

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 18, 2016

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending March 18, 2016

Area G–Safety Basis: On Thursday, the NNSA Field Office recommended to the NNSA Cognizant Secretarial Officer partial approval of revision 5 of the Evaluation of the Safety of the Situation (ESS) for the inappropriately remediated nitrate salt (RNS) wastes. The approval for this revision is phased with this action authorizing LANL personnel to remove the lids from the standard waste boxes. The second phase will authorize installation of an additional vent and pressure relief device. In accordance with revision 5, controls for lid removal include: gas sampling; visual inspections; container temperature monitoring; prohibition on container movement; and Permacon temperature control. The installation step includes additional controls for non-sparking and non-conductive tooling. The post-installation control set includes: the new venting and pressure relief manifold; the Permacon fire suppression, ventilation, and cooling systems; response to continuous air monitors; visual inspection; prohibition on container movement; container spacing; and implementation of Conduct of Maintenance and Engineering. The ESS notes that revision 6 will include controls for wildland fire induced accidents and will be submitted within 30 days of approval of revision 5. Notably, this recommendation by the NNSA Field Office represents the first federal approval of a safety basis covering the RNS wastes following the new information that emerged in the March 2015 Accident Investigation Report indicating a substantially higher potential release hazard associated with these wastes.

Area G–Emergency Management: This week, Area G personnel conducted two discussion-based (Type I) drills. On Thursday, Area G management approved standing orders for operations center responses to continuous air monitor alarms and personnel contamination events. Management directed the development of the standing orders in response to an observation from a January drill indicating that written instructions did not exist for all conditions that require a response by operations center staff. In parallel, management has directed a review of all abnormal, alarm, and emergency procedures, including procedures that were retired.

Plutonium Facility–Criticality Safety: On Monday, LANL submitted to the NNSA Field Office a corrective action plan for the assessment of implementation of the Plutonium Facility criticality safety program (see 12/4/15 weekly). An independent federal team performed this assessment in two phases primarily in response to a recommendation by the Balance of Machining federal readiness assessment team following their review (see 7/3/15 weekly). The team recommended this assessment be completed prior to commencing the Actinide Recovery and Integrated Extraction System (ARIES), Furnace, and Casting contractor readiness assessment completed in February of this year. LANL identified five findings from the assessment that need to be addressed prior to commencing the ARIES, Furnace, and Casting federal readiness assessment scheduled for April of this year. LANL is tracking these findings in its Performance Feedback and Improvement Tracking System and the Plutonium Facility Nuclear Criticality Safety Board is managing closure of these corrective actions to support the upcoming federal readiness assessment.