DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 21, 2022

MEMORANDUM FOR:Christopher J. Roscetti, Technical DirectorFROM:D. Gutowski and J. Plaue, Resident InspectorsSUBJECT:Los Alamos Activity Report for Week Ending January 21, 2022

Plutonium Facility–Glovebox Safety: On Wednesday, a five-member federal Accident Investigation Board commenced its review of the contamination event and potential intake of radioactive material by a worker that occurred on January 7, 2022. Following Triad's decontamination efforts, board members walked down the laboratory room associated with the incident. They also conducted interviews and received a briefing from Triad's internal dosimetry team.

Transuranic Waste Facility: On Thursday, Triad declared full implementation of two safety basis changes. One change was related to flammable gas sampling, and the other was the upgrade of the fire suppression system to safety significant. Upgrading the fire suppression system has involved substantial effort since the facility became operational in 2017 (see 9/6/2017 report).

Weapons Engineering Tritium Facility: A Triad team performed an implementation verification review for the safety basis changes supporting upcoming plutonium coupon studies. The team noted four findings in their outbrief and expressed a general concern outside of safety basis implementation with bringing plutonium into the facility given the substantially different radiological hazard compared to tritium.

Radioactive Liquid Waste Treatment Facility–Readiness: Triad's Joint Evaluation Team met this week to evaluate readiness needs for the resumption of transuranic waste drumming operations. This operation has not been performed since 2014. The hazard category 3 facility is approaching material-at-risk limits which can best be reduced by resuming the drum cementation process. Facility personnel proposed that this was an expansion of existing capability, however the Joint Evaluation Team concluded that it was a restart and should undergo a readiness assessment.

Nuclear Criticality Safety: On Wednesday, the NNSA Field Office concurred with Triad's revision to the program improvement plan. Focus areas for this fiscal year include: continued development of standardized criticality safety requirements documents; completion of the 86 fissile material operations remaining in the backlog; and full implementation of a new holdup database. On Thursday, Triad requested a variance to the requirement to conduct annual fissionable material operational reviews citing onsite staffing impacts from COVID-19. They specifically requested an extension of the frequency from 12 to 15 months for 79 fissionable material operations with due dates between January 15, 2022 and February 25, 2022.