

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 6, 2017

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending January 6, 2017

**Plutonium Facility Infrastructure:** Last month, LANL management transmitted to the NNSA Field Office for information the fiscal year 2017 TA-55 Project Execution Strategy (PES). Planned work for this year includes: a number of continued seismic structural activities; completion of walk-downs for the firewater pump houses; completion of the preliminary evaluation of the cast iron fittings issue for the fire suppression system; installation of concrete pads for a future diesel generator to support the electric firewater pumps; continuation of the development of an execution strategy for glovebox fire suppression systems; and identification of equipment and components needed to support a potential Performance Category 3 ventilation system. Notable out-year activities include: determination of a path forward to remediate seismic interaction issues (2 over 1), particularly with the fire suppression system; completion of seismic evaluations for safety significant systems, structures, and components in order to complete the project to identify the totality of seismic vulnerabilities that began in 2008; modifications to achieve 2-hour fire barrier status for certain walls; removal of non-seismic loads from the safety class firewater loop; and an active confinement ventilation system.

**Confinement Vessel Disposition (CVD) Project:** CVD project personnel continue with cleanout operations of the fifth sphere, despite the recent loss of several operators. The fifth sphere contains substantially more debris than prior spheres with more than 40 drums worth removed to-date.

**Inappropriately Remediated Nitrate Salt (RNS) Waste–Emergency Management:** On Thursday, the NNSA Field Office Manager approved an addendum to LANL’s Emergency Planning Hazards Assessment (EPA) for RNS waste storage and treatment. The addendum supplements the existing EPAs for Area G, the Waste Characterization, Reduction, and Repackaging Facility, and onsite transportation. LANL submitted the addendum to update the EPAs to be consistent with the safety basis changes made for RNS treatment and to address the identified increase in hazard presented by the RNS following the February 2014 drum breach at the Waste Isolation Pilot Plant.

**Federal Oversight–2016 Performance Evaluation Report:** On Tuesday, NNSA posted its 2016 Performance Evaluation Report for LANL. In the Operations and Infrastructure goal, NNSA acknowledged that LANL exceeded expectations for operational resumption activities at the Weapons Engineering Tritium Facility and the Plutonium Facility. NNSA identified a number of areas under this goal where LANL did not meet expectations that included: (1) necessary improvements to the criticality safety program are not proceeding at an acceptable pace; (2) although improving, the contractor assurance system continues to have significant deficiencies, and (3) weaknesses in the emergency management program continue to be identified by both internal and external reviews.