

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 24, 2015

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending July 24, 2015

**DNFSB Staff Activity:** J.L. Shackelford was at LANL this week to perform site cognizant engineer familiarization activities. On Thursday, C. Berg, M.W. Dunlevy, R.C. Eul, and N.M. George conducted a teleconference with Field Office and LANL personnel regarding the remediated nitrate salt (RNS) wastes.

**Plutonium Facility–Restart Activities:** In a letter dated July 16, 2015, the Field Office approved the restart of nuclear operations associated with the T Base II machining activity. Operations personnel intend on machining a plutonium part before the end of the fiscal year. The ability to perform additional machining operations is currently constrained by limited availability of suitable feed materials and dependent on successful restart of predecessor and downstream activities.

**Area G–Nitrate Salts:** On Friday, the NNSA Field Office provided LANL relief from the technical safety requirements related to the WARM STANDBY mode condition resulting from the composite source term issue (see 7/3/15 weekly). Specifically, Field Office direction allows Area G personnel to: (1) sample the seven drums containing cemented inorganic wastes known to contain liquid; (2) perform real-time radiography of approximately 150 similar drums that may contain liquid; (3) sample the unremediated nitrate salts currently stored in the Dome 231 Permacon; and (4) conduct other activities needed to support the above actions. The first two actions mainly facilitate resolution of outstanding environment compliance issues and the third action facilitates development of the safety basis for final treatment of the RNS wastes. The Field Office also directed LANL to doublepack the four pipe overpack containers currently containing RNS wastes (containing water absorbent polymer rather than wheat-based cat litter) and prohibited LANL from crediting reductions in damage ratios for the pipe overpacks.

**Plutonium Infrastructure Strategy:** On July 10, 2015, LANL transmitted the revised safety design strategy for the upgrade of the Radiological Laboratory Utility Office Building to a Hazard Category 3 nuclear facility (see 5/22/15 weekly). LANL is now referring to the future facility as the Nuclear Laboratory/Office Building (NLOB). LANL included in the submittal an applicability matrix for DOE Order 420.1C, *Facility Safety*. NNSA management has yet to decide on moving forward with the NLOB.

**Area G–Conduct of Operations:** The newly assigned Senior Supervisory Watch (see 6/12/15 weekly) recently completed a review of Area G standing orders, abnormal operating procedures, and emergency procedures. He identified a number of opportunities for improvement that will help streamline the large number of currently open standing orders and bolster operator response to emergency and abnormal conditions.

**Safety Basis:** LANL safety basis personnel have completed their review of new information related to assignment of damage ratios for pipe overpack containers in various safety bases (see 7/3/15 weekly). As a result, LANL management declared Potential Inadequacies of the Safety Analysis for the Plutonium Facility, Area G, the RANT Shipping Facility and the Waste Characterization Reduction and Repackaging Facility.