

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 14, 2025

TO: Technical Director
FROM: Los Alamos Site Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending February 14, 2025

Plutonium Facility–Fire Protection: On Wednesday, a resident inspector visited the PF-11 pumphouse with a Triad engineering manager to observe the newly repaired safety-class diesel fire pump that supports the Plutonium Facility (see 12/6/2024 report). Two weeks ago, the pump vendor successfully rebuilt the impeller assembly for the pump. The pump is back in service following acceptance testing.

Emergency Management: On Wednesday, multiple site and Los Alamos County organizations conducted a tabletop emergency preparedness exercise, which included activation of the Emergency Operations Center. The scenario involved a wildfire starting on the south side of East Jemez Road near Technical Area 53 (TA-53), home of the Los Alamos Neutron Science Center. The simulated weather conditions were appropriate for May, featuring high winds and low humidity. The fire spread rapidly into TA-53, impacting its only evacuation route. Drill participants, therefore, proposed the alternative protective action of sheltering in place in structures with sprinkler systems, located on the far end of TA-53 from the fire.

Safety Basis: On Tuesday, Triad sent a letter to the NNSA Field Office providing revised milestones for updating site safety basis documents to reflect the most current standards: DOE-STD-3009-2014 for hazard category (HC) 2 facilities and DOE-STD-1228-2019 for HC-3 facilities. The NNSA Field Office initially directed the contractor to develop a strategy to perform these updates for HC-2 facilities in 2018 (See 2/23/2018 report). A DNFSB letter to the DOE, dated December 6, 2024, indicated that many NNSA sites had not updated their safety basis documents to DOE-STD-3009-2014. The Triad update letter states there are eight safety bases are expected to meet the new standards. For the five HC-2 facilities, Triad reported two safety basis updates are in progress and due for submission to the NNSA field office by the end of September 2025. Safety basis updates to two HC-2 facilities have not started and are at least three years out, while one HC-2 safety basis will not be revised due to its status as a “non-enduring facility.” For the three HC-3 facilities, Triad reported that two safety bases comply with the most current standard, while one for a new facility is in progress.

PF-400–Safety Basis: Last Thursday, Triad transmitted to the field office for concurrence a safety basis strategy proposing removal of the sum-of-fractions approach to material-at-risk calculations in the PF-400 safety basis. The intent of this change is to simplify compliance with the safety basis. The hazard analysis will be updated to reflect the consequences of considering all material at risk as a more dispersible form.

Area G–Safety Basis: Last Friday, the DOE Environmental Management Field Office (EM-LA) approved an extension request for the current Justification for Continued Operations that applies to Area G. N3B requested these extensions to support a delay in implementing the new documented safety analysis for Area G, in order to support the venting of flanged tritium waste containers stored on site (see 1/10/2025 report). EM-LA approved an extension to October 6, 2025, which complements the requirement for N3B to implement the new DSA for Area G by September 30, 2025.