

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 30, 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 November 30, 2018

**Area G:** On Monday, N3B personnel discovered that personnel maintaining the minimum staffing requirements per the Technical Safety Requirements had expired for a required qualification on lockout/tagout training. Facility management promptly placed all designated areas into warm standby and obtained the required training for personnel. They later declared a violation of the Technical Safety Requirements and completed an extent-of-condition review. The list of qualified individuals was incorrectly tracking this requirement based on information provided by LANS that subsequently changed following transition. N3B continues to explore acquiring a comprehensive learning management system as there have been other instances of issues associated with the list of qualified individuals.

Once the appropriate personnel were verified to be appropriately qualified, N3B completed a mobile loading shipment that included eight drums of cemented waste and five drums from the offsite source recovery program. Vehicles involved in the shipment used the designated vehicle route as the safety class vehicle barriers remain inoperable (see 11/16/2018 report).

**Plutonium Facility–Nuclear Criticality Safety:** On Monday evening a faucet malfunctioned in the same restroom as the water overflow event from this past March (see 3/16/2018 report). Similar to the first event, the water flowed from the mezzanine to the first floor and then further on to the basement. The water flow resulted in some ponding, in part due to the fact that a sump pump was de-energized because of concurrent breaker maintenance. Given the recurrence of this event, Triad management plans to conduct a fact-finding next week to better understand the extent of this condition and its implications for assumptions in nuclear criticality safety evaluations.

**Emergency Management:** On Tuesday, the NNSA Field Office, after consultation with NNSA Headquarters, concurred with a proposal from the previous laboratory contractor to use the Computer Assisted Protective Action Recommendation System (CAPARS). This software will be used for improved analysis in support of Emergency Planning Hazard Assessments (EPHA). CAPARS uses a three-dimensional Lagrangian model that includes site specific terrain and weather data that is expected to improve accuracy compared to the existing analysis software packages that use a simple Gaussian model. LANL is the first site in the DOE complex to use CAPARS for emergency planning. Triad intends to complete updating all of the EPHAs using CAPARS by the end of fiscal year 2020.

**Weapons Engineering Tritium Facility–Safety Basis:** On Wednesday, the NNSA Field Office unconditionally approved the safety basis addendum to vent the Flanged Tritium Waste Containers (see 11/23/18 report).

**Fire Protection:** On Thursday, the NNSA Field Office approved the 2018 Baseline Needs Assessment. In their approval, NNSA noted that increasing minimum staffing at the fire department and replacing two fire stations are key issues to be addressed through negotiations between NNSA and the Los Alamos County Fire Department.