

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Mark T. Wright, Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for August 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. The cognizant engineer also attended the Hazard Review Board (HRB) meeting for the demolition of Accelerated Retrieval Project (ARP) buildings VII and IX on August 14, 2024. At this meeting, ARP management, engineers and operators appropriately discussed the planned demolition sequence; differences from the recent demolition of ARP VIII; monitoring of radiological conditions around the demolition area; and expected hazards such as wind conditions, swing of cut purlins and cables, and safe stand-off distances during the structure pull-down.

A DNFSB staff team visited INL on August 19–22, 2024 to conduct electrical systems walkdowns and observe general site conditions and operations. Preliminary observations of the staff team included excess combustible storage in some electrical spaces, degraded exterior condition of some older outdoor electrical equipment, and presence of an outdoor temporary accumulation area that was roped off but appeared to be missing radiological signs. The staff team also observed operations at the Advanced Mixed Waste Treatment Facility's north box line. The operators were knowledgeable about the procedure used to guide this work, including using appropriate verbal verification steps as called out in the procedure.

Integrated Waste Treatment Unit (IWTU) Updates. As noted in the March–July 2024 reports, IWTU personnel shut down the plant to determine the cause of material bypassing the process gas filter (PGF) and repair this equipment. In August 2024, IWTU personnel completed the PGF outage. After completing pre-start checklists, IWTU personnel began the heat-up process of the plant and returned IWTU to operational status on August 25, 2024. IWTU resumed processing sodium-bearing waste (SBW) on August 29, 2024. Also at IWTU, construction of product storage building (PSB) II is proceeding ahead of schedule. During August 2024, IWTU construction personnel completed the outer concrete structural walls, began interior electrical installation, and began preparations to install the steel roof trusses, which are already on-site. When complete, PSB II will more than double the product vault storage capacity.

Telehandler Struck Van near ARP IX Structure. On August 12, 2024, a telehandler carrying two empty, stacked intermediate bulk container (IBC) totes struck a passenger van near the ARP IX structure. The height of the stacked IBC totes was approximately 7 feet, which created an off-center blind spot in front of the telehandler operator. The telehandler operator did not see the van behind the IBC totes and struck it while travelling at approximately 3 miles per hour. The accident caused minor damage to the van but no injuries to either the telehandler operator or the van passengers. At the fact-finding meeting, Idaho Environmental Coalition (IEC) personnel noted that a spotter would not be required in this situation according to current procedures. For a corrective action to address this issue, IEC restricted stacking of these IBC totes when moving them with a telehandler. This event is another example of vehicle impact occurrences as documented in the July 2024 report.