DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 12, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: J.W. Plaue and D. Gutowski, Resident Inspectors

SUBJECT: Los Alamos Activity Report for Week Ending February 12, 2021

DNFSB Staff Activity: On Wednesday, members of the Board's staff conducted a web conference with Triad and NNSA Field Office personnel to discuss the combustible trailer formerly parked adjacent to an outside transuranic waste storage pad at the Plutonium Facility (see 12/18/2020 report).

Area G–Safety Basis: Last Friday, the EM Field Office approved the evaluation of the safety of the situation (ESS) concerning the use of a spatula-like tool during headspace gas sampling (see 9/11/2020 report). N3B intends to submit a justification for continued operations within 30 days, which is necessary to restore gas sampling operations that have been impacted since January 2020. Last week, N3B operations management implemented a standing order that consolidated compensatory actions associated with 16 ESSs from the safety basis issues identified last year (see 1/8/2021 report). The extent-of-condition review on the existing safety basis continues.

Transuranic Waste Management: N3B personnel continue their extent-of-condition review of the waste container population concerning DNFSB/TECH-46. Recently, they identified four containers with ion exchange resins and seven containers with unknown absorbents—all were treated as containing potentially incompatible chemicals consistent with the recently submitted ESS and moved into the Dome 375 PermaCon (see 1/22/2021 report).

On Wednesday, Triad personnel transported a shipment of 28 containers of cemented transuranic waste to Area G. N3B and Central Characterization Program personnel will conduct non-destructive examination activities on these containers for Triad. Currently, Triad relies exclusively on visual examination to fulfill the non-destructive examination requirements and does not possess radiography capability appropriate for cemented waste forms or standard waste boxes. This is the first instance that Triad has exercised the service agreement with N3B to send newly generated wastes to Area G for storage or services.

Onsite Transportation: Last Thursday, the NNSA Field Office conditionally approved Triad's ESS for the shipment of pyrophoric materials not being addressed in the onsite Transportation Safety Document (see 9/18/2020 report). The ESS states that shippers will attempt to validate that shipments labeled 'solid metal' of less than 50 grams are actually solid metal rather than potentially pyrophoric turnings. If they are unable to conclusively determine that the shipment does not contain potentially pyrophoric material, it will not be shipped without further evaluation. The ESS also states that pipe overpack containers may be used to transport potentially pyrophoric metals with masses less than 50 grams. As a condition of approval, the field office noted that there is no documented basis demonstrating the adequacy of a pipe overpack to contain such material and therefore prohibited transport until a basis is approved. The Transportation Safety Document will be updated in the future to allow transportation of pyrophoric materials when contained in Type B equivalent packages.