

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 11, 2022

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: D. Gutowski and J. Plaue, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending February 11, 2022

Weapons Engineering Tritium Facility: On Tuesday, the tritium stack monitor alarmed resulting in a facility evacuation in accordance with procedure. At the time, no programmatic activities were in progress and only three individuals were in the facility. Personnel in the area reported to designated shelter-in-place locations and facility command obtained positive accountability. Monitors showed no evidence of an ongoing tritium release either inside or outside of the facility. Further analysis of the stack monitor data concluded the event released a small quantity of tritium (approximately 0.1 curie). Facility personnel are investigating the cause of the release. Facility and emergency management personnel conducted a hotwash to evaluate their response to the event and develop improvements. Key items discussed during the hotwash included: two individuals responded to the event scene before it had been cleared for safety; the need to revisit the appropriate setpoint for facility evacuation due to a stack monitor alarm; and alarm panel communications with the Emergency Operations Support Center.

Transuranic Waste Management: Earlier this month, Triad received approval from the Carlsbad Field Office to resume packaging and shipping transuranic waste originating from gloveboxes with inert or semi-inert atmospheres. The approval is predicated on completing the corrective actions from the titanium event (see 5/14/2021 report), continued use of a compensatory measure to ensure such waste is opened and observed in an air environment, and committing to the near-term completion of a Generator Site Technical Review. Key remaining corrective actions include: developing a plan and schedule to implement chemical compatibility evaluations for evaluation against the safety basis; revising a requirements document to adjust terminology, ensure integration, and incorporate lessons learned; and revise waste management training.

Plutonium Facility–Safety Basis: Last Friday, Triad submitted to the NNSA Field Office for approval a revised version of the combined justification for continued operations/evaluation of the safety of the situation pertaining to the potential inadequacy of the safety analysis resulting from the July 2021 overflow event. The revision is intended to address NNSA’s comments on topics such as clarifying the requirements for the water filling specific administrative control and ensuring that control level designations are consistent with the consequences in the hazard evaluation (see 1/14/2022 report).

Last week, the NNSA Field Office formally transmitted to Triad the review comments on the safety basis addendum supporting receipt of large shipments of heat source plutonium (see 12/24/2021 report). They directed that Triad revise the safety basis addendum to incorporate changes resulting from comment resolution.

Onsite Transportation: Triad submitted to the NNSA Field Office for approval a revision to the technical safety requirements for onsite transportation that incorporates an increase in the limit for heat source plutonium in a package from 10 grams to 25 grams which was previously approved through an evaluation of the safety of the situation and a safety basis addendum.