

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 22, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: J.W. Plaue and D.M. Gutowski
SUBJECT: Los Alamos Report for Week Ending September 22, 2017

DNFSB Staff Activity. D. Gutowski was onsite providing resident inspector coverage.

Plutonium Facility–Safety Basis. Last week, safety basis personnel finalized their new information process analysis concerning adequacy of the visual examination criteria used during in-service inspections for the pipe overpack containers (see 8/25/2017 weekly). They concluded that the situation did not constitute a potential inadequacy of the safety analysis. Their rationale included the fact that DOE Directives do not require in-service inspections for credited design features and therefore there could be no requirement to implement criteria in DOE-STD-5506.

Plutonium Facility–Readiness. A contractor readiness assessment (RA) team commenced their review of the electrorefining process. During demonstration of breaking press operations, fragments of a surrogate material ring bypassed the shield around the press. There was no damage to the glovebox. Facility personnel are evaluating how to prevent future occurrences. The RA is expected to finish next week and will be followed by a Federal RA.

Plutonium Facility–Criticality Safety. Two detectors for the criticality accident alarm system in the basement failed the quarterly TSR surveillances test. Facility personnel entered the appropriate Limiting Condition for Operation and launched a fact-finding meeting where they discussed that the surveillance test is likely to show failures in areas with higher background radiation. The detectors passed a revised test and have been returned to service.

During a fissile material operation review, LANL personnel discovered that uranyl nitrate hexahydrate material from TA-18 did not have a current technical basis for criticality safety controls. They restricted access to the location, determined that the material was safe and stable from a criticality perspective, and are developing a recovery plan.

Area G–Safety Basis. LANL completed implementation of the revised Evaluation of the Safety of the Situation for material-at-risk discrepancies (see 9/8/2017 weekly).

Inappropriately Remediated Nitrate Salt (RNS) Waste–Treatment Activities: As of Friday, Waste Characterization, Reduction, and Repackaging Facility workers were treating the 40th RNS container out of 60.

Transuranic Liquid Waste (TLW) Facility Project. In a letter dated August 24, 2017, NNSA directed LANL management to suspend the TLW project by the end of September 2017 due to a number of factors associated with budget, schedule, and competing priorities. The TLW was to fulfill a mission need for an enduring capability to process aqueous waste from the Plutonium Facility. This capability is currently performed in the 1963 vintage Radioactive Liquid Waste Treatment Facility. As directed per the suspension letter, LANL delivered an updated version of the preliminary documented safety analysis to the NNSA Field Office last Friday.