DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 25, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for Week Ending June 25, 2021

Federal Oversight: The resident inspector met with Mr. Ted Wyka who became the manager of the NNSA Field Office on Monday. He replaces Mr. Pete Rodrik who served two months as the interim Field Office Manager.

Plutonium Facility-Criticality Safety: On Monday, workers inadvertently moved water resistant containers with salt residue materials into a glovebox where that material type was not allowed per the criticality safety posting. They moved these materials out of a dropbox to move in a higher mass item while maintaining compliance with its mass limits. Promptly after they moved the containers, while performing checks, they identified the error and responded appropriately. This was an analyzed upset condition in the criticality safety evaluation for the receiving glovebox. The upset condition was recovered later in the week. Criticality Safety personnel plan to evaluate whether the criticality safety evaluation and posting for the receiving glovebox should be revised to allow inclusion of this type of material. They also plan to evaluate increasing the mass limit for the dropbox the materials were moved from.

Chemistry and Metallurgy Research Building (CMR)—Safety Basis: On Monday, Triad personnel declared a Potential Inadequacy of the Safety Analysis (PISA) for the analysis of wildfire hazards in the CMR yard. The safety basis states that plume lofted burning embers from wildfires of any size cannot impact containers stored in the CMR yard. Triad safety analysists noted that the wildfire analysis calculation does not support that conclusion for the entire yard, but only for one sheltered area of the yard. Since the safety basis analyzes other potential types of fires that can impact containers in the yard and identifies existing credited and non-credited controls, Triad is not adding any compensatory measures to address this PISA.

Area G–Safety Basis: Last Friday, N3B submitted to the Environmental Management Field Office and Headquarters a revised Evaluation of the Safety of the Situation (ESS) for the PISA related to DNFSB TECH-46 and potentially energetic drums. The new revision is intended to resolve DOE's comments on the previous revision which was rejected (see 1/22/2021, 4/2/2021 reports). It includes detailed tables of waste containers subject to operational restrictions following extent of condition reviews of the entire population of above ground containers looking for potential chemical incompatibilities or unknown contents.

Plutonium Facility–Infrastructure: On Tuesday, the NNSA Field Office and the Federal Project Director unconditionally approved the Safety Design Strategy for the Chemistry and Metallurgy Research Replacement Plutonium Facility Equipment Installation Phase 2 subproject. The majority of the scope in this project does not directly impact the safety basis of the Plutonium Facility, however construction to support an expanded access portal for the Plutonium Facility will impact the safety class missile barriers. The approval letter notes that the safety function of the barrier must be maintained during all phases of work.