

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 2014

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaue  
**SUBJECT:** Los Alamos Report for Week Ending June 6, 2014

**DNFSB Staff Activity:** On Wednesday, the Site Representatives and DNFSB Headquarters staff held a discussion at Sandia National Laboratories with the lead of the Department of Energy's (DOE) Technical Assistance Team for the Waste Isolation Pilot Plant recovery effort. On Thursday, Headquarters staff conducted a teleconference with field office and LANL personnel regarding emergency response planning for the nitrate salt wastes.

**Area G–Nitrate Salts:** LANL management announced they will not complete the 3706 Campaign on schedule and are working to relocate all remaining campaign wastes (i.e., combustible and dispersible forms) into Dome 230 for storage under fire suppression. In addition, Area G management suspended all legacy transuranic waste repackaging, treatment, and remediation activities. This suspension excludes drum venting, replacement of degraded components, non-destructive assay, and similar actions that improve the safety posture. On Wednesday, Area G personnel conducted a tabletop exercise involving the nitrate wastes that resulted in the identification of several important improvements. Area G and Chemistry Division personnel have also initiated development of a “safing” process to treat the nitrate salt wastes using a water addition followed by eventual cementation.

**Plutonium Facility–Criticality Safety:** On Wednesday, the field office unconditionally approved revision 3 of the Evaluation of the Safety of the Situation/Justification for Continued Operations (ESS/JCO) regarding the potential for criticality due to firewater flooding (see 5/23/14 weekly). The field office noted in their Safety Evaluation Report (SER) that the ESS/JCO is to be implemented by June 30, 2014, and that implementation will include: (1) evaluation of each applicable fissile material operation (FMO) in the context of firewater introduction as a credible abnormal condition, (2) evaluation to ensure that any new credible upsets beyond flooding (e.g., increased reflectivity from graphite) are analyzed, and (3) the criticality controls, procedures, and postings are updated accordingly. The SER notes approval of the ESS/JCO expires on May 30, 2015, and that the termination condition for each FMO is the development and implementation of an updated process-specific criticality safety evaluation that addresses both firewater and seismic induced upsets. Program personnel have initiated implementation efforts with the first Implementation Verification Review expected to occur as early as this weekend.

**Contract Management:** Last week, LANL transmitted to the field office for approval a revised implementation plan for DOE Order 420.1C, *Facility Safety* (see 12/20/13 weekly). DOE issued this version of the Order on December 4, 2012. LANL's revised plan projects implementation of the last action by end of September 2016 with the next updated probabilistic seismic analyses to occur by September 2018.

**Confinement Vessel Disposition (CVD) Project:** This week, LANL transmitted a letter to the field office indicating closure of all pre-start findings from the CVD Operational Readiness Review and requesting Startup Approval Authority to commence CVD operations. CVD personnel plan to transport and receive the first confinement vessel from TA-55 next week.