DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 15, 2023

TO: Katherine R. Herrera, Acting Technical Director

FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for the Week Ending December 15, 2023

Staff Activity: M. Bradisse and R. Wu were on site providing resident inspector support. M. Bradisse also attended the training course *Safety Culture for Front Line Leaders* at the NNSA Field Office.

Waste Characterization, Reduction, and Repackaging Facility (WCRRF)—Radiological Control: Last Wednesday, there was a skin contamination event at WCRRF. Personnel were working to remove legacy contaminated equipment from the glovebox enclosure, which is highly contaminated

and has a legacy hydraulic oil spill. The workers were wearing two pairs of Tyvek coveralls and powered air purifying respirators. One of the workers who entered the enclosure alarmed monitoring equipment on exit after doffing his coveralls. Supporting radiological control technicians identified contamination on the individual's inner elbow. They were unable to successfully decontaminate the skin with the limited techniques allowed and available at WCRRF, so the worker was transported to Occupational Medicine where he was successfully decontaminated. Radiological control, operations, and industrial hygiene personnel plan to re-evaluate personal protective equipment requirements for this activity to better protect the workers from radiological hazards while avoiding heat stress issues.

Area G–Operations: Last week N3B lifted stop works specific to corrugated metal pipe activities and resumed those operations (see 12/1/2023 report).

N3B commenced a management self-assessment for startup of the Universal Drum Assay and Segregation System (UDASS). The UDASS is a new system under evaluation to obtain more accurate characterization of waste drums. As UDASS operations are largely similar to existing assay techniques, this is considered an expansion of existing capabilities, and no formal readiness assessment is planned. This week, the review team observed an operational demonstration and started interviews. The review is expected to conclude next week.

Plutonium Facility–Safety Basis: Last Wednesday, Triad personnel concluded that the energetic event in the bonecrusher constituted a positive unreviewed safety question (see 12/1/2023).

Chemistry and Metallurgy Research Building (CMR): Last Thursday, Triad submitted to the NNSA Field Office for approval a major modification determination for a potential new mission to size reduce mixed oxide fuel rods at CMR. These fuel rods have no defined use and are currently in shipping casks staged in the Plutonium Facility. The proposed project would be to ship the casks to CMR, open them, and size reduce the fuel rods in the Wing 9 Confinement Vessel Disposition enclosure prior to disposal as waste offsite. Triad concluded that this proposed mission would not constitute a major modification, but a safety basis addendum would be required.

Weather Impacts: A winter storm caused a laboratory closure on Thursday and a delayed opening on Friday.