

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 15, 2017

**MEMORANDUM FOR:** S.A. Stokes, Technical Director

**FROM:** J.W. Plaue

**SUBJECT:** Los Alamos Report for Week Ending September 15, 2017

**DNFSB Staff Activity:** D.J. Brown observed the follow-up demonstrations for the Federal Operational Readiness Review (FORR) at the Transuranic Waste Facility (TWF) discussed below.

**Federal Oversight:** On Thursday, the NNSA Field Office Manager, Kim Davis Lebak, announced her upcoming retirement from federal service. She will be succeeded by Steve Goodrum in October 2017.

**Infrastructure:** NNSA Headquarters personnel were at LANL this week to conduct the second deep dive associated with NNSA's Master Asset Plan. The deep dive attendees were provided presentations and tours associated with key laboratory infrastructure.

**TWF–Readiness:** On Monday and Tuesday, TWF operators demonstrated their ability to direct-load a simulated degraded transuranic waste drum into a standard waste box and stack three pallets of drums for a subset of the FORR team. The FORR team had previously identified that both of these activities required further federal assessment (see 8/11/2017 weekly). At their outbrief, the team again complimented the professionalism of the TWF operations personnel and noted that both tasks were successfully executed. However, they noted several opportunities to strengthen the applicable procedures and expressed concern regarding the margin for fork lift maneuvering during the stacking evolution. Project personnel designed the waste storage buildings with the intent to load them with two rows of drums on pallets, each row stacked three high. The spacing of these rows is such that the facility's current forklift has about 14 inches to maneuver into a position perpendicular to a row in order to stack a pallet. The FORR team expressed concern that this degree of margin was putting the operators in an unnecessarily difficult position and may necessitate alternate arrangements.

In parallel, TWF personnel continue to close corrective actions for the pre-start findings in support of receiving startup authorization before the end of the month. Currently, technicians are conducting a 100 percent inspection and repair of the safety class penetration fire seals, which is pacing progress. This action requires technicians to systematically work each building to catalog, relabel, inspect, and rework the penetrations as needed. When last reported, they found deficiencies requiring rework for 26 of 28 through-wall seals, including the use of incorrect materials and incomplete coverage.

**Plutonium Facility–Safety Basis:** On Monday, LANL management transmitted to the NNSA Field Office for information a project execution plan associated with updating key modeling used in the development of the safety basis. The plan responds to previous directed actions and aims to: (1) update the dispersion modeling using recent meteorological data; (2) revise the fire modeling using current combustible loading levels; (3) create a unified leak path factor analysis of an integrated model of the facility using MELCOR; and (4) examine the actual amounts of material-at-risk used to support programmatic operations to more accurately reflect the source-term in the accident analysis. Notably, the plan indicates uncertainty in funding and does not mention including consideration of co-located worker consequences.