

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 16, 2017

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending June 16, 2017

**Transuranic Waste Facility (TWF)–Emergency Management:** On Tuesday, TWF personnel conducted their annual emergency exercise. The scenario involved a pool fuel fire from the transportation vehicle that engulfed a load of 16 transuranic waste drums. Notably, this was the third exercise that involved a new rigorous and comprehensive approach to the player hot-wash and evaluator critique. For the latter, evaluators met for more than three hours to develop a common understanding of the timeline for significant events and discuss issues and best practices for each of the response elements. A sampling of the issues they self-identified include: workers in the yard mustered in a location downwind of the fire; fire department assets also approached from downwind; there is not a fire hydrant in proximity to the south entrance; the fire department’s map lacked indication of hydrants; the need to include more subject matter experts in the exercise design and evaluation process; and the need to exercise, instead of simulate, the deployment of additional radiological control technicians (RCT) from other facilities. Fire department personnel also noted the benefits of the realism achieved by using an actual truck and smoke generator over past simulations.

**Conduct of Engineering:** On Tuesday, LANL management informed the NNSA Field Office that they intend to discontinue by the end of the month the practice of conducting vital safety system assessments for passive safety systems. They note that there is no requirement for this practice and assert that the ongoing system health reporting and in-service surveillance processes remain robust and effective.

**Plutonium Facility–Infrastructure:** Facility engineers recently completed their evaluation of the need to further examine a sampling of penetrations in the safety class confinement. They determined that six penetrations will be examined by August 11, 2017. This is a corrective action in response to earlier discoveries of three penetrations with degraded seals that would have otherwise passed the visual inspection criteria (see 5/26/17 weekly).

**Plutonium Facility–Readiness Activities:** During the past eight days, facility personnel have performed a series of assessments to determine readiness to perform mobile loading of TRUPACT II waste containers. Startup of this activity will allow operators to load transuranic waste from the high-efficiency neutron counter pad at Technical Area-55 and ship the waste directly to the Waste Isolation Pilot Plant (WIPP). The ability to ship transuranic waste directly to WIPP is essential while the RANT Shipping Facility is non-operational due to ongoing seismic and safety basis upgrades. On Friday, a contractor readiness assessment team out-briefed the results of their review and identified one pre-start finding concerning missing elements and inaccuracies with the critical lift plan, which is identified in the safety basis as a Specific Administrative Control.

**Inappropriately Remediated Nitrate Salt (RNS) Waste–Treatment Activities:** This week, Waste Characterization, Reduction, and Repackaging Facility (WCRFF) personnel successfully treated two more RNS waste drums, including the sibling of the drum involved in the radiological release event at the WIPP, for a total of eight drums treated to-date. Processing activities have taken more than a single day for each of the eight drums. Subsequently, WCRFF management recently modified their implementation practices for the stationary fire watch, which is required when a parent drum remains in process during off-hours. The new process relies on the fire watch using a camera system supplemented with hourly facility entries and, if needed, assisted by an RCT on call within two hours.