

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 9, 2019

**MEMORANDUM FOR:** Christopher J. Roscetti, Technical Director  
**FROM:** J.W. Plaue and D. Gutowski, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for Week Ending August 9, 2019

**Transuranic Waste Management–Safety Basis:** On Tuesday, the LANL Central Characterization Program (CCP) issued Triad and N3B new non-conformance reports related to transuranic waste containers that failed to meet the Basis of Knowledge (BoK) requirements associated with the waste acceptance criteria for the Waste Isolation Pilot Plant (see 7/26/2019 report). This means that WIPP will refuse to receive the containers because their contents may be susceptible to exothermic chemical reactions and propagating fires. Triad and N3B will need to either provide additional information to substantiate compliance with the BoK or perform treatment to eliminate the hazard. These reports bring the number of containers that are currently non-compliant with the BoK to 24 stored within the fabric domes at Area G and 4 stored on the outdoor waste pads at the Plutonium Facility. The non-conformances challenge various aspects of the BoK. For example, CCP rejected the containers on the outdoor pads because the information Triad provided indicated that an unknown liquid was absorbed by an engineered organic polymer sorbent in an unknown ratio and therefore compliance with the BoK could not be demonstrated. Triad waste management personnel have since submitted to CCP further information regarding the nature of the liquids that they gathered during interviews with two workers involved in generating these waste containers in 2015. CCP is evaluating this information.

**TA-21 Environmental Remediation:** During potholing activities to locate utility lines in TA-21, N3B and subcontractor personnel encountered soil contamination adjacent to an industrial waste line. Radiological control technicians (RCT) who were present with the work team paused the activity and found contamination on the line, excavated soil, and the workers tools. There was no worker contamination and the work area is currently in a safe configuration. Discovering contamination is anticipated during this type of activity, and continuous RCT coverage is a corrective action from a January 2019 potholing job in the same area when workers uncovered an industrial waste line and backfilled it before RCTs could survey it. N3B management is evaluating the clarity of the command media for potholing tasks to ensure that all relevant requirements are included without ambiguity.

**TA-35 Nuclear Criticality Safety:** On Tuesday, Triad management lifted the pause on fissile material operations at TA-35-002 and TA-35-027 following re-evaluation of the criticality safety evaluations (see 7/5/2019 report). The re-evaluation concluded that the original control set is conservative.

**Plutonium Facility–Radiological Safety:** On Tuesday, a hand and foot monitor at the exit of the Plutonium Facility detected contamination on a workers hand. The worker had been performing assembly operations and had cleared a full body survey and a hand and foot monitor at the room exit. RCTs responded and successfully decontaminated the individual. Follow-up surveys found no contamination spread in the work area and none of the other approximately 40 workers in the same room had any contamination detected. In response to this discovery, facility management plans to reinforce training and expectations for doffing of protective equipment.