

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending March 24, 2017

Federal Oversight: On Tuesday, the NNSA Field Office Manager signed out the annual work force and technical staffing plan. Overall, the plan identifies the need for increased staffing.

Support to Pantex: Weapons response personnel recently commenced a series of experiments to address questions concerning the potential for safety impacts to nuclear explosives operations if a Pantex technician were to fall toward an assembly while carrying various pieces of tooling. The test reports are expected in about a month.

Waste Characterization, Reduction, and Repackaging Facility–Readiness Activities: Last Saturday, the Federal Readiness Assessment team briefed the results of their review. As briefed, the team found that all 23 functional area objectives were met; however, they identified 15 pre-start and 6 post-start findings. Pre-start findings of interest include: questionable ability to notify nearby workers of emergency conditions; maintenance work control documents that include broad provisions to adjust task sequence; and procedural and radiological posting deficiencies. Notably, the assessment team leader complimented the treatment team’s embracement of safety culture and commitment to disciplined operations, while noting them to be among the best that he has seen in the Department of Energy.

Emergency Management–Federal Oversight: The NNSA Field Office Manager recently transmitted to LANL the fiscal year 2017 emergency management program element assessment plan. The plan identifies five program elements to be assessed independently by the field office emergency management program manager including: (1) technical planning basis; (2) emergency exercise; (3) training and drills; (4) emergency public information; and (5) program administration. This action is intended to ensure the field office meets the requirement to conduct independent assessments of all 15 emergency program elements every 3 years, consistent with DOE Order 151.1C, *Comprehensive Emergency Management System*.

Plutonium Facility–Safety Basis: Last Friday, LANL management transmitted to the NNSA Field Office for approval the Evaluation of the Safety of the Situation (ESS) regarding concerns associated with the use of cheesecloth in plutonium-238 operations, specifically the lack of rinsing these materials as stated in the approved safety basis (see 2/3/17 weekly). The ESS summarizes recent LANL thermal studies on temperatures produced in pipe overpack containers with varying quantities of plutonium-238. These results justify the 10 g limit established as part of the initial operational restrictions. Accordingly, the ESS proposes to codify this limit as a Specific Administrative Control to minimize the likelihood of fires associated with cheesecloth and plutonium-238. The reduced loading limit also translates into low potential radiological consequences.