

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 13, 2022

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: A. Boussouf, D. Gutowski and J. Plaue, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending May 13, 2022

DNFSB Staff Activity: A. Boussouf commenced duties as the third resident inspector assigned to LANL

Wildland Fire: The Cerro Pelado wildfire remains active west of the laboratory and grew to more than 45,000 acres. Spread in the direction of the laboratory has been relatively slow over the past week. Last weekend, the fire crossed the decision point for the laboratory to move to a maximum telework posture, which became effective Monday morning. The Emergency Operations Center also moved from monitoring mode to a partial activation.

Radiological Laboratory Utility Office Building (RLUOB)/PF-400: A federal team completed an operational readiness review for the upgrade of RLUOB to a hazard category 3 nuclear facility. On Wednesday, they briefed NA-LA Field Office and Triad personnel on the initial findings. They presented eight findings for Triad and two for the Field Office. Notable findings for Triad include: the issues management system does not effectively resolve moderate and high significance issues, the fire protection program has not been effectively implemented to address some elements for a hazard category 3 facility, and the maintenance program does not currently meet the requirements for a hazard category 3 facility. The findings for the field office were that they do not have a baseline oversight plan for the facility and that they do not have sufficient qualified oversight staff to support the transition to hazard category 3 operations.

Plutonium Facility–Infrastructure: Last weekend, the NNSA Field Office conditionally approved a longstanding LANL contractor exemption request from 2015 regarding areas underneath gloveboxes that cannot receive coverage from the automatic fire suppression sprinklers mounted on the ceiling contrary to standards required by DOE Order 420.1C, *Facility Safety*. LANL proposed placing fencing around new or modified gloveboxes to eliminate the common practice of placing combustibles under the gloveboxes. We note that this fencing is highly effective, but Triad has no plans to expand installation to the large number of existing gloveboxes. To compensate, one of NNSA's conditions of approval included improving a number of elements of the transient combustible loading program, including developing a process to evaluate combustibles underneath gloveboxes.

On Tuesday, Triad personnel briefed NNSA headquarters on the Plutonium Facility Seismic Performance Reassessment Project (see 12/17/2021 report). NNSA accepted Triad's proposed alternative to fully document and peer review the interim risk results while placing the full seismic performance reassessment on hold until the updated probabilistic seismic hazards assessment is completed, which is currently anticipated in 2025. The interim risk results currently show performance for all limit states governed by horizontal motions are well below the target performance goals. Mean performance for limit states driven by vertical ground motion are below the target performance goals. However, in some conservative sensitivity studies, limit states driven by vertical ground motion approach and exceed the target performance goals.

Transuranic Waste Management: Last Friday, the NNSA Field Office directed Triad to develop a safety design strategy and address elements of DOE-STD-1189-2016, *Integration of Safety into the Design Process*, for its plan to develop a new safety basis supporting size reduction and limited waste container remediation activities at the Waste Characterization, Reduction, and Repackaging Facility operated as a hazard category 3 nuclear facility (see 4/15/2022 report).