

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 25, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending March 25, 2016

DNFSB Activity: On Tuesday, the Board conducted a public hearing regarding the hazards posed to the public and workers by the management of transuranic waste at Area G. On Wednesday, Board Member Santos, accompanied by staff members M.W. Dunlevy and N.F. Khalil, walked-down the Plutonium Facility and the Dome 375 Permacon at Area G.

Area G–Safety Basis: On Tuesday, the NNSA and EM Field Offices transmitted approval to LANL management of phase 1 of revision 5 for the Evaluation of the Safety of the Situation (ESS) concerning the inappropriately remediated nitrate salts (RNS) wastes (see 3/18/16 weekly). The approval included four actions directed by NNSA Headquarters: (1) submission within 1 week of a resource-loaded schedule for installation of the pressure relief devices; (2) completion of a progress briefing by April 15th on wildland fire mitigation activities; (3) commencing April 18th, the NNSA Field Office is to conduct weekly briefings on the status of phase 2 activities until they are completed; and (4) concurrent with submission of revision 6 of the ESS, the NNSA Field Office is to submit a strategy for resolving all of the outstanding Potential Inadequacies of the Safety Analysis for Area G. On Friday, LANL personnel completed their Implementation Verification Review of the phase 1 controls and plan to commence a Management Assessment next week to confirm readiness to remove the lids from the standard waste boxes containing the RNS wastes.

Area G–Emergency Management: In the past two weeks, Area G and LANL wildland fire management personnel have taken dramatic actions to improve the protection of the Dome 375 Permacon from potential wildland fire insults. These actions include: (1) significantly expanding the zone of reduced shrubbery on the south side of the Permacon; (2) improving an existing fire break; (3) developing a new fire break; and (4) developing a new fire response plan that utilizes the fire breaks and an area for retardant application to minimize the potential for the postulated worst case fire impact to the Permacon. Area G personnel are also in the process of procuring specialized reflective fire blankets for additional protection of the RNS wastes. These actions come as conditions in northern New Mexico become increasingly favorable for wildland fire. In fact, on Tuesday a wind-driven brush fire burned about 30 acres near Pojoaque, a town approximately 15 miles northeast of Area G.

On Monday, LANL Emergency Management personnel issued an addendum to the Emergency Planning Hazards Analysis for the RNS wastes. The addendum incorporates specific information on the hazard posed by the RNS waste including use of the respirable release fraction identified for the RNS wastes by the DOE-EM Carlsbad Field Office (see 11/20/15 weekly). Issuance of this addendum addresses a significant issue identified in the Board’s letter dated January 7, 2016.

Area G–Engineering: Earlier this month, Area G personnel completed commissioning of the new supplemental chiller for the Dome 375 Permacon (see 7/10/15 weekly). They expect to issue operating procedures in April 2016.

Plutonium Infrastructure Strategy: On Thursday, LANL personnel completed placement of a second foundation for the new uninterruptible power supply (UPS) building. A difficult cold joint encountered during placement of the original foundation required complete rework. The new UPS building will be a seismic performance category 3 structure that could be used in support of the incremental upgrades necessary for an eventual performance category 3 active confinement system for the Plutonium Facility.