

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 6, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Mark T. Wright, Cognizant Engineer  
**SUBJECT:** Idaho National Laboratory (INL) Report for November 2024

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

**Sludge Repackaging Project (SRP) Drum Vent Corrosion.** Over the past few months, several SRP drums have failed at points of excessive corrosion around the metal, hexagon-style drum vent filters. The three most recent events include Advanced Mixed Waste Treatment Project (AMWTP) operators observing a vent position shift during a drum movement (October 21, 2024); radiation control technicians (RCT) taking a sample swipe on a corroded part of an SRP drum lid around the vent, causing the vent to fall into the drum (November 5, 2024); and AMWTP operators catching the edge of a plastic drum spacer on a filter during drum movement, causing the filter to peel up and away from the drum lid (November 7, 2024). Personnel appropriately responded to these events, evacuating the affected facility and securing ventilation. RCT surveys of the event areas did not find any contamination, and operators subsequently overpacked these drums. Idaho Environmental Coalition (IEC) personnel are reviewing information about the failed SRP drums to determine potential common factors. Age of the drums appears to be at least one such factor.

**Utility Task Vehicle (UTV) Strikes Pedestrian Resulting in Safety Stand-Down and DOE Letter of Concern.** Prior to sunrise on the morning of November 4, 2024, an operator driving a UTV between buildings at AMWTP struck a pedestrian after turning a corner. The UTV impact knocked the pedestrian to the ground, causing minor injuries. The UTV operator had difficulty seeing through the windscreen, which kept icing over after being scraped and prevented a clear view of the pedestrian. This is the latest in a series of vehicle-related incidents that have occurred at INL (see December 2023, July 2024, August 2024, and September 2024 reports). On November 6, Idaho Environmental Coalition (IEC) conducted a company-wide safety stand-down to discuss this and other recent events, company expectations, procedural requirements, and employee responsibilities required for equipment. DOE Idaho Cleanup Project (EM-ICP) management briefed federal staff on these issues. EM-ICP also issued a formal letter of concern related to the negative trend in vehicle safety and briefed IEC senior management on their concerns. IEC is developing formal corrective actions to improve vehicle safety.

**Neutron Detection Instrument with Expired Calibration Used at Idaho Nuclear Technology and Engineering Center (INTEC).** During routine checks of instrument calibration paperwork on November 25, 2024, an INTEC Radiation Protection (RP) supervisor discovered that a neutron detector had been used on September 9 and 10, 2024, with an annual calibration that expired on September 6, 2024. The RCT who used the instrument did not notice the expired calibration. The technician who performed the monthly source check of the instrument on September 3, 2024, also did not notice the pending expiration. The INTEC RP group maintains an equipment database that includes this instrument, but the database does not provide automatic reminders of upcoming calibration expiration. On October 1, 2024, INTEC personnel sent the instrument to a lab for calibration. On October 8, 2024, lab technicians performed "as-found" checks on the instrument and confirmed the instrument was in tolerance. INTEC personnel determined that this instrument had only been used with the expired calibration on the days noted above and verified that other neutron detectors had not been used with expired calibration.