

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 28, 2022

**MEMORANDUM FOR:** Christopher J. Roscetti, Technical Director  
**FROM:** D. Gutowski and J. Plaue, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for Week Ending January 28, 2022

**DNFSB Staff Activity:** J. Flora was on-site to observe activities of the federal Accident Investigation Board. This week, the Accident Investigation Board continued interviews and observed a glove change demonstration in a cold training facility. On Wednesday, the staff held a teleconference with N3B and Environmental Management personnel to discuss the current safety posture of Area G until a modern safety basis is developed and implemented. On Thursday, the staff held a teleconference with NNSA Field Office personnel as part of a complex-wide review of DOE's review and approval of safety basis documents.

**Weapons Engineering Tritium Facility:** Last Friday, an operator incorrectly implemented a procedure for a gas transfer resulting in the rupture of a safety-significant pressure disk. No tritium was released from the system. Facility management took corrective actions with the operator and more broadly to reinforce proper use of the facility control system. Facility management concluded this event does not meet DOE reporting criteria. In the opinion of the resident inspectors, this event meets reporting criteria for the actuation of a safety-significant component because it resulted from the actual unsafe condition of too much pressure in a segment of the line.

**Plutonium Facility–Infrastructure:** Last month, Triad issued the tenth revision of the project execution strategy that guides improvement activities necessary to achieve further reductions of the mitigated consequences from postulated accidents to support enduring operations (see 1/15/2021 report). Achievements for last fiscal year include completion of the design for a facility control system replacement, continued progress on fire barriers, and completion of 13 fire hazard evaluations for gloveboxes. Focus areas for this fiscal year include completing modification to fire barriers and structural upgrades necessary to eliminate seismic equipment interactions for the bleed-off ventilation system.

The resident inspectors' review of the document identified that the schedule slipped for several out-year projects including those focused on the ventilation and fire suppression systems. We also noted the approach for achieving a more robust active confinement ventilation system is to replace aging ventilation fans with new equipment that meets performance category 3 seismic criteria, replace the obsolete facility control system, and install a new diesel electric generator and secondary uninterruptible power supply. Of significance, the resident inspectors note that equipping these fans with safety-class electrical power and controls no longer appears to be planned. The need for DOE to provide clarity on the planned end-state of the ventilation system, the schedule for achieving that end-state, and how the system will be credited in the facility safety basis was the subject of the Board's letter dated November 24, 2021.

**Area G–Safety Basis:** Last Friday, N3B transmitted a revised annual update for the Area G safety basis to the Environmental Management Field Office. The revision is intended to address the field office's condition of approval related to Flanged Tritium Waste Containers (see 12/10/2021 report).

**Federal Oversight:** On Monday, the NNSA Facility Representative for the Transuranic Waste Facility, RANT Shipping Facility, Radioactive Liquid Waste Treatment Facility, and Waste Characterization, Reduction, and Repackaging Facility completed final qualifications following a walkdown of the Transuranic Waste Facility with the NNSA Field Office Manager.