

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 2025

TO: Acting Technical Director
FROM: Acting Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for May 2025

DNFSB Staff Activity. The DNFSB INL cognizant engineer held weekly meetings to maintain awareness of site activities, including attending event fact-findings, management reviews, integrated project team reviews, facility plan-of-the-day and operations report meetings.

Advanced Mixed Waste Treatment Project (AMWTP) Continuous Air Monitor (CAM) Source Check Procedural Violations. On May 19, 2025, Radiation Protection (RP) personnel identified that a CAM had been out of range for the prior seven weeks based on the performance of a source response check and a review of previous data in the super compactor glovebox area. RP personnel removed the CAM from service and verified that no work was in progress or planned for the affected area. The site investigated and confirmed that the RP personnel performing the daily out-of-range CAM checks failed to confirm the readings against the range indicated on the log form. The extent-of-condition review did not reveal further deficiencies. The site implemented corrective actions, including increasing supervisors' oversight of CAM source checks and conducting supplementary training for RP personnel to improve performance.

Idaho Nuclear Technical and Engineering Center (INTEC) Contamination on Forklift and Telehandler Tines. On April 28, 2025, operators at INTEC identified elevated swipe counts on forklift tines after moving a C90 waste box. RP personnel assumed the activity was likely due to radon, but the activity did not decay as anticipated overnight. The identified contamination activity was later determined to be 764,706 dpm from Cesium-137, which was appropriately decontaminated. On May 21, 2025, operators moved two C90 waste boxes with a forklift. Because of lessons learned in the previous event described above, the forklift was moved to the hotline staging area to prevent the spread of any contamination that might be present in addition to limiting background dose interference. The smears and large-area wipes of the tines indicated elevated beta/gamma activity levels of 160 dpm and 10,000 dpm, respectively. RP personnel performed additional surveys, and the results were below the minimum detectable activity level. After decontamination of the tines, the disposition for this event showed that the RP personnel applied the lessons learned from the prior event.

Integrated Waste Treatment Unit (IWTU) Inadvertent Loss of Power. On May 21, 2025, IWTU experienced complete loss of power and ventilation during the performance of an annual preventive maintenance evolution. While isolating the hazardous electrical energy source via lockout/tagout prior to commencing work, operators misinterpreted a step in the work order that required bypassing of the uninterruptible power supply (UPS). Instead of a manual bypass, the operators bypassed the UPS internally, resulting in the loss of power to the whole facility when the breaker was opened. The radiological buffer area was evacuated, and appropriate emergency action responses were taken. Management review identified corrective actions to prevent recurrence, including revising the work order procedure to clarify ambiguous steps.