

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 27, 2020

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending November 27, 2020

Area G–Readiness: Last Friday, the contractor readiness assessment team for the glovebag and drill & drain operations paused the review due to operational impacts from a presumptive case of COVID-19 with multiple close contacts. The team out-briefed its interim results and plans to complete necessary field demonstrations and an emergency drill in December pending COVID-19 conditions. The team’s interim results included eight pre-start findings involving: flow-down of criticality safety requirements; design and configuration management issues with the installed glovebag; ability to respond to a fire during glovebag operations; lack of defined compensatory measures associated with phasing out of the startup plan; procedural issues; lack of evaluation of lighting levels to support safe glovebag operations; and deficiencies with the radiation protection review. The team also identified a post-start finding associated with inadequate closure of issues identified during the management self-assessment.

Infrastructure: Earlier this month, Triad safety basis management transmitted to the NNSA Field Office for review and approval a significantly revised major modification determination and safety design strategy for the Los Alamos Plutonium Pit Production Project (see 8/21/2020 report). The revisions address previous comments from the field office that generally improve the level of detail and analysis in the documents; however, the overall conclusion remains that the LAP4 effort does not constitute a major modification. Of particular interest, the documents provide better granularity on the expected changes to material-at-risk. They note an expected increase in the quantity of plutonium metal and a decrease in the quantity of plutonium oxide compared to the current safety basis. The reduction in oxide is expected to result in overall lower dose consequences for the bounding postulated accident scenario of a seismically-induced fire. The need to protect the apportionment of material-at-risk assumed in the safety analysis was discussed in the report attached to the Board’s letter dated November 15, 2019, concerning the safety basis for the Plutonium Facility. The field office is reviewing the submittal.

Weapons Engineering Tritium Facility: Triad safety basis personnel concluded they had a deficient safety basis (i.e., a positive unreviewed safety question) related to the setpoint for the oxygen monitoring system (see 11/20/2020 report).

Plutonium Facility–Safety Basis: On Thursday, the NNSA Field Office unconditionally approved Triad’s evaluation of the safety of the situation concerning the criticality alarm system (see 8/28/2020 report).

COVID-19 Impacts: Contractor and field office management continue to emphasize the need to maximize telework. For next week, Triad management intends to implement a slow, deliberate return to work that keeps onsite staffing at an absolute minimum following the holiday weekend.