

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending August 21, 2015

DNFSB Staff Activity: J.W. Plaue was out of the office this week to attend training on root cause analysis and incident investigation.

Area G–Safety Basis: Senior managers from EM headquarters and the EM and NNSA field offices met with LANL personnel this week to discuss the proposed path forward with necessary safety basis changes to allow limited transuranic (TRU) waste receipts and a return to OPERATIONS mode in Area G. Currently all waste receipts are on hold due to exceedance of composite source term (CST) material-at-risk (MAR) limits (see 5/8/15 weekly). LANL has developed a draft Evaluation of the Safety of the Situation/Justification for Continued Operations (ESS/JCO) that will lower overall facility MAR limits and replace the CST limit with new limits on combustible waste. Additionally, LANL performed a new accident analysis for the 17 design basis accidents affected by the CST issues, which is included as an appendix to the ESS/JCO. A team comprised of EM and NNSA safety basis experts is reviewing the ESS/JCO and expect to complete their review in approximately two weeks.

Area G–Operations: This week, Area G operations personnel transitioned the facility from WARM STANDBY to OPERATIONS mode to permit various sampling activities to be performed on seven drums containing cemented inorganic wastes known to contain liquid. This is the second in a series of activities directed by the Field Office (see 7/24/15 weekly) to improve the safety posture of Area G while the facility is in WARM STANDBY mode due to the CST issue.

Plutonium Facility–Safety Basis: On Monday, the Field Office manager signed the safety evaluation report approving LANL's submittal of a revision to the 2014 Plutonium Facility documented safety analysis. Of significance, this revision allows storage of TRU waste containers on designated pads located outside of the facility. Use of these waste storage pads will increase TRU waste storage capacity necessary for ongoing Plutonium Facility operations. This is important as TRU waste storage within the facility is nearing technical safety requirement MAR limits and disposal to Area G is curtailed.

The field office manager also recently approved the closure of an ESS for ammonium nitrate in the plutonium facility ventilation system (see 7/9/10 weekly). The approval letter notes that improvements made to door seals and glovebox exhaust systems, as well as rerouting of ventilation ductwork, has adequately segregated the source of the ammonium nitrate from the ventilation system.

Confinement Vessel Disposition Project: Chemistry and Metallurgy Research (CMR) building operators have completed cleaning out the second of ten confinement vessels stored at TA-55 that have been slated for disposition. The third vessel will not be transported from TA-55 to CMR for cleanout until necessary safety basis changes are implemented and the TRU waste generated from cleanout of the previous two vessels can be shipped out of the facility.