DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 5, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending May 5, 2017

Waste Characterization Reduction and Repackaging Facility–Restart: Last Friday, the NNSA Field Office approved the corrective actions from the federal readiness assessment regarding the treatment of the inappropriately remediated nitrate salt (RNS) waste. Additionally, they granted LANL management permission to commence a phased startup of treatment activities. The approval letter notes that one pre-start finding associated with Department of Energy approval of the treatment procedure remains outstanding. As such, LANL is authorized to perform phase 1 of the startup plan involving the treatment of surrogate wastes. LANL must notify NNSA and EM managers prior to phase 2 activities with the actual RNS wastes. On Tuesday, program personnel commenced processing of the first container of surrogate waste. They plan to process at least two additional containers of surrogate next week.

Area G–Emergency Management: On Thursday, Area G personnel conducted an instructional emergency drill against their procedure for potential wildland fire impacts to the RNS waste containers currently stored in the Dome 375 Permacon. The procedure directs actions related to the Permacon ventilation system and the installation of fire blankets on the RNS containers. Separately, Area G personnel recently completed turnover for the backup electric diesel generator for the Permacon.

Plutonium Facility–Readiness Activities: Last Friday, the contractor readiness assessment team briefed the results of their review of aqueous chloride and americium production activities. The team identified two pre-start findings on training associated with the response to a process deviation and operations center actions during criticality alarm testing. Additionally, there are three self-identified pre-start findings regarding the calibration of tanks and the need to consider the caustic waste liquid discharge from the chloride processes as part of the technical basis for criticality safety at the Radioactive Liquid Waste Treatment Facility.

On Tuesday, the NNSA Field Office responded to a request from LANL management to re-evaluate the readiness activities associated with startup of the new electrorefining line and the startup of a new mobile loading activity for offsite shipment of transuranic waste. In both cases, the field office overruled LANL's proposal for performing only management self-assessments and determined that appropriately scoped federal readiness assessments were warranted.

Plutonium Facility–Infrastructure: Last Friday, facility management accepted for operation the new Criticality Alarm System, one of the sub-projects associated with Phase II of the TA-55 Reinvestment Project. Project personnel expect to complete some additional modifications to the previous system in order to retain the capability for remote area radiation monitoring. On Tuesday, the west safety class diesel firewater pump failed its weekly surveillance test when it tripped offline and did not restart. A similar problem occurred with this same pump last week. They are currently troubleshooting and plan to hold a fact-finding on the situation next week. On Wednesday, an engineer photographing penetrations in the safety class confinement structure observed rays of sunlight coming through one of the penetrations. It is unlikely that the engineer would have noticed this breach except for the particularly dark location of this penetration. Facility staff responded appropriately and repaired the condition in the afternoon.