

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 2, 2024

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

Integrated Waste Treatment Unit (IWTU) Process Gas Filter (PGF) Outage. As noted in the March–June 2024 reports, IWTU is currently shut down to determine the cause of material bypassing the PGF and repair this equipment. In July, IWTU personnel completed assembly then installation of new PGF filter bundles, seated the PGF vessel head on the PGF vessel, and tensioned the PGF head bolts. To complete the PGF recovery, IWTU must reinstall the PGF head insulation, reinstall blowback and process piping, complete removal of work material from the Process Cell around the PGF, reinstall Process Cell shield plugs, and remove the large area containment. IWTU startup activities are expected to initiate in mid-August 2024. IWTU personnel placed the removed filter bundles and broken filter elements into CO-140 and CO-90 waste boxes, which were then placed in two empty vaults normally used to store IWTU processed waste. These vaults have been placed in the Product Storage Building, along with vaults containing canisters of processed waste.

Radioactive Waste Management Complex (RWMC) Adams Boulevard Bridge (ABB) Load Restrictions. On July 22, Battelle Energy Alliance (BEA) personnel informed Idaho Environmental Coalition (IEC) personnel of the results of the latest load rating report for the ABB, which showed a degradation in load carrying capacity. The ABB traverses a culvert on the north side of the RWMC, leading to the main entrance of the facility. BEA conducts regular inspections and analyses of bridges for the INL site, including areas operated by IEC. The load rating report for the ABB showed that the bridge may not be able to safely support some of the larger vehicle loads that routinely use the north entrance to RWMC, including emergency vehicles, waste shipments including WIPP-bound TRUPACTs, dump trucks for soil moves at the Accelerated Retrieval Project, and personnel buses. These vehicles are temporarily being routed through the south RWMC gate leading to the Advanced Mixed Waste Treatment Project (AMWTP) portion of RWMC. BEA personnel have put up temporary signage to note bridge restrictions and are developing a comprehensive list of impacts as well as considering other traffic routing options until the bridge is repaired.

Inconsistent Use of Spotters for Vehicle and Crane Movements in and around Nuclear Facilities. On July 23, an IEC forklift operator was performing pre-operational checks of a forklift in an AMWTP waste storage building when the forklift mast contacted and damaged an operating ceiling fan. A forklift spotter was not used for this part of the operation. Other incidents involving vehicle or crane operations in or around nuclear facilities without a spotter have occurred over the past eight months, including a forklift impacting a loaded waste trailer, a roll-up door damaged by lumber in a pickup truck bed, crane impacting a forklift, and a truck impacting a waste drum (see December 2023 report). IEC personnel are aware of the inconsistent use of spotters and are taking steps to clarify when spotters are required in both training and procedures.