

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Timothy L. Hunt, Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for October 2019

DNFSB Staff Activity: Board's staff member R.G. Quirk was on site from October 21-24, 2019, providing routine oversight of ongoing INL activities.

Sludge Repackaging Project (SRP) Restart in Accelerated Retrieval Project (ARP) VII.

Fluor Idaho commenced SRP operations in ARP VII on October 31, 2019, following closure of seven pre-start findings from its contractor readiness assessment (CRA)—addressing training weaknesses and needed procedure improvements, in particular. The ARP VII SRP operations are an extension of those that were performed in ARP V prior to the drum overpressurization event of April 2018. The activity will be conducted with a subset of the same controls and operational restrictions described in the *Evaluation of the Safety of the Situation for the Drum Event at ARP V* to address potential reactions. The activity will include many of the same item description codes (IDCs) as well as some IDCs not previously processed. Fluor Idaho has developed a startup plan to control initial activities. In accordance with the plan, operations are being conducted under the direct oversight of senior supervisory watches (SSW). Assigned duties of the SSWs include evaluation of operations tasks, execution of technical procedures, formality of operations, and radiological control activities. The SSW reports will serve as objective evidence of satisfactory performance to the criteria of the startup plan, prior to authorizing the shift to unrestricted hot operations.

Rigging Event at Idaho Nuclear Technology and Engineering Center (INTEC). The rigging event involved the inner canister of an HFEF-14 cask. Operators were attempting to remove the lid from the empty inner canister, which was in the cask. When the lid was lifted by the auxiliary hoist, the inner canister was inadvertently lifted as well, despite the fact that the screws holding the lid to the canister had been removed. When the lid and canister had been lifted from the cask a short distance, the canister abruptly disengaged from the lid and dropped back into the cask. All spent nuclear fuels hoisting and rigging activities were placed on hold until a series of safety meetings with certified fuel handlers, equipment operators, and support personnel was completed, as this was the third recent rigging-related event at INTEC.

Integrated Waste Treatment Unit (IWTU) Update. The September 4, 2019, Startup Notification Report (SNR) discusses the proposed startup-up of IWTU hot (i.e., radiological) operations. IWTU is currently in a corrective maintenance and facility modification outage that includes significant tasks such as changeout of process gas filter (PGF) bundles. The SNR indicates that the activity to resume operations at the completion of the outage will be either (1) an additional demonstration run using nonradioactive simulant to evaluate the effectiveness of the replacement PGF bundles; or (2) a confirmatory run to demonstrate full plant controllability using nonradioactive simulant followed by processing of radioactive waste. Once this decision is made, the final readiness review process will be established. Whichever path is chosen, Fluor Idaho is planning on conducting a CRA after heat-up for the confirmatory run that will focus on IWTU readiness to receive radiological wastes into the facility. The level and scope of the DOE assessment prior to radiological waste processing in IWTU is to be determined. The estimated start date of a management self-assessment prior to option (1) or (2) is May/June 2020.