DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 26, 2024

TO: Timothy J. Dwyer, Technical Director FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for the Week Ending July 26, 2024

Plutonium Facility—Radiological Control: Last Tuesday, a worker exiting a laboratory room used for heat source plutonium operations alarmed the hand and foot monitor. Responding radiological control technicians discovered a particle of heat source plutonium on the individual's hand. They were successfully decontaminated, and there was no evidence of further contamination spread or airborne activity. Decontamination personnel performed a wipe down of the room following the event. The individual with the skin contamination had not been performing glovebox work; however, they had performed a task without gloves, which is not on the limited list of activities that can be performed without wearing gloves. A key corrective action planned from this event is additional reinforcement of glove usage requirements for the workforce. Recent efforts to reduce hot particle contamination incidents have already been implemented including monthly wipe downs of heat source plutonium processing rooms and use of portable air handlers with filtration.

Plutonium Facility–Readiness: On Thursday, the NNSA Field Office approved the corrective action plan and causal analysis for the contractor and federal readiness assessments supporting receipt and repackaging of large quantities of heat source plutonium (see 6/21/2024 report). In its approval, the Field Office stated that additional performance demonstrations would be required before approval to start the operation. Field demonstrations for the readiness assessments took place more than one calendar year ago.

Area G–Operations: Last week, N3B personnel completed programming changes to the variable frequency drive controllers for the ventilation system supporting corrugated metal pipe cutting activities in the Dome 375 Perma-Con (see 7/12/2024 report). Power to the system has been stable and cutting activities have resumed. New surge protection is slated for installation next month.

Chemistry and Metallurgy Research Building (CMR)–Decontamination and Decommissioning (D&D): Triad personnel are planning to resume D&D activities at CMR in Fiscal year 2025 (see 5/19/2023 report). The complete scope of this activity is being defined, and it will involve removal of equipment as low-level waste from Wings 2, 3, and 4. Glovebox removal and transuranic waste activities will not be part of this scope. Last Wednesday, the resident inspector walked down Wing 2 of CMR with facility management to observe current conditions and potential future work scope.

Weapons Production–Continuous Improvement: Triad personnel completed a new revision to the procedure defining processes for performing pre-job briefings for the majority of weapons production activities including work in Technical Area 55 and Chemistry and Waste Facilities. Changes in the procedure are intended to address corrective actions resulting from outside assessments and events where issues with pre-job briefings were identified as causes (see 6/28/2024 report). Of note, pre-job briefings for moderate or high hazard jobs are now required at the start of every day or shift. The current version of the procedure allows weekly briefings for repetitive, moderate hazard work activities. Training on the new revision is in progress to support implementation.