DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 27, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director **FROM:** R.K. Verhaagen and J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending May 27, 2016

DNFSB Staff Activity: P. J. Foster observed the independent construction project review for the new Transuranic Waste Facility (TWF) project.

Area G–Inappropriately Remediated Nitrate Salts (RNS): There were several notable accomplishments:

- On Thursday, Area G operators completed installation of the pressure relief devices on all of the 55-gallon drums containing RNS wastes. Installation of high capacity filter vents should proceed next week.
- LANL has staged sufficient fire blankets to protect all of the RNS waste in the event of an encroaching wildland fire.
- Last week, the senior integrated project team leads issued the overall project execution plan for the *Nitrate Salt Safing and Treatment Project*. This represents a key document in the path toward eliminating the hazard associated with the RNS waste.

TWF Project: On Tuesday, the LANL contracting officer requested NNSA Field Office approval to proceed with an alternate approach to completing the safety basis for the project utilizing DOE-STD-3009 instead of proceeding with the controls identified in the preliminary safety basis developed using DOE-STD-1189. In particular, LANL management believes controls associated with the passive physical characteristics of the site, the fire suppression system and its supporting systems, and controls associated with standard industrial hazards exceed the requirements of the contract. While these systems have already been designed and installed per their current safety classifications, LANL provided a rough order of magnitude estimate of the lifecycle savings associated with their alternate approach of about \$50M to \$120M. During this week's construction project review, LANL managers also emphasized that existing project schedule commitments were in jeopardy should their alternative approach be denied. LANL requested a response by June 3, 2016. The Site Representatives note that this relatively simple storage facility is consuming significant NNSA and LANL senior management attention.

Plutonium Facility–Work Control: On Tuesday, an empty safe estimated to weigh several thousand pounds tipped into a glovebox while being moved for seismic anchoring. No injuries occurred and no release of contamination was detected despite the fact that the safe impacted the glovebox on a glove port. During the fact finding, workers indicated that they utilized two transport skates instead of the four specified in the work package. Management is developing a recovery plan to upright the safe, inspect the glovebox line for damage, and assess the lift plan development process.

Weapons Engineering Tritium Facility (WETF)–Programmatic Operations: On Thursday, WETF personnel successfully completed a programmatic function test of a tritium gas transfer system research and development unit. This significant milestone marks the first time WETF operators have conducted a function test since July 2011.