

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 13, 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 December 13, 2019

**Plutonium Facility–Readiness:** Last Friday, Triad management requested NNSA Field Office approval on a proposal to maintain operational readiness of the TA-55 Mobile Loading Unit (MLU). Triad personnel last operated the MLU in October 2018 and would ordinarily be required to conduct a readiness review prior to restarting nuclear operations in accordance with DOE Order 425.1D. However, Triad is proposing to credit the ongoing loading operations at the RANT Shipping Facility for operational proficiency of MLU. Their argument is that the same personnel perform both activities using similar procedures. The primary difference is that MLU operations involve the use of a mobile crane that is operated by workers that do not work at RANT. Triad also proposed establishing a Senior Supervisory Watch for future MLU operations. The NNSA Field Office is reviewing the proposal.

On Wednesday, Triad convened their Joint Evaluation Team to evaluate a proposal to consider a new, one-time shipping cask loading activity as an expansion of MLU operations. The two operations are inherently similar; however, Triad expects to submit a safety basis addendum for the new casks as there are differences with the materials being loaded, the location for the loading, the shipping container and trailer, and the work crew associated with the shipping container. The team concluded that the activity qualified as an expansion of an existing capability and as such does not require a readiness review—pending approval of the proposal discussed above. Of note, neither DOE Order 425.1D nor the associated DOE-STD-3006 provide explicit guidance related to the definition of an expansion of an existing capability, which has previously created confusion at LANL (see 8/31/2018 and 5/5/2017 reports).

**Plutonium Facility–Safety Systems:** On Sunday, facility operations personnel detected an apparent fault condition with the safety-significant Criticality Incident Detection and Alarm System and entered the limiting condition for operation by placing the facility into Mode 2—Standby. At the time, no work was underway. On Monday, vendor support personnel replaced a power supply and the facility resumed operations that evening. Facility management determined that since the fault was with a power supply that did not have credited functionality, their retrospective view was that the system was never degraded. As a result, facility management concluded this event did not meet any of the criteria for internal institutional or external reporting.

**Flanged Tritium Waste Containers (FTWC):** On Tuesday, the EM Field Office, with concurrence from the NNSA Field Office unconditionally approved the safety basis addendum that allows venting and handling of the four FTWCs. Credited controls to reduce the risk to workers from a FTWC deflagration include two design features, the FTWC and a relief valve orifice, as well five specific administrative controls.

On Thursday, personnel at the Weapons Engineering Tritium Facility (WETF) held their quarterly emergency drill. The scenario was an explosion of a FTWC from Area G upon arrival at WETF. The explosion injured a worker and caused a release of tritium. The coached training drill will be used for further development of processes to handle FTWCs from Area G at WETF.