

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 31, 2017

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending March 31, 2017

**Inappropriately Remediated Nitrate Salts (RNS) Wastes–Startup Activities:** Last Friday, the Associate Director for Nuclear and High Hazard Operations (ADNHHO) approved startup of the RNS denesting and cold-safing activity in Area G. On Thursday, Area G personnel successfully commenced this activity with the removal of the first two RNS drums from their standard waste boxes and subsequent placement into the freezer unit. Area G personnel hope to load eight additional containers into the freezer in the coming week while corrective actions are completed and verified in advance of the startup of treatment activities in the Waste Characterization, Reduction, and Repackaging Facility (WCRRF).

**WCRRF–Safety Basis:** After contemplating feedback from the federal readiness assessment team, facility personnel decided to pursue authorization to use an electric forklift to unload the RNS containers from the transportation vehicle. Accordingly, on Wednesday they transmitted for approval to the NNSA Field Office a temporary modification to the safety basis. The modification enumerates eight benefits of using an electric forklift as compared to the currently authorized electric drum stacker, including reduction on the amount of manhandling required of the RNS drums, improved operator proficiency and efficiency, and the avoidance of the awkwardness of two people handling a drum at a slight angle with up to a 2000 lbs combined load. To address the potential hazard posed by the electric forklift, the modification proposes four new Specific Administrative Controls regarding forklift inspection prior to use and allowed locations for the electric forklift.

**Confinement Vessel Disposition (CVD) Project:** On Thursday, CVD personnel completed cleanup and closure of the fifth vessel. This vessel differed from the previous vessels in that it contained impact mitigation material resulting in the generation of 73 transuranic waste drums—a substantially greater number than the previous vessels. The remaining four vessels also contain various impact mitigation materials. CVD personnel expect to receive the sixth vessel in mid-April.

**Plutonium Facility–Infrastructure:** On Tuesday, facility operations personnel were performing the weekly surveillance on the west pump house diesel firewater pump when they observed elevated temperatures and the release of smoke and steam from the packing gland. They had replaced the gland the previous week after discovery of an unsatisfactory drip rate. At the fact-finding, they were unable to conclusively determine the cause of the failure. However, they discussed the need to re-instate past practices of pre-soaking the gland material prior to installation and allowing additional post-installation soak time prior to operating the pump. The manufacturer does not specify the need for either of these steps. Personnel replaced the packing and successfully returned the pump to service on Wednesday.

**Conduct of Operations:** On Wednesday, the ADNHHO briefed the NNSA Field Office on a planned initiative to institute a bi-monthly operational performance forum. The forum is designed to bring senior leadership from LANL and the NNSA Field Office together to discuss performance improvement initiatives, as well as selected operational events and associated follow-up actions.