

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 2, 2018

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: J.W. Plaue and D. Gutowski

SUBJECT: Los Alamos Activity Report for Week Ending February 2, 2018

DNFSB Staff Activity. Members of the Board's staff held a closeout teleconference with NNSA Field Office and LANL personnel to provide the staff's observations from their review of the leak path factor modeling used in the Plutonium Facility safety basis (see 12/22/2017 report).

Plutonium Facility–Equipment Deactivation. Plutonium Facility personnel were able to adjust the valve lineup to improve vacuum and complete the solution transfer that had been stuck in the line for more than two weeks. The exact volume transferred has not been determined due to uncertainty in the original volume and uncalibrated tanks on the receiving side. They plan to flush the line with water in the near future. Since water utilities were removed from the sending location, they plan to bring small bottles of water into the glovebox to supply flush water. The next step is to conduct a limited scope campaign to cement this solution along with other legacy solutions that have accumulated since the 2013 pause. They expect to conduct this campaign under a special allowance, since it will likely occur prior to completing formal restart.

Plutonium Facility–Conduct of Operations. On Monday, Plutonium Facility personnel conducted a fact-finding after a craft worker entered an airborne radioactivity area without filters installed in his powered air-purifying respirator (PAPR). While there were no indications of an uptake, fact-finding participants noted that the work crew would benefit from a checklist to ensure proper use of equipment rather than exclusively relying on their training. They also noted that this was the worker's first hot job and would have benefited from additional experience in less hazardous environments. The maintenance supervisor paused PAPR jobs until a learning team is completed.

Unremediated Nitrate Salt (UNS) Waste Treatment. On Monday evening, while leaving the facility for the day, a Waste Characterization, Reduction, and Repackaging Facility (WCRRF) operator alarmed the personal contamination monitor. The responding radiological control technicians identified alpha contamination on the skin of the operator's forearm at levels of about 17 k dpm. They commenced decontamination activities and worked with the operations center staff to transfer the individual to LANL's Occupational Medicine (OccMed) clinic, where he was successfully decontaminated and released without restrictions. At the fact-finding, operations center personnel noted difficulty reaching the after-hours on-call OccMed provider delaying the response. Ultimately, the operations center supervisor was able to reach an OccMed supervisor who was able to initiate preparations for their response. Fact-finding participants determined the need for a learning team to review the communications difficulty, which they currently believe was related to cell phone connectivity at the on-call provider's home. WCRRF personnel also subsequently determined that the contamination resulted from a breached glovebox glove. As of Thursday evening, WCRRF operators completed processing of 16 of 27 UNS containers.

Transuranic Waste Facility (TWF). TWF management received NNSA approval to proceed with phase 2 of their startup plan. Accordingly, they successfully received a shipment of eight containers during a roughly six hour evolution on Wednesday. TWF operators and management continue to refine their conduct of operations in order to ensure safe and efficient work accomplishment.