

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 21, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending July 21, 2017

Plutonium Facility–Transuranic (TRU) Waste Operations: On Thursday, a Federal Readiness Assessment team briefed the results of their review of Plutonium Facility readiness to perform mobile loading of TRUPACT II waste containers for offsite shipment to the Waste Isolation Pilot Plant. The team concluded that operators adequately demonstrated their ability to start this new activity and identified one post-start finding relating to the Plutonium Facility’s Unreviewed Safety Question process. Last Friday, the NNSA Field Office Manager approved a temporary modification to the Plutonium Facility safety basis that rescinds previous direction excluding pipe overpack containers from the mobile loading activity (see 6/2/17 weekly). The approval letter notes that allowing POCs in mobile loading activities is essential to ongoing Plutonium Facility material-at-risk reduction efforts.

Transuranic Waste Facility (TWF): On Thursday, LANL transmitted to the NNSA Field Office for review and approval, an execution plan for a redesign of the malfunctioning TWF seismic power cutoff system (see 7/14/17 weekly). LANL’s plan details the scope and schedule to complete the redesign in 18 months to ensure the system meets its performance criteria and design requirements.

Chemistry and Metallurgy Research (CMR) Building–Emergency Management: On Thursday, CMR personnel conducted their annual emergency exercise. This year’s scenario included an explosion and a brief fire in the facility ventilation system ducting that seriously injured a maintenance worker. Participation included CMR personnel, the LANL Emergency Management and Response Organizations, and the Los Alamos County Fire Department. Evaluators will hold their critique next Monday.

Plutonium Facility–Infrastructure: Last Tuesday, the east safety class diesel firewater pump failed its weekly surveillance test when it did not continue running after startup. Maintenance personnel completed troubleshooting that revealed a faulty relay in the starting circuitry. On Wednesday, the diesel was repaired, successfully retested, and placed back in service. On Thursday, LANL submitted to the NNSA Field Office for review and approval, a request for extension of the Evaluation of the Safety of the Situation (ESS) for the potential non-conservatism in the seismic capacity of the fire suppression system (see 6/17/16 weekly). LANL’s request notes that the current ESS expires on August 3, 2017, and engineering personnel require additional time to evaluate potential interaction issues with non-seismically qualified equipment and the fire suppression system to support revision of the ESS.

Inappropriately Remediated Nitrate Salt (RNS) Waste–Treatment Activities: Waste Characterization, Reduction, and Repackaging Facility workers successfully treated the 17th RNS drum. On Wednesday, a worker discovered the safety-significant drum lift was missing a hinge pin clip. Operations personnel entered the appropriate Limiting Condition for Operations while maintenance personnel replaced the clip and returned the drum lift to service.