EM UPDATE
U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

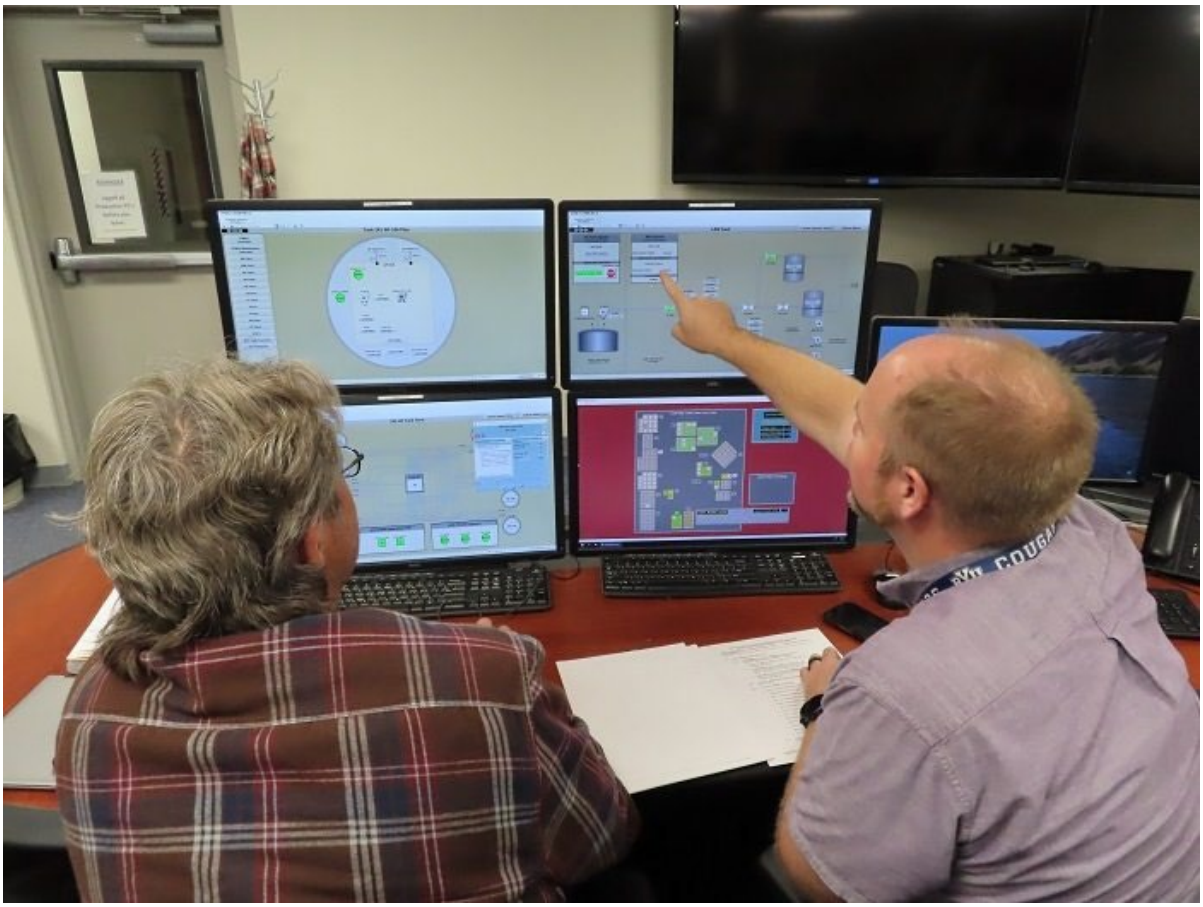
Hanford Completes Waste Transfer Line Communications Testing

January 10, 2023

Nolan Wright, Washington River Protection Solutions Instrumentation and Controls engineer, left, and Darin Wood, nuclear chemical operator, talk with operators at the Waste Treatment and Immobilization Plant control room to test the transfer line communication system between the plant and Hanford's AP Tank Farm.

RICHLAND, Wash. – Hanford Site crews recently completed testing on a transfer line communications system between the Waste Treatment and Immobilization Plant (WTP) and the nearby tank farm, or large group of underground storage tanks, where pretreated waste is being stored for transfer.

When **EM Office of River Protection** (ORP) contractor Bechtel National Inc. begins waste treatment operations at WTP, tank operations contractor Washington River Protection Solutions (WRPS) will feed pretreated low-level waste from the AP Tank Farm to WTP's Low-Activity Waste (LAW) Facility.



Simulated transfers of low-activity waste recently occurred between the Hanford Site's Tank AP-106 and the Waste Treatment and Immobilization Plant during testing of the tank farms monitoring and control system.

Control room operators on both ends of the transfer lines need to keep lines of communication open to both verbally and visually confirm the transfer is occurring. The recent testing between both contractors included simulated transfers of low-activity waste to the LAW Facility.

"This is an important step for the entire Hanford team and our collective mission of executing Direct-Feed Low-Activity Waste (**DFLAW**) Program operations to treat tank waste," said Ricky Bang, ORP Tank Farms Program Division director.

In August 2021, workers made the final welds on the transfer line connecting the Hanford Site's tank farms to the Waste Treatment and Immobilization Plant.

During DFLAW operations, up to 9,000 gallons of pretreated waste will be sent each day from Tank AP-106 through the new transfer lines to WTP's LAW Facility for vitrification, or immobilization in glass form.

"DFLAW will be a 24/7 operation, and control rooms at both ends of the line need to be able to see and hear what's being transferred," said Nolan Wright, WRPS Instrumentation and Controls engineer. "Testing like this makes sure our procedures and people are integrated and operating safely."

"Successful completion of these tests is an important step in being able to show that both the fiber infrastructure and the software will be ready to operate across the interface," said Mark Esp, interface implementation engineer for WTP Mission Integration. "Having transfer status and monitoring data available to both control rooms simultaneously will be very beneficial when DFLAW operations begin."

Fieldwork on the transfer lines was completed in the summer of 2021.