DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 17, 2026

Los Alamos National Laboratory Resident Inspectors Activity Report for Week Ending April 17, 2026

Plutonium Facility–Work Control: In late March, during a routine system test, facility workers noticed a damaged copper pipe connected to a pressure differential transmitter, which measures the differential pressure of part of the Plutonium Facility's ventilation and confinement systems. The pipe was completely separated and bent. Workers were still able to conduct the scheduled routine test, but the damage was reported to operations staff, who submitted a priority repair request given the safety significance of the ventilation and confinement systems. There was a misunderstanding about the significance of these systems, and maintenance workers put a management level (ML) 4 stainless steel component on the line to repair it when a ML-2 level brass component was requested by engineering staff. Management level refers to the quality assurance requirements for the component, with ML-1 representing the highest level of quality assurance and ML-4 the lowest. Furthermore, operations staff for the Plutonium Facility were not notified that this repair work was occurring. Operations staff learned about the repair when they conducted a walkdown of the line to troubleshoot pressure abnormalities in the system and discovered a valve had been closed by an unknown person, which was causing system abnormalities. Facility staff placed a non-conformance report tag on the piping and entered the proper process to complete the repair. The contractor conducted an initial fact-finding meeting on this event last week, but the appropriate workers did not attend the meeting; the meeting was rescheduled to this week, and all necessary workers attended. The contractor has identified corrective actions, including ensuring that the facility has sufficient ML-1 and ML-2 spare components for common systems to ensure the right equipment is available for immediate repair.

Plutonium Facility–Radiological Controls: This week, facility management conducted several fact-findings related to recent glovebox glove breaches. While glove breaches represent a potential safety hazard due to a loss of a confinement layer, such events are a known and periodically occurring challenge in glovebox operations, arising from factors such as normal operational wear, physical impacts during use, and long-term radiation exposure. The facility identified and responded to each event in accordance with established procedures and confirmed that no skin contaminations or personnel injuries occurred. The contractor's glovebox safety team continues to review glovebox integrity issues, including these recent events, using the fact-finding process to establish timelines, evaluate contributing factors, capture lessons learned, and implement targeted improvements to glove use practices and reliability. As the facility activity levels increase, contractor management is closely monitoring corresponding trends in glove integrity performance. In response, facility leadership is implementing multiple glovebox safety improvement initiatives. Additionally, there is an increased emphasis on reinforcing thorough pre-use inspections and radiological surveys to enhance early identification of potential issues and further strengthen operational safety.