

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 25, 2017

**MEMORANDUM FOR:** S.A. Stokes, Technical Director

**FROM:** J.W. Plaue

**SUBJECT:** Los Alamos Report for Week Ending August 25, 2017

**Management:** On Wednesday, the LANL Director announced that Scott Gibbs will serve as the Deputy Director for Mission Assurance, beginning September 5<sup>th</sup>. The role of this newly created position is to provide strategic and tactical support in the areas of contract assurance and risk management.

**Plutonium Facility–Safety Basis:** Subsequent to questions raised by the NNSA Facility Representatives, facility management declared a violation of the technical safety requirements (TSR) after determining the annual in-service inspection of pipe overpack containers (POCs) had been performed on a statistical sample rather than the complete inventory as required. At the fact-finding, the cognizant system engineer for containers acknowledged an error in executing the surveillance procedure and noted opportunities to eliminate future confusion. In particular, the surveillance, which covers multiple types of fire-rated containers that are credited in the safety basis to provide reduced damage ratios, permits statistical sampling for all containers except POCs and DOE-STD-3013s. Management is determining a path forward to restore TSR compliance for the approximately 700 POCs at the facility, as well as the associated implications for continuing to use a damage ratio for purposes of complying with TSR limits on material-at-risk. Additionally, attendees discussed an apparent conflict between the TSR surveillance criteria for the visual examination and language within DOE-STD-5506 that mandates use of the criteria in the payload integrity checklist for the waste acceptance criteria for the Waste Isolation Pilot Plant when reduced container damage ratios are utilized. On this point, management decided to enter the New Information process.

**Plutonium Facility–Conduct of Operations:** On Monday, an operator declared a potential process deviation after questioning a nuclear criticality safety posting on a glovebox slated for decontamination and demolition. Attendees at the fact-finding determined that the approved process for changing postings had not been followed.

**Transuranic Liquid Waste (TLW) Project:** On Wednesday, the NNSA Field Office provided LANL management with direction regarding the preliminary documented safety analysis. The direction included: revise the hazard evaluation to reflect sodium hydroxide as a standard industrial hazard; revise the hazard analysis to reflect the potential for spray leaks of acidic liquid waste; and affirm the designation of defense-in-depth for the piping system and chemical shields.

**Inappropriately Remediated Nitrate Salt (RNS) Waste–Treatment Activities:** On Tuesday, treatment activities were paused after an operator's coveralls snagged and snapped a pressure gauge assembly on a fire suppression system riser rendering the system inoperable. At the fact-finding, attendees noted appropriate responses and requested an evaluation to determine whether the assembly could be better protected, as it is located in a space-constrained location that is frequently trafficked. Maintenance personnel repaired the system on Wednesday, but noted unexpected corrosion on the broken assembly. As a result, the cognizant system engineer is investigating the need for additional intrusive inspections of the fire suppression system. On Friday, Waste Characterization, Reduction, and Repackaging Facility workers expected to complete treatment of the 30<sup>th</sup> RNS container—marking the halfway point of the campaign.