DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 4, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending November 4, 2016

DNFSB Staff Activity: B.K. Caleca, M.W. Dunlevy, N.M. George, P.J. Migliorini, A.R. Powers, and C.P. Scheider were onsite to conduct an initial scoping review of the Plutonium Facility safety basis and for site familiarization. Activities included walkdowns of Technical Area-55, the Plutonium Facility, Area G, and the Chemistry and Metallurgy Research (CMR) Building, as well as holding discussions with LANL safety basis personnel. B.K. Caleca participated in a Plutonium Facility seismic discussion with NNSA and LANL personnel and observed seismic trenching activities in Technical Area-16.

Waste Characterization, Reduction, and Repackaging Facility (WCRRF)–Operations: Last week, LANL submitted to the NNSA Field Office for review and approval a request to transfer a drum containing transuranic (TRU) waste from WCRRF, which is currently in COLD STANDBY, to CMR for temporary storage. Operations personnel created this waste drum when cleaning out the waste characterization glovebox that will be used in the treatment of the inappropriately remediated nitrate salts (RNS) currently stored in Area G. WCRRF personnel did not anticipate the possibility that this activity would generate TRU waste which is prohibited by the Technical Safety Requirements when the facility is in COLD STANDBY. Complicating this matter, WCRRF management notes that transition to WARM STANDBY cannot be achieved in a timely manner due to a lack of qualified operations personnel and the current operability status of facility equipment. In the request letter, LANL states that the presence of the drum is impacting the ability to conduct readiness activities necessary to startup the RNS treatment campaign.

Plutonium Facility Infrastructure: On Monday, the NNSA Administrator approved Critical Decision (CD)-2/3, *Performance Baseline and Start of Construction*, for the Radiological Laboratory Utility Office Building (RLUOB) Equipment Installation Phase 2 (REI-2) and Plutonium Facility Equipment Installation Phase 1 (PEI-1). These subprojects of the CMR Replacement project (see 12/18/15 weekly) are needed to move the remaining analytical chemistry and material characterization activities out of CMR. The CD-2/3 approval letter identifies the scope of the subprojects to include outfitting or repurposing 10,000 square feet of laboratory space in RLUOB and 2,800 square feet of space in the Plutonium Facility. Additionally, the letter indicates these projects are scheduled to receive approval for CD-4, *Start of Operations*, in early calendar year 2022.

Transuranic Waste Facility (TWF)–Safety Basis: On Wednesday, the NNSA Field Office convened a Senior Review Board (SRB) to evaluate the draft Safety Evaluation Report (SER) for approval of the TWF Documented Safety Analysis. The SRB was comprised of senior leaders from NNSA's Field Office and headquarters, including NNSA's Cognizant Secretarial Officer for Safety and Deputy Associate Administrator for Safety. In addition to reviewing the SER, the SRB heard a number of minority opinions from members of the Safety Basis Review Team. The SRB identified a number of issues the Safety Basis Review Team will have to resolve prior to SER approval.