals undergoing bioassay to determine if there was any uptake. The most likely cause of the airborne activity was a release from one of the spool pieces connecting to the dropbox where the workers were installing doors to adjacent gloveboxes. Both rooms are restricted while recovery efforts are in progress. Facility management paused work on all door replacements in the facility wing where the event occurred while corrective actions are developed.

Onsite Transportation: Last Thursday, the NNSA Field Office conditionally approved the latest revision to the Packaging and Transportation Safety Document and Technical Safety Requirements (see 6/2/2023 report). There were two conditions of approval. Both relate to addressing Field Office comments. One requires that specified comments be addressed no later than the 2023 annual update of the documents, and the other that remaining comments be addressed no later than the 2024 annual update with quarterly briefings on closure status.

Transuranic Waste Management–Safety Basis: Triad submitted to the NNSA Field Office for approval revisions to the longstanding evaluations of the safety of the situation (ESS) for potential hazards of nitric acid and anion exchange resin in transuranic waste drums for the Transuranic Waste Facility, the Chemistry and Metallurgy Research Building, and the Plutonium Facility (see 2/5/2021 report). The revisions state that experiments with anion exchange resins demonstrated no potential for rapid drum pressurization; thus, there is no unanalyzed event involving anion exchange resins in waste drums. The revised ESSs therefore request removal of compensatory measures and closure of the potential inadequacy of the safety analysis.