DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 12, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: D. Gutowski, Resident Inspector

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

Transuranic Waste Management–Safety Basis: On Tuesday, Triad personnel entered their new information process to re-evaluate the safety basis implications of transuranic waste containers with nitric acid and polysaccharides at the Plutonium Facility, the Transuranic Waste Facility (TWF), the Chemistry and Metallurgy Research Building (CMR), and the RANT Shipping Facility. This was in response to the Board's September 8, 2021 letter regarding the technical basis for the Carlsbad Field Office accepting such waste at the Waste Isolation Pilot Plant. They had concluded that such mixtures were acceptable and no longer a reactivity hazard if they have been aged for a sufficient amount of time. Triad has previously evaluated this issue and is re-evaluating it in light of the Board's letter. Triad currently has specific administrative controls at CMR and the Plutonium Facility that prohibit waste containers from containing polysaccharides and greater than 12 molar nitric acid. The Radiological Laboratory Utility Office Building also includes such a prohibition in its safety basis to support future Hazard Category 3 operations. TWF and RANT have broader specific administrative controls prohibiting them from receiving potentially reactive waste drums as defined in the waste acceptance criteria for the Waste Isolation Pilot Plant.

Plutonium Facility—Operations: Last week one of the trolley cables failed in the Plutonium Facility. The trolleys are a critical piece of infrastructure that support movement of materials between gloveboxes and rooms without the need for bagging materials out. Facility personnel were testing the system following an upgrade to the trolley controller. After raising the bucket, the cable snapped, and the bucket fell to the floor of the drop box. There were no injuries or damage to glovebox gloves as no workers had their hands in the box, and all glovebox gloves were secured outside. Initial inspections indicated no damage to the glovebox. The trolley bucket is damaged, although it is not currently known whether this is from the fall. Facility personnel are evaluating the failure mechanism and planning for replacement of the failed components.

Radiological Laboratory Utility Office Building (RLUOB): On Monday, an eighteenmember team including several independent personnel from non-Triad organizations commenced the Management Self-Assessment for upgrading RLUOB to a Hazard Category 3 nuclear facility to be known as PF-400. The team expects to issue their final report in December. Following completion of this self-assessment, there will be additional readiness reviews including a contractor operational readiness review currently planned for late February 2022 and a Federal operational readiness review in early May 2022 to support a late June upgrade to Hazard Category 3.