DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 28, 2015

MEMORANDUM FOR:S.A. Stokes, Technical DirectorFROM:R.K. Verhaagen and J.W. PlaueSUBJECT:Los Alamos Report for Week Ending August 28, 2015

DNFSB Staff Activity: J.L. Meszaros observed LANL's independent assessment per DOE-STD-1158 of the nuclear criticality safety program at the Plutonium Facility. On Tuesday, a staff team lead by C. Berg and M.W. Dunlevy conducted a teleconference with NNSA Field Office, EM Field Office, and LANL personnel to discuss a range of safety basis topics associated with the remediated nitrate salt wastes and Area G.

Plutonium Facility–Restart Activities: On Thursday, machinists utilized the recently authorized T-Base II lathe to make a few cutting passes on a plutonium part sufficient to exercise the procedure, including the management of turnings. In accordance with the approved startup plan, a Senior Supervisory Watch and an independent group leader provided management oversight of the activity.

RANT Shipping Facility: In a letter to LANL management dated August 26, 2015, the NNSA Field Office noted numerous and significant deficiencies with the 2015 annual update to safety basis, which is currently in the form of a Basis for Interim Operations (BIO). However, the Field Office acknowledged that the BIO was sufficient to support continued operations under COLD STANDBY. The Field Office further directed that the facility remain in that mode until: (1) the previously identified seismic vulnerabilities are resolved (see 1/30/15 weekly) and (2) the facility implements an approved DOE-STD-3009 compliant Documented Safety Analysis consistent with its enduring facility status. The Field Office did not specify a version of DOE-STD-3009.

Weapons Engineering Tritium Facility–Safety Basis: On Monday, LANL submitted to the NNSA Field Office an Evaluation of the Safety of the Situation (ESS) addressing the Potential Inadequacy of the Safety Analysis declared for the discovery of safety significant oxygen monitor system (OMS) modules plugged into the incorrect power source (see 7/17/15 weekly). In the ESS, LANL noted that workers switched the power source for the modules to the required uninterruptable power supply and satisfactorily completed the appropriate surveillances to verify operability. As such, LANL suggested that no additional operational restrictions are necessary to place the facility in a safe condition and requested approval of the ESS without any required actions.

On Wednesday, LANL submitted to the NNSA Field Office a revision to the ESS for the potential for increased probability of OMS failure (see 11/9/13 weekly). With the submittal of this revision, LANL is requesting to reduce the frequency of OMS calibration surveillances from monthly to quarterly. Accompanying the ESS is a calculation that uses sixteen months of recorded calibration data to demonstrate that sensor lifetime is at least three months.

Emergency Management: On Thursday, LANL personnel conducted a second fact-finding associated with the lapse of Emergency Responder Radiological Training (ERRT) for members of the Los Alamos County Fire Department (LACFD). About two weeks ago, while responding to an external audit, LANL personnel discovered that the ERRT for more than a hundred LACFD personnel had expired around March 2015. LACFD personnel are in the process of completing the training. LANL personnel uncovered several weaknesses in the processes used to monitor and convey training status to LAFD and are examining the extent of condition.