

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 15, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: J.W. Plaue

SUBJECT: Los Alamos Report for Week Ending December 15, 2017

DNFSB Staff Activity: D.J. Brown observed the federal readiness assessment (FRA) on the electrorefining operation (ER) discussed below.

Plutonium Facility–Readiness: This week, a FRA team conducted their review of the new ER line, which consists of six gloveboxes and their associated connecting trunk line. NNSA approved the mission need for this new line in 2001 in order to replace the existing line which was transferred in 1979 from a previous facility. The review included interviews, process demonstrations, and an operational drill. At their out-brief, the FRA team noted three pre-start findings associated with: (1) inadequate seismic and static loading analyses to support the proposed operation in the primary staging glovebox; (2) procedure issues; and (3) startup plan inadequacies with the validation of equipment operability and management oversight. They also identified two post-start findings concerning the conduct of operations sustainability plan and the fire hazard evaluation.

Federal Oversight: NNSA Field Office personnel continue development of their enhanced oversight plan of the operating culture in the Plutonium Facility. The plan is intended as a companion to LANL's conduct of operations sustainment/improvement plan stemming from the overmass event that occurred on August 17, 2017 (see 10/27/2017 weekly). Notable topics of discussion included: coping with recent staffing losses, balancing the oversight and partnering roles of the new NNSA governance model, handling activity-level oversight planning given weaknesses in the facility's plan of the day processes, and assessing the significance of the fact that the sustainment initiative does not specifically address facility operations or maintenance/craftwork. Field office management intends to approve the plan in the coming weeks.

Plutonium Facility–Conduct of Operations: Early last Thursday morning, facility operators received a low temperature alarm on a ventilation intake necessitating a shutdown of a portion of the ventilation system and the transition to Mode 2. The facility returned to normal operations around mid-morning. At the fact-finding, held this Wednesday, attendees discussed concerns and identified corrective actions with the failure to appropriately react to a previous low temperature alarm, independent verification of valve lineups, and a lack of formality with call-out work.

Transuranic Waste Facility (TWF): On Thursday, TWF operators successfully received their second four-drum shipment of waste containers from the Plutonium Facility. Operators appropriately paused when they observed that the expected radiological information tags had been removed from the containers, but were able to obtain copies and verify the necessary information. Based on the success, TWF management is considering requesting NNSA concurrence to move forward to an eight drum receipt in early 2018. Last week, Plutonium Facility program and facility operations management assumed responsibility for TWF.

Unremediated Nitrate Salt (UNS) Waste Treatment: On Thursday, Waste Characterization, Reduction, and Repackaging personnel restored the operability of the ventilation system and returned the facility to OPERATIONS mode after the successful repair of the filter housing gaskets (see 12/8/2017 weekly). They subsequently received a UNS container and commenced treatment.