

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 8, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: E. Freeman, D. Gutowski, and J. Kemp, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending November 8, 2024

DNFSB Staff Activity: J. Kemp commenced his assignment as a resident inspector bringing the DNFSB Los Alamos Field Office to full staffing. A headquarters staff team held a remote interaction with Environmental Management and N3B personnel to support the staff's review of the new safety basis for Area G (see 7/19/2024, 8/2/2024 reports).

Plutonium Facility–Criticality Safety: Last Tuesday, personnel identified that updated assay values for materials they had recently moved resulted in exceeding the mass limits for a glovebox. Workers had performed the move compliantly using initial assay values. When they received updated numbers, the mass of one item increased by approximately 15%. The workers immediately paused and called a potential process deviation. Criticality safety personnel recommended verbal recovery guidance to facility operations personnel who authorized recovery of the box by moving material to another location to restore compliance with the mass limit.

Plutonium Facility–Radiological Control: Last Thursday, there was a skin contamination event at the Plutonium Facility. A radiological control technician had contamination on their palm, which was detected at the final hand and foot monitors prior to facility exit. The likely cause of the contamination was touching equipment without gloves on, which goes against established procedures. Management is immediately reinforcing current requirements on glove usage. Meanwhile, evaluation of pilot studies of different personal protective equipment requirements following previous contamination events is nearing completion (see 1/12/2024 report). Revised requirements for entry into the Plutonium Facility based on these data are being finalized.

Plutonium Facility–Decontamination and Decommissioning (D&D): Last Wednesday, there was a contamination spread within a tented area in a laboratory room undergoing D&D activities. Dayshift workers were size reducing a legacy vacuum line with substantial internal contamination. After discovering liquids and sludge within the line, they capped the cut end of the line. During backshift, personnel performing surveys identified contamination spread within the tent, found visible material from the line on top of a glovebox within the tent, and several workers had contamination on their personal protective equipment. The next morning, facility personnel called a potential process deviation due to concerns with liquids collecting in the unsafe geometry of a point source ventilation system. Decontamination efforts within the tent are pending resolution of this potential criticality safety concern.

Waste Characterization, Reduction, and Repackaging Facility (WCRRF): Last Thursday an independent team began a contractor readiness assessment (CRA) for WCRRF's upcoming glovebox size reduction activities. DNFSB staff have been observing CRA activities this week. The CRA will continue next week.

Weather Impacts: Snowfall impacted onsite operations at the laboratory resulting in suspension of onsite operations all day Thursday and parts of Wednesday and Friday.