DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 8, 2019

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: J.W. Plaue and D. Gutowski, Resident Inspectors

SUBJECT: Los Alamos Activity Report for Week Ending February 8, 2019

Plutonium Facility–Accident Investigation: Last week, the LANL Director signed the final investigation report (LA-UR-19-20258) from the August 2018 event where a worker received a puncture wound during glovebox cable maintenance that resulted in an intake of plutonium-238 (see 9/7/2018 report). Overall, the investigation team identified five judgements of need covering the following: (1) inadequate management implementation of work control, training, and conduct of operations requirements; (2) inadequate performance steps in the work control document associated with the use of skill of the craft requirements; (3) inadequate management follow-up to eliminate the previously identified frayed wire hazard; (4) workers did not identify the need to pause work in accordance with procedures; and (5) management did not fully appreciate the injection hazard posed by isotopes with greater specific activity. Facility management is developing associated corrective actions.

Plutonium Facility–Nuclear Materials Management: This week, machining personnel began the process of moving containers of plutonium metal turnings to another room in the facility for stabilization. Multiple containers of turnings have been stagnant in the machining room since prior to the operational pause of the facility (see 7/4/2014 report). Processing the turnings creates a safer material form by eliminating the pyrophoric hazard and removes unnecessary material-at-risk from the machining gloveboxes.

RANT Shipping Facility–Readiness: On Monday, a thirteen member team commenced the contractor readiness assessment for the restart of the RANT Shipping Facility. Restart of this facility will restore the Triad's capability to load transuranic waste for offsite shipment in an indoor environment thus avoiding the vagaries of weather that constrain outdoor mobile loading. This week, the team observed a performance demonstration of transuranic waste loading and conducted interviews. The performance demonstration also included an operational drill involving discovery of radiological contamination during surveys of the shipping container. The assessment is scheduled to complete next week. A federal readiness assessment team is scheduled to commence their review the week of February 18, 2019. The plan of action for the federal assessment was issued on Thursday.

Plutonium Facility—Readiness: The federal readiness assessment team for the Uranium Electrolytic Decontamination (UED) process issued their final report last Friday. The report recommends that upon correction of two pre-start findings and establishment of a corrective action plan to address two post-start findings, the UED process be allowed to restart in accordance with its startup plan. One pre-start finding was in the area of configuration management and involved the process for determining equipment management levels for quality assurance purposes. The second pre-start finding notes that the radiological work permit for UED operations is not consistent with site procedures. The post-start findings were both in the area of feedback and improvement and related to treatment of corrective actions from the contractor readiness assessment.