

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 19, 2018

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending October 19, 2018

DNFSB Staff Activity: On Monday, the Board's staff held a teleconference with EM Field Office and N3B personnel to discuss the control strategy for postulated fuel fires and vehicle crash incidents associated with transuranic waste mobile loading operations at Area G.

Contract Transition: On Wednesday, management from Triad, LANS, NNSA Headquarters, and the NNSA Field Office conducted a transition readiness review. Triad managers provided NNSA leadership with their justification for readiness to assume responsibility for management and operations of the laboratory. Triad personnel also presented what they believe are the top risks to successful operations: conduct of operations, the waste cycle, project execution, and human capital. They also presented risks specific to nuclear facility operations that included the need to improve planning, operational discipline, criticality safety performance, and organizational learning

Area G–Safety Management Programs: At the end of September, N3B personnel provided the EM Field Office with the majority of their proposed safety management program documents. The field office has so far approved the Nuclear Criticality Safety Program. N3B has not yet submitted their Radiation Protection Program as they work to either obtain their own accreditation or acquire services from a DOE Laboratory Accreditation Program (DOELAP) accredited entity. The current service agreement with LANS that provides limited Radiation Protection Services expires on January 30, 2019, and N3B does not expect DOELAP accreditation in place by that time. N3B is tracking this as a high operational risk as dosimetry is required for entry into mission critical parts of Area G.

RANT Shipping Facility: On Wednesday, the NNSA Field Office requested that LANS provide by next Friday a schedule to ensure the safe restart of the facility with a goal of January 2019. The strategy and schedule for restarting RANT—a capability that is essential to risk reduction across the laboratory—has been the subject of multiple perturbations since going into cold standby in 2014. For example, NNSA initially desired to restart using a modern safety basis developed in accordance with DOE-STD-3009-2014 (see 10/8/2017 report). LANS also spent years conducting geotechnical investigations and designing a seismic retrofit (see 12/2/2016 report) only to recommend not pursuing upgrades. The current strategy relies on a DOE-STD-3009-1994 derived safety basis that limits material-at-risk such that the unmitigated accident consequences are below thresholds requiring safety controls (see 5/4/2018 report). NNSA expects to approve this safety basis in the coming weeks, leaving implementation and readiness to pace restart; however, NNSA and LANS continue to align schedule expectations (8/31/2018 report).

Coincidentally, the need for a viable indoor transuranic waste shipping capability was underscored after Plutonium Facility personnel spent the week attempting a mobile loading shipment, but were unable to proceed due to inclement weather. They will try again next week, though this delay will likely curtail N3B's planned shipment from Area G, impacting overall risk reduction at the laboratory. The NNSA Field Office specifically emphasized the need for timely RANT restart in order to capitalize on shipping opportunities that arise in the winter. Previous LANS studies indicate that less than half the days per year have wind and temperature conditions that support outdoor mobile loading.