

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 17, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending March 17, 2017

DNFSB Staff Activity: On Wednesday and Thursday, a staff team participated in teleconferences with LANL and NNSA personnel, and members of a seismic expert panel to discuss the details of planned seismic analyses and testing for the Plutonium Facility. Also on Thursday, P.J. Migliorini participated in a teleconference with NNSA, EM and LANL personnel to discuss the current status of the Potential Inadequacy of the Safety Analysis for the flanged tritium waste containers in Area G that may be pressurized with a potentially explosive headspace mixture of oxygen and hydrogen isotopes.

Chemistry and Metallurgy Research (CMR) Building–Safety Basis: The NNSA Field Office Manager recently approved LANL’s submittal of the 2016 annual update to the CMR safety basis. This annual update incorporates a temporary modification that was implemented to support cleanout of the confinement vessels currently stored in Technical Area 55. Additionally, this update closes the only open Evaluation of the Safety of the Situation in the safety basis that was developed for a glovebox found to be inappropriately excluded from the Technical Safety Requirements.

On Thursday, LANL submitted a safety basis temporary modification to the NNSA Field Office for review and approval. The temporary modification revises a previous safety basis change for receipt and storage of a package containing americium-241 (see 1/8/16 weekly). LANL proposes a two phased approach to ensure continued safe storage and ultimate recovery of the isotope for beneficial use. In this temporary modification, LANL identifies Phase 1 activities to include venting and sampling of the existing outer containers holding the material, as well as unpacking and repacking the seven inner containers into individual new outer containers. LANL will perform non-destructive assay and radiography of the inner containers to better characterize their contents and then develop a Phase 2 plan to open the inner containers to recover their contents.

Waste Characterization, Reduction, and Repackaging Facility–Readiness Activities: The Federal Readiness Assessment team continues to evaluate facility and personnel readiness to safely accomplish the treatment of the inappropriately remediated nitrate salt wastes (see 3/10/17 weekly). The team is extending their assessment activities into next week due to last week’s unplanned loss of power and glovebox discrepancies identified by facility personnel this week.

Federal Oversight: On Friday, the review team for the Chief of Defense Nuclear Safety briefed the results of their biennial review of the NNSA Field Office. The 25 member team had been performing aspects of their review since early January (see 1/7/17 weekly). The team identified numerous issues, including four high-level management concerns that cross-cut multiple functional areas. These management concerns cover areas associated with oversight procedures, issues management, staffing, and nuclear safety. Of note, many of the issues overlap with previously identified problems that already have corrective actions underway (e.g., last summer’s organizational health assessment).