

For Immediate Release

Date: August 3, 2021

Media Contact: Erik Simpson, (208) 390-9464



Idaho Waste Treatment Facility Moves Forward, Prepares for Confirmatory Run

IDAHO FALLS, Idaho – The Department of Energy Office of Environmental Management (EM) has concluded a two-year outage at the Idaho National Laboratory (INL) Site's Integrated Waste Treatment Unit (IWTU), where crews completed more than 50 modifications to the liquid-waste treatment facility to prepare it for a 50-day confirmatory demonstration run and subsequent radiological operations.

"Completion of this outage is a major milestone for the project," said John Law, IWTU operations director for EM INL Site contractor Fluor Idaho. "These complex facility modifications have touched nearly every part of the process and will further enhance plant operability."

The most notable modification was to the process gas filter, which received new ceramic filters to replace sintered-metal versions. Gases generated in IWTU's primary reaction vessel are transferred to the filter, which removes fine solids.

In past demonstration runs, the filters became plugged with fine solids resulting in the shutdown of the facility. Ceramic filters proved more reliable during extensive testing at Hazen Research, an industrial laboratory in Golden, Colorado.

More recently, crews completed two modifications at IWTU to enhance facility operations and maintenance. Crews added a wet and dry decontamination system to remove residual radioactive product from the treatment cells and vessels upon facility shutdown to allow for maintenance. They also attached robotic arms to the facility's canister fill cells to remove contamination from product canisters prior to their placement in concrete vaults.

Fluor Idaho is working to ensure the IWTU and personnel are prepared for the confirmatory run scheduled to begin this fall. Workers will use a non-radioactive liquid waste simulant to verify the effectiveness of the modifications made during the outage and will determine if the IWTU is ready to operate under radiological conditions.

"With the changes we have made, we are confident the plant will successfully complete the confirmatory run and safely process the sodium bearing waste," Law said.

The IWTU was constructed to process 900,000 gallons of radioactive liquid waste into dry granular solids that will be packaged in stainless steel canisters and stored in concrete vaults. The waste was generated during decontamination activities following spent nuclear fuel reprocessing.

Fluor Idaho, LLC is a wholly owned subsidiary of Fluor Corporation with subcontractor partners CH2M, North Wind Inc., Portage, and Waste Control Specialists. Fluor Idaho manages the Idaho Cleanup Project Core contract at the Department of Energy's Idaho National Laboratory Site located 45 miles west of Idaho Falls. The 5-year, \$1.4 billion project, funded through the U.S. Department of Energy's Office of Environmental Management, focuses on safely remediating the Idaho National Laboratory site including dispositioning transuranic waste, managing spent nuclear fuel, and treating high-level radioactive waste.

For more information visit the Idaho Cleanup Project on the Web at <https://fluor-idaho.com>

Suggested Caption:

The Department of Energy Office of Environmental Management is scheduled to conduct a 50-day confirmatory run this fall of the Integrated Waste Treatment Unit at the Idaho National Laboratory Site.