

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 1, 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 February 1, 2019

**Plutonium Facility–Infrastructure:** A water main leak on Tuesday morning caused a potable water loss to most of Technical Areas 35, 50, and 55, including the Plutonium Facility. Fire suppression water for the Plutonium Facility was not impacted since it is supplied from dedicated storage tanks adjacent to the facility. However, facility management curtailed operations at the Plutonium Facility and the Radioactive Liquid Waste Treatment Facility due to the lack of water for safety showers, eye washes, and decontamination. Utilities personnel restored water service Tuesday evening.

**Plutonium Facility–Worker Safety:** Last Tuesday, two electricians were inadvertently locked inside a caged storage location for approximately 40 minutes. During this time, the workers would have been unable to properly respond to alarms associated with a nuclear criticality, an airborne radioactive material release, fire, or other emergency situations requiring egress. Triad management held two fact-findings to review this event and determine corrective actions, which include: conducting a pre-job briefing that integrates overlapping functions when multiple work groups are involved, conducting an extent-of-condition review of other locations that may need modifications for life safety egress, and examining use of a lock-out/tag-out process for entry into these types of areas.

**Plutonium Facility–Safety Basis:** On Wednesday, facility management entered the New Information (NI) process to determine whether the hazards analysis considers failures of the freight elevator and a programmatic dumbwaiter while transporting material-at-risk.

**Plutonium Facility–Radiological Control:** On Monday, facility management conducted a fact-finding after a worker's bootie was found to be contaminated during self-monitoring at the facility exit. Participants discussed potential improvements to the control of hot job exclusion areas (see 12/14/2018 and 9/1/2017 reports). Separately, management is considering options to strengthen monitoring of known contamination areas, including a room with a wall of legacy gloveboxes previously used for plutonium-238 operations but unused for at least the last 20 years, the room where the significant contamination event occurred in 2017, and the area of the basement that was subjected to flooding late last year.

**Plutonium Facility–Readiness:** A nine member NNSA team performed a readiness review for restart of the Uranium Electrolytic Decontamination process.

**Area G:** On Tuesday, N3B management declared a violation of the Technical Safety Requirements following discovery of a prohibited vehicle outside of the designated travel route in place until the safety-class vehicle barriers are restored (see 11/16/2018 report). On Monday, N3B entered their NI process to evaluate the apparent discrepancies in the safety basis between material-at-risk assumptions for the overall waste inventory and those used for individual accident scenarios.

**Transuranic Waste Facility:** This week, facility management entered the NI process for two separate apparent discrepancies: (1) material-at-risk assumptions for sealed-sources and (2) dimensions and thicknesses for fire-rated safes.