

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 1, 2022

**MEMORANDUM FOR:** Christopher J. Roscetti, Technical Director  
**FROM:** A. Boussouf and D. Gutowski, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for Week Ending July 1, 2022

**Area G:** Last Friday, the Environmental Management Field Office provided authorization for N3B to restart drill and drain operations at the Dome 231 Permacon in Area G. They did not authorize resumption of glovebag activities in the same location. The field office requested N3B submit revised procedures for the glovebag work and is withholding approval until they evaluate the submitted documents. N3B commenced deliberate hot operations for drill and drain this week; these operations have proceeded without incident.

On Monday, a worker in a tool crib turned on a heater which started sparking and smoking. The worker called 911 and notified personnel working in other parts of the building to evacuate. The fire department responded promptly. There was no fire and there is no material at risk in this building. The resident inspectors observed that a fire alarm pull station in the area was not readily accessible as it was behind a padlocked gate that had been added in the building. N3B engineering is evaluating corrective measures to fix this code compliance issue.

**Chemistry and Metallurgy Research Building (CMR):** Last Wednesday, two workers in CMR alarmed radiological monitors due to contamination on their personal protective equipment. There was no skin contamination or evidence of an uptake. Further evaluation found that there was a contamination spread originating from a laboratory room in Wing 7. The likely source of the contamination was a fume hood with internal contamination levels well above the threshold for routine decontamination. Radiological control technicians found contamination on the floor immediately outside of this hood which then was further spread to other laboratory rooms and the corridor through routine custodial activities. Air monitoring equipment in this room showed elevated readings which did not reach alarm levels but did exceed thresholds for evaluation by radiological control personnel. Facility personnel noted that this lab room and the fume hood were not subject to routine radiological surveys and plan to correct that and do a wider evaluation of routine survey locations. The last measurement of the face velocity for the hood was satisfactory, but on the low end so another corrective action is to retest the flow and increase it if possible. Custodial practices in radiological areas have evolved over time so those will also be reevaluated. Decontamination efforts are in progress.

**Plutonium Facility–Safety Basis:** On Monday, the NNSA Field Office conditionally approved the annual update to the Plutonium Facility’s safety basis. In April, the Field Office requested a resubmittal of the annual update to address review comments. In this week’s approval, the field office noted that all of their comments were adequately resolved other than one related to fire suppression system performance criteria. The condition of approval is to update the fire system performance criteria with respect to ongoing fire pump upgrade activities no later than the next annual update.

**Weapons Engineering Tritium Facility (WETF):** During a management self-assessment to prepare for startup of plutonium coupon studies at WETF, assessors identified that some accidents involving the test cell assembly when connected to the tritium gas handling system were only analyzing plutonium and not tritium. Safety basis personnel determined this constituted a positive unreviewed safety question and are recalculating consequences using both tritium and plutonium to see if there will be any impact on control selection.