

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 29, 2023

TO: Katherine R. Herrera, Acting Technical Director
FROM: D. Gutowski, Resident Inspector
SUBJECT: Los Alamos Activity Report for the Week Ending December 29, 2023

Year in Review: A summary of the key developments of 2023.

- A parallel federal and contractor readiness review took place to support the receipt and repackaging of large quantities of heat source plutonium in the Plutonium Facility. These reviews discovered discrepancies in the safety basis and emergency hazards planning assessment regarding the total amount of material at risk allowed. NNSA headquarters is evaluating a revised safety basis addendum that includes a higher amount of material.
- Triad continued to make upgrades at the Plutonium Facility. Major accomplishments this year included the commissioning of two new safety-class diesel fire pumps, commencement of the project to provide a separate fire water supply to non-seismically qualified buildings adjacent to the Plutonium Facility, and replacement of aging air compressors to support the safety-significant instrument air system.
- N3B identified a programmatic breakdown in their training program and instituted a stop work at Area G and Technical Area 21. Senior management has individually released the vast majority of individual work activities, but the training stop work remains in place.
- Corrugated metal pipe size reduction at Area G went through contractor and federal readiness assessments and commenced operations.
- N3B developed and the Environmental Management field office approved a new site-specific atmospheric dispersion protocol to support development of a safety basis compliant with the most current DOE standards for Area G. Triad has also developed an atmospheric dispersion protocol to support a modern safety basis for the Plutonium Facility. The NNSA Field Office is still reviewing Triad's proposed approach and has requested several modifications.
- The Radiological Laboratory Utility Office Building completed the transition to a Hazard Category 3 nuclear facility known as PF-400.
- Preparations to restart the Waste Characterization, Reduction, and Repacking Facility as a hazard category 3 nuclear facility continue. Workers have started entries into the highly contaminated glovebox enclosure to prepare it for future missions. The NNSA Field Office conditionally approved the new hazard category 3 safety basis. Readiness activities are planned for next year.
- DOE's Criticality Safety Support Group performed an assist visit in response to the NNSA Field Office's request to review Triad's criticality safety program. Triad has restructured its criticality safety division under new leadership in response to recommendations from the review.
- The Flanged Tritium Waste Containers stored at Area G are still awaiting venting. Updated pressure calculations and standoff distances have been developed to account for the steadily increasing internal pressures. These will be used to revise the safety basis addenda that will support venting.