

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 14, 2018

**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 14, 2018

**DNFSB Staff Activity:** Staff members J. Anderson, Z. Beauvais, C. Berg, M. McCoy, and P. Migliorini were at the laboratory to review weapons response basis information in support of safe operations at the Pantex Plant.

**Area G:** N3B personnel completed a mobile loading shipment of one HALFPACT and two TRUPACT-II containers to the Waste Isolation Pilot Plant (WIPP). The shipment contained cemented waste overpacked in standard waste boxes. Prior to the shipment, Central Characterization Project personnel noted a discrepancy in the databases at WIPP and LANL between the coding of inner drums compared to their overpacks. All drums in this week's shipment were re-verified to meet requirements. Vehicle operations, including mobile loading, continue to use the designated alternative vehicle route as the safety-class vehicle barriers remain inoperable (see 11/16/2018 report). N3B personnel completed the design and work package for returning the vehicle barriers to service; however, their attempt this week to begin the repairs was thwarted when a necessary tool was not available.

**Plutonium Facility–Work Control:** Last week, a four-person work crew was found to have contamination on their booties after two members of the crew alarmed the hand and foot monitors at the facility exit. There was no skin contamination. The crew had been investigating a potentially degraded glovebox spool piece in a plutonium-238 processing room. Another worker not involved with the job was also found to have contaminated booties. The work crew had been wearing respirators and two pairs of anti-contamination clothing in the work area. When departing the work area, they doffed their outer coveralls and surveyed, but did not remove, their outer booties. Follow-up surveys discovered a contamination spread in the room, which is being decontaminated. No airborne radioactivity related to this contamination spread was detected. The spool piece currently has a temporary confinement barrier installed while engineers evaluate options for a longer-term replacement.

**Readiness:** On Wednesday, Triad personnel executed their process to determine the appropriate level of readiness review for two new activities. They determined that resumption of a pinch welding operation at the Weapons Engineering Tritium Facility requires contractor and federal readiness assessments. They determined that a new pit cutter in the Plutonium Facility, which will use a cutting tool similar to a pizza wheel, constituted an expansion of an existing capability and does not require a formal readiness review. The team considered the new operation to be similar to an existing robotic lathe.

**Chemistry and Metallurgy Research Building:** Last Thursday, the NNSA Field Office approved a temporary modification to the safety basis in support of the next phase of processing activities associated with americium-241 materials received from an off-site location (see 5/25/2018 report).

**Transuranic Waste Facility:** Last month, Triad management sent the NNSA Field Office an update to the project execution schedule in support of reclassifying the fire suppression system to safety significant. The schedule indicates that the system will be implemented by April 30, 2019.