DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 4, 2016

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

DNFSB Staff Activity: On Thursday, staff members C. Berg, D.J. Brown, R.T. Davis, M.W. Dunlevy, R.C. Eul, N.M. George, and J.A. Pasko conducted a teleconference with personnel from each of the Los Alamos Field Offices and LANL. The discussion covered the path forward and associated technical bases for planned near-term actions associated with LANL's strategy to improve the safety posture of the inappropriately remediated nitrate salt (RNS) wastes through enhancing vent capacity and other measures (see 2/5/16 weekly).

Area G–Emergency Management: On Thursday, Area G personnel conducted their second drill as part of their nascent program for emergency and operational drills. The tabletop style drill included a crew of waste operators and radiological control technicians that will be involved with the near-term installation of additional vent capacity for the RNS wastes. The scenarios covered responses to a radiological continuous air monitor alarm, as well as a medical emergency. The drill coordinators are using experience from successful efforts at the Plutonium Facility to develop the program at Area G. They have established two standing drill times each week and plan to increase the complexity and reduce the artificiality associated with upcoming drills. For example, next week's drills will require the use of full personal protective equipment, including powered air purifying respirators.

Emergency Management: LANL training personnel are in the process of completing evolutions of the practical component for Emergency Radiological Responder Training that covers firefighters from the Los Alamos County Fire Department. The practical consists of three modules: (1) contaminated patient handling, (2) doffing protective equipment simulated to be potentially contaminated, and (3) use of one type of radiation monitoring equipment. The training is thorough and conducted in a stop-action style intended for immediate feedback for both participating and observing firefighters. Use of simulation includes an approximately 60 pound mannequin and intentional lack of respiratory protection for the patient handling module to facilitate verbalization of actions. The Site Representatives note that LANL and NNSA Field Office personnel frequently point to this practical evaluation as the basis for simulating performance of these response steps during evaluated exercises.

Plutonium Facility–Safety Basis: On Tuesday, the NNSA Field Office Manager approved LANL's request for closure of the safety basis addendum for exceedance of seismic performance goals (see 2/19/16 weekly). The approval letter suggests that the Plutonium Facility meets established seismic performance goals and cites this as the basis for closure approval. The letter also notes that ongoing roof girder upgrades will further improve facility seismic performance.

Plutonium Facility–Nuclear Criticality Safety: Last Friday, LANL transmitted to the NNSA Field Office a Nuclear Criticality Safety Program Improvement Plan. This plan was submitted as required by the NNSA Field Office in an approval letter extending the Evaluation of the Safety of the Situation/Justification for Continued Operations regarding the potential for criticality due to firewater flooding (see 6/6/2014 weekly). The plan identifies intended actions to rebuild a robust Nuclear Criticality Safety Program that enables continued safe and efficient operations.