

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 24, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: D. Gutowski, Resident Inspector
SUBJECT: Los Alamos Activity Report for Week Ending December 24, 2021

Plutonium Facility–Safety Basis: The NNSA Field Office responded to Triad’s latest revision of the Evaluation of the Safety of the Situation (ESS) for overpressurization of sealed sources in the Plutonium Facility (see 11/5/2021 report). They noted that they will not approve the ESS until provided comments are addressed. Notable comments from the field office included: concern with the application of multiplication factors to material release events, and several related to reliance on combustible loading controls from the fire protection program.

Last week, NNSA Office of Safety and Field Office personnel informally provided Triad with initial comments on the safety basis addendum supporting the receipt of large shipments of heat source plutonium (see 12/3/2021 report). Topics include: the consistency of the safety basis document with the specifications and test report for the containment vessel; compliance with DOE-STD-3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*; and interface with the ESS discussed above. NNSA requested to discuss these comments with Triad early next year.

Radiological Laboratory Utility Office Building (RLUOB)/PF-400: Triad submitted to the NNSA Field Office for approval a revision to the hazard category 3 safety basis for PF-400 and a revised safety design strategy. The revised safety basis is intended to address issues from the recent Implementation Verification Review (see 9/3/2021 report).

Chemistry and Metallurgy Research Building (CMR): Last week, a radiological control technician discovered contamination in a radiologically uncontrolled area of CMR during a routine survey. They controlled the location and contacted personnel who may have walked through the area. They cleaned the area and verified that there was no further contamination spread. Analysis of the contamination found that it was americium-241 which was not an expected isotope for that portion of the facility. Facility personnel are attempting to determine the provenance of the contamination and are evaluating their routine survey requirements for uncontrolled areas. The evaluation will also be informed by the shift in activities in some wings to more invasive deactivation and decommissioning. This contamination was discovered outside of a wing undergoing equipment removal.

Federal Oversight: NNSA Field Office staff showed the resident inspector some of the current capabilities for using the Safety, Analytics, Forecasting, Evaluation, and Reporting (SAFER) software tool for facility oversight (see 12/17/2021 report). Available information varies widely by module as the system is still being built and populated with relevant data.