DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 11, 2020

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

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

SUBJECT: Los Alamos Activity Report for Week Ending December 11, 2020

Transuranic Waste Management: Last Thursday, N3B management declared a potential inadequacy of the safety analysis (PISA) based on a review of information contained in DNFSB/TECH-46, Potential Energetic Chemical Reaction Events Involving Transuranic Waste at LANL, issued on September 24, 2020. The PISA notes that the Area G safety basis does not explicitly evaluate a transuranic waste container with unreacted incompatible chemicals or one for which the contents are unknown. Further, such an analysis would need to reflect higher energy events that could impact the magnitude of the release and resulting radiological consequences. In late September, N3B personnel completed an initial review of the aboveground inventory based on information in TECH-46. They took action to overpack containers and place them in the Dome 375 Perma-Con—a location that includes non-credited confinement ventilation, fire suppression, and continuous air monitoring. N3B personnel continue an extent of condition review of the inventory to identify other containers of concern and are developing a shift order to communicate storage and management controls for other containers with the potential for incompatible materials. Triad personnel continue to work through their New Information process concerning TECH-46 implications (see 12/7/2020 report).

Area G–Readiness: Three members of the contractor readiness assessment team evaluating Glovebag and Drill & Drain operations in the Dome 231 Perma-Con returned to complete their review (see 11/27/2020 report). A presumptive COVID case and related self-isolations paused field operations during the first phase of the review. The presumptive individual received a negative test clearing personnel to return to duty. N3B rescheduled an additional operational demonstration and an emergency drill for this week. The team's second out-brief to N3B on Tuesday noted that the additional observations this week did not result in any new findings or changes to those outlined in the interim out-brief two weeks ago. A federal readiness assessment will follow next year.

Radiological Laboratory Utility Office Building (RLUOB): On Monday, the NNSA Field Office transmitted a letter to Triad directing several actions to be taken as part of the transition of RLUOB to a hazard category 3 nuclear facility to be known as PF-400. The letter notes that there are ambiguities in the code of record for RLUOB supporting the transition to a nuclear facility. Therefore, NNSA directed Triad to develop a plan within 30 days to complete specific actions to address this situation including updating their list of applicable codes and evaluating gaps between current codes and previous codes used for the facility's construction. The Board noted a similar concern in a letter to the Secretary of Energy dated December 8, 2020.

Waste Characterization Reduction and Repackaging Facility: Last Thursday, the NNSA Field Office approved a safety basis addendum to support characterization and removal of a drum of unconfirmed contents in the facility (see 1/18/2019 report). The addendum requires the use of a webbing-type lid restraint during handling of the open overpacked drum until flammable gas measurements demonstrate that deflagration is no longer a concern.