

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 22, 2018

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending June 22, 2018

Weapons Engineering Tritium Facility: Last Thursday, the NNSA Field Office approved the third six-month extension of the Evaluation of the Safety of the Situation (ESS) associated with the Flanged Tritium Waste Containers (FTWC). LANL management previously recognized the potential that the FTWCs could be pressurized with an explosive mixture of hydrogen isotopes and oxygen (see 11/11/2016 report). WETF safety basis personnel are in the process of updating the ESS to consider this potential hazard for AL-M1 containers stored outside of FTWCs. They also continue to develop a safety basis addendum in support of future FTWC venting operations. The current schedule indicates performance of a contractor readiness assessment in mid-November 2018, pending submittal and NNSA Field Office approval of the addendum.

Confinement Vessel Disposition (CVD) Project: Last week, CVD personnel declared the seventh vessel completed.

Transuranic Waste Facility (TWF): On Wednesday, TWF management entered the New Information process after workers questioned whether waste drums received from the CVD project were covered by oxidizer testing documentation created for the Plutonium Facility. The nature of the vessel wastes are such that they are not expected to contain oxidizers; however, this may indicate a weaknesses in the implementation of the waste acceptance criteria. TWF currently holds about 150 waste containers.

Plutonium Facility–Planning: On Wednesday, LANL management conducted a workshop focused on identifying the impacts associated with establishing backshift operations at the Plutonium Facility. The discussions included mission drivers, lessons-learned from other sites, and supporting functions such as safety basis, occupational medicine, and radiological control.

Plutonium Facility–Conduct of Operations: Facility personnel held fact-finding meetings this week for two potential process deviations that occurred last week and both involved transuranic waste. In one event, workers paused after noting that a waste drum had not been fully characterized as waste and therefore questioned whether it complied with a criticality safety posting specifying “plutonium in waste.” Personnel are evaluating the clarity of this definition in the criticality safety program which does not appear to require material be fully characterized as waste per the procedural definition of “plutonium in waste.” In the second event, workers discovered bagged items were labeled incorrectly due to a communications breakdown.

Radioactive Liquid Waste Treatment Facility (RLWTF): The NNSA Field Office unconditionally approved a revised Hazard Analysis Report for the Low-Level Waste Subproject of the RLWTF Upgrade Project that supports categorization as a less than hazard category 3 nuclear facility. This Hazard Analysis Report revision updates the following: (1) expands the facility boundary to include chemical storage sheds; (2) updates process descriptions and inventories for radionuclides and chemicals; (3) confirms that an Emergency Planning Hazard Assessment is not required; and (4) adds detail to planned administrative controls.