

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 8, 2017

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

**FROM:** J.W. Plaue

**SUBJECT:** Los Alamos Report for Week Ending September 8, 2017

**DNFSB Staff Activity:** D.J. Brown, M.W. Dunlevy, and P.J. Foster held two teleconferences with NNSA Field Office personnel to discuss questions regarding the state of readiness and the technical safety requirements for the Transuranic Waste Facility.

**Plutonium Facility–Safety Basis:** On Thursday, the cognizant system engineer completed the required in-service inspections for the pipe overpack containers, restoring compliance with the technical safety requirements (see 8/25/17 weekly). As part of their new information process, safety basis personnel are still analyzing the potential impacts of the differences in visual examination criteria between those used to implement the existing technical safety requirements and those required by DOE-STD-5506-2007 to justify use of a reduced damage ratio.

**RANT Shipping Facility:** On Thursday, the NNSA Field Office approved the letter that LANL submitted on April 20, 2017, in lieu of the annual update to the safety basis. The approval reiterated that the safety basis was sufficient for operations permitted in COLD STANDBY mode, but further operations would require approval of a new safety basis developed in accordance with DOE-STD-3009-2014. Separately, LANL engineering staff recently completed a seismic retrofit design to ensure the structure will meet performance category 2 seismic criteria. Safety basis personnel have begun preliminary analyses to ensure this level of seismic performance will be adequate to support the future safety control strategy.

**Area G–Safety Basis:** Late last month, the EM Field Office approved a revision to the Evaluation of the Safety of the Situation concerning transuranic waste inventory discrepancies, formerly known as the composite source term issue (see 7/7/17 weekly). The approved analysis indicates the postulated accidents with the highest consequences are a large combustible fire and lightning strikes to multiple waste containers with mitigated consequences to the public of about 19 and 12 rem, respectively. Implementation of this revision will eliminate the aircraft crash accident through a reduced frequency argument, as well as support resumption of normal operations at Area G. Implementation is currently scheduled for later this month, and will be closely followed by receipt of oversized, low material-at-risk containers from the Plutonium Facility.

**Inappropriately Remediated Nitrate Salt (RNS) Waste–Treatment Activities:** On Wednesday, Waste Characterization, Reduction, and Repackaging Facility (WCRRF) management declared a violation of a Specific Administrative Control after receiving a report that a DOE-EM Headquarters overseer witnessed a lapse in required fire watch coverage during shift turnover. Specifically on Tuesday morning, the overseer noted that the required hourly entry was performed after the grace period and witnessed lapses in video monitoring, contrary to the procedure for a condition with an RNS container present outside of the refrigerator. Fact-finding attendees discussed contributing causes and corrective actions related to strengthening procedural guidance for transitions, improving conduct of operations training for the pool of laborers performing the fire watch function, and issuing a vest to the fire watch assigned to monitor the video. As of Friday, WCRRF workers were treating the 34<sup>th</sup> RNS container out of 60.