

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 4, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending December 4, 2015

DNFSB Staff Activity: M.R. Bradisse was on site to observe the nuclear criticality safety program (NCSP) assessment discussed below. B.K. Caleca and C.J. March were on site to perform a review of Plutonium Facility fire suppression upgrades, to walkdown systems supporting the permacon in Area G storing the inappropriately remediated nitrate salts, and to observe wildland fuel reduction activities utilizing the LANL masticator in the vicinity of Area G. All three staff members conducted a walkdown of the Transuranic Waste Facility (TWF) construction site.

Weapons Engineering Tritium Facility (WETF)–Restart Activities: On Thursday, the NNSA Field Office Manager approved LANL’s submittal of the corrective action plan and prestart finding closure package supporting the recent WETF federal readiness assessment (see 11/27/15 weekly). In the approval letter, the NNSA Field Office Manager acknowledged the prestart findings have been verified closed and authorized restart of WETF gas transfer operations.

Transuranic Waste Facility–Safety Basis: On Monday, LANL submitted to the NNSA Field Office for review and approval a revision of the TWF 90% Documented Safety Analysis (DSA) and Technical Safety Requirements. This revision was submitted to address NNSA Field Office comments and directed actions for a previous submittal (see 9/18/15 weekly). In the revision, LANL noted that all directed actions had been addressed with the exception of one relating to initial conditions assumed for building dimensions and site layout in the aircraft crash analysis. LANL indicated in the submittal that the directed action will be incorporated into the 100% DSA submittal when as-built measurements become available.

Area G–Safety Basis: LANL recently submitted for review and approval a revision to the Evaluation of the Safety of the Situation (ESS) for the storage of remediated nitrate salt wastes. This most recent submittal incorporated comments received from NNSA and EM during a presentation of a draft version of the ESS (see 11/20/2015). On Thursday, NNSA, EM, and DOE Office of Environment, Health, Safety and Security headquarters personnel conducted a video teleconference with EM and NNSA Field Office personnel to discuss the strategy for moving forward with review and approval of the ESS.

Plutonium Facility–Criticality Safety: On Thursday, a team of criticality safety experts from NNSA briefed the results of their focused assessment of the NCSP at the Plutonium Facility. This assessment was primarily conducted to address a recommendation from the federal readiness assessment team for the balance of machining operations to conduct an independent federal assessment of facility implementation of the NCSP (see 7/3/15 weekly). The assessment was conducted using criteria from DOE-STD-1158-2010 scoped to include Supervisory Responsibilities, Operating Procedures, and Materials Control. The team identified seven findings relating to material labeling, material movement processes and procedures, criticality safety infraction corrective action effectiveness, and a nuclear material exemption process that inappropriately excludes certain items from the NCSP. Of note, the finding relating to exempt items was identified as requiring resolution prior to proceeding with the next scheduled federal readiness assessment.