

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 10, 2020

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending January 10, 2020

Federal Oversight: On Monday, Mr. Michael Weis became the manager of the NNSA Field Office. He briefed his 30-60-90 day plan to understand, evaluate, and optimize field office operations.

Plutonium Facility–Infrastructure: Last month, Triad issued the annual update for the TA-55 Project Execution Strategy (see 1/4/2019 report). Overall, Triad’s projections to achieve the desired end-states for the ventilation and fire suppression systems remain in fiscal years 2025 and 2026, respectively. Key accomplishments for fiscal year 2019 include:

- Completion of seismic evaluations for the electrical distribution and instrument air systems
- Commenced Phase I testing of column capitals at the University of Nevada, Reno
- Completed seismic analyses for six clusters of gloveboxes
- Resolved seismic interaction issues with the fire suppression system (see 9/27/2019 report)

The recommended scope for work in fiscal year 2020 includes:

- Remediating ventilation penetrations with approved firestop systems
- Commissioning the diesel generators and accoutrements supporting the electric firewater pumps
- Continuing column capital testing
- Evaluating additional supports needed to bring the fire suppression system to seismic design category 3, limit state C

Area G: On Tuesday, N3B management declared a potential inadequacy of the safety analysis after identifying a discrepancy between the waste container array aisle spacing described in the approved safety basis and the as-found configuration of the facility. Specifically, the safety basis states that aisle spacing is 36 inches due to regulatory requirements, which a supporting fire protection calculation conservatively treats as 28 inches. However, the actual regulatory requirement and facility practice is 24 inches. Safety basis personnel determined that the decreased spacing results in an increased number of waste containers that could be impacted by a potential fuel pool fire. Their preliminary calculations indicate increased mitigated doses to the public and the collocated worker, but these increases do not exceed any DOE criteria. As a result, facility management concluded that no compensatory measures were needed, but identified corrective actions to evaluate the extent of this condition in the command media and other safety basis calculations.

Transuranic Waste Management: This week, Triad personnel completed their first two shipments since early October 2019 from the RANT Shipping Facility to the Waste Isolation Pilot Plant (WIPP). Shipments had been impacted by container movement issues, concerns about pyrophoric materials, and an equipment issue at WIPP. They plan to execute two shipments each week until the annual WIPP maintenance outage in mid-February. Following the outage, they are exploring increasing the shipping cadence to three shipments per week if it can be sustained by the rate of container certification. N3B also has not shipped since October 2019 and is not currently included on the WIPP shipping schedule. They have a certified container population sufficient for about 50 shipments and continue to work with Triad to resolve integration processes to support co-mingled shipping operations at RANT.