

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 30, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: E. Freeman and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending August 30, 2024

Plutonium Facility–Decontamination and Decommissioning (D&D): On Monday, there was a contamination spread during D&D activities at the Plutonium Facility. Workers were removing a sink and associated industrial waste lines from a laboratory room and the basement areas below. Exit surveys discovered contamination on one worker’s personal protective equipment (PPE). Further investigation by radiological control personnel identified positive nasal swabs on the individual and discovered contamination on the floor of the work area. Management paused this project and, as an immediate corrective action, plans to ensure that all D&D activities involving industrial waste lines include respiratory protection. Further corrective actions are under development to improve work planning for D&D activities.

Plutonium Facility–Glovebox Safety: During a walkdown of the Plutonium Facility, a resident inspector observed glovebox safety personnel evaluating a glovebox glove with a potential breach. On Tuesday, a worker in a heat source plutonium room detected a small amount of contamination on their PPE glove and followed the response process for a potential glove breach. The evaluation of the glove after it had been changed out did not find any conclusive visual evidence of a breach. The resident inspector also saw the glovebox window that was successfully replaced following severe damage from a pair of pliers (see 8/2/2024 report).

Plutonium Facility–Safety Basis: On Monday, the NNSA Field Office concurred with a major revision to the Project Execution Plan for updating accident analysis calculations supporting the new safety basis (see 4/19/2024). In their concurrence letter, Field Office personnel commented that the plan integrates vetting of comments on the initial safety basis submittal from the field office, DOE headquarters elements, and the DNFSB staff.

Chemistry and Metallurgy Research Building (CMR): Last Thursday, a bagout of material from a glovebox in CMR resulted in the PPE contamination of two workers and a continuous air monitor (CAM) alarm. Radiological control technicians determined the contamination was contained in the work area. Nasal swabs and further surveys were all negative. During the fact-finding meeting participants noted the workers’ actions were appropriate for the circumstances and prioritized safety considerations. One corrective action stemming from this meeting was a recognition that further evaluation is needed on the current alarm level(s) for CAMs, how those alarm levels may differ from the allowable work conditions under a radiological work permit, and whether facility abnormal event procedures account for this. Participants discussed that a CAM alarm during active hot work may not require a facility response since the potential for contamination is anticipated and documented.

Waste Characterization, Reduction, and Repackaging Facility (WCRRF): On Tuesday, the NNSA Field Office approved the plan of action for the contractor’s operational readiness review to assess the readiness of WCRRF to restart operations as a hazard category 3 nuclear facility. A federal operational readiness review will follow.