

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 22, 2022

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: D. Gutowski and J. Plaue, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending April 22, 2022

DNFSB Activity: On Wednesday, the Board members received a briefing from Triad and NNSA Field Office personnel on their actions to improve the safety of transuranic waste operations. This updated DOE's response dated March 30, 2021, to DNFSB-TECH-46, *Potential Energetic Chemical Reaction Events Involving Transuranic Waste at Los Alamos National Laboratory*, with information regarding corrective actions from the titanium sparking event and other current initiatives for chemical compatibility evaluations for transuranic waste.

On Tuesday, members of the Board's staff conducted a closeout teleconference with NNSA Field Office and Triad personnel to discuss the results of the staff's review of the receipt and repackaging of large amounts of heat source plutonium at the Plutonium Facility (see 3/25/2022 report).

Plutonium Facility–Accident Investigation: On Tuesday, the Federal Accident Investigation Board briefed the NNSA Field Office on the results of its investigation into the contamination spread and potential uptake of radioactive material by a worker in January (see 1/21/2022 report). The final investigation report will be issued following a briefing to the NNSA Administrator.

Plutonium Facility–Conduct of Operations: A worker manipulated a valve and inadvertently drained the negative pressure chilled water system. This was in the same room where the wet vacuum system overflowed from a valving error last year and the performance errors were similar (see 7/23/2021 report). Facility management has directed that work activities in the pump room will be overseen by a senior supervisory watch as a corrective action. The chilled water system cannot be refilled and used until the justification for continued operations related to last year's overflow event is implemented, which is expected next week (see 3/11/2022 report).

Readiness: Triad and N3B are entering a period of increased readiness activities, including:

- A federal operational readiness review for the startup of PF-400, planned to commence in May. This is the upgrade of the Radiological Laboratory Utility Office Building to a hazard category 3 nuclear facility.
- A federal readiness review to support startup of plutonium coupon experiments in the Weapons Engineering Tritium Facility, planned for the summer.
- A federal readiness review to support restart of aqueous nitrate operations in the Plutonium Facility, planned for the fall.
- A contractor readiness assessment for corrugated metal pipe retrieval and federal readiness assessments for size reduction of the corrugated metal pipes and venting of the Flanged Tritium Waste Containers at Area G, all planned for the summer.