DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 4, 2018

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: J.W. Plaue and D. Gutowski, Resident Inspectors

SUBJECT: Los Alamos Activity Report for Week Ending May 4, 2018

DNFSB Staff Activity: Members of the Board's staff held a telephone call with NNSA Field Office personnel to discuss leak path factor calculations for the Plutonium Facility.

Plutonium Facility–Infrastructure: Two weeks ago, Plutonium Facility personnel entered a limiting condition for operations due to inoperability of the new uninterruptable power supply (UPS). The UPS was placed into maintenance bypass to correct a deficiency identified during commissioning. Personnel were unable to restore operability. Further work on the system during the past two weeks has restored the UPS function, but the replacement parts used to repair the system are not fully qualified. Facility personnel are expecting to receive fully qualified replacement parts next week. During a post-job review for this activity, personnel identified a number of issues with the conduct of the job and proposed corrective actions to resolve them including component labeling, availability of appropriate tools and parts, lockout/tagout performance, and adequacy of work documents.

Weapons Engineering Tritium Facility (WETF): WETF personnel loaded tritium onto a hydride transport vessel for the first time in approximately a decade. The evolution proceeded smoothly. This process is essential to allow deinventory of significant quantities of legacy tritium that are no longer needed for programmatic purposes. Last month, WETF personnel removed the unused exhaust stack without incident (see 3/2/2018 weekly).

RANT Shipping Facility–Safety Basis: On Wednesday, LANL management transmitted a safety basis strategy document to the NNSA Field Office for review and approval. The RANT facility has been in cold standby since 2014 due to safety basis inadequacies and seismic vulnerabilities. The strategy proposes using the facility without a seismic retrofit and proposes a revision to the existing safety basis that reduces material-at-risk such that mitigated consequences are less than 5 rem to the public and 100 rem to the collocated worker. The strategy indicates the likely resulting material-at-risk limits will support shipping of about 95 % of the existing transuranic waste inventory. Notably, the strategy proposes deferring an upgrade to a safety basis complaint with DOE-STD-3009-2014 until next year, contrary to the path forward NNSA briefed to the Board on February 23, 2017. The strategy indicates safety basis submission in June 2018 with approval anticipated the following month in order to support restart of RANT in calendar year 2018.

Area G: On Monday, N3B-Los Alamos assumed control of Area G operations. They have established minimum staffing and established interim procedures largely adopted from previous versions. They plan to implement their own newly developed processes and procedures within 90 days. Operations this week focused on establishing communication systems and personnel relocations.

Transuranic Waste Facility (TWF): On Thursday, the NNSA Field Office released TWF from their startup plan allowing them to transition to normal operations and forgo the phase three demonstration of 16 waste containers based on multiple successes with eight containers. The approval emphasizes the need to practice prior to stacking operations. The practice is intended to address the constrained maneuvering environment for the existing forklift that NNSA observed during readiness.