

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 23, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending June 23, 2017

DNFSB Staff Activity: On Thursday, M.W. Dunlevy and P.J. Migliorini conducted a teleconference with staff from the NNSA Field Office to discuss questions related to the safety basis provisions for the storage and mobile loading of transuranic waste at TA-55 outdoor pads.

Transuranic Waste Facility–Startup Activities: Last Friday, the 13 member contractor operational readiness review team out-briefed the results of their assessment. They identified five pre-start findings associated with: (1) procedural control of hand placement during a loading evolution; (2) premature declaration of readiness in the functional areas of operations, procedures, and radiation protection; (3) lack of formality in execution with in-service inspections; (4) lack of adequate procedural field validation; and (5) improper radiological controls coverage during evolutions and the emergency exercise. The post-start finding involved issues with preventive maintenance evaluation and implementation. Overall, the team concluded that 15 of 17 primary objectives were met and that the issues with procedures and operator performance can be corrected through proper use of existing LANL programs.

Plutonium Facility–Infrastructure: On Tuesday, NNSA Field Office personnel in-briefed their assessment of the safety-class firewater pumps. The purpose of the review is to assess the adverse trend of numerous outages with the pumps and the associated risk to the reliability of the safety-class control. They expect to issue a report in August 2017.

Plutonium Facility–Criticality Safety: Last Friday, nuclear criticality safety personnel, including some newer staff members, were walking-down a room with a safe containing nuclear material to assess concerns regarding housekeeping when they observed a piece of shielding affixed to one side of the safe. They were unable to find evidence that this condition had been evaluated, as required by the posting, and declared a process deviation. At the fact-finding, personnel determined that the as-found configuration, including consideration of the current nuclear material contents, was safe and that they would add the shielding issue to the other two infraction issues associated with this safe's out-of-service condition. They also noted that the shielding had not been detected on the last two annual walk-downs and decided to further evaluate the need for an extent of condition review and a change to the walk-down checklist.

Area G–Safety Basis: On Monday, the NNSA Field Office issued direction to LANL regarding the need for an additional compensatory measure associated with the safe storage of the Flanged Tritium Waste Containers with potentially pressurized and flammable headspaces. The new compensatory measure requires LANL personnel to utilize appropriate protective equipment should there be a need to enter the 50 foot exclusion zone during emergency conditions. The Field Office observed the need for this control after a LANL worker approached the shed without any protective equipment in order to close a door that had opened.

On Thursday, the NNSA Field Office denied approval of the Evaluation of the Safety of the Situation (ESS) submitted on July 8, 2016, regarding the Potential Inadequacy of the Safety Analysis associated with the behavior of certain sealed sources in fire events (see 4/29/16 weekly). They requested that the laboratory resubmit the ESS within 120 days to improve the rigor and quality of the fire analysis.