

Tank Farm Pump Pull Moves ORP Closer to DFLAW Operations

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A truck ships the last excavator used in cleanup at the Separations Process Research Unit on Jan. 24.

RICHLAND, Wash. – EM's Office of River Protection (ORP) and its tank farm contractor have safely completed a pump removal of outdated, contaminated equipment.

This recent high-risk operation, also known as a pump pull, was instrumental in laying the groundwork for AP Farm to store treated waste and later pump it to a vitrification facility on-site.

Washington River Protection Solutions (WRPS) is tasked with having a waste feed delivery system (WFD) ready to support Waste Treatment and Immobilization Plant (WTP) operations by 2023. It's part of the direct feed low-activity waste (DFLAW) process adopted by ORP to begin treating tank waste as soon as possible. WRPS will pump treated tank waste directly to the LAW vitrification facility at WTP.

The pump pull from Tank AP-102 was among the highest risk portions of the WFD project, based on potential radiological hazard.



The crane that pulled the pump at the AP Farm eases it toward the disposal box.



With help from a second crane, the outdated pump is lowered horizontally toward the disposal box.

On Jan. 24, the pump pull team started work at daybreak and by a little after noon, the pump was removed and safely placed in a specially built disposal box.

"The team did an awesome job," said Jason Engeman, an engineer with WRPS tank farm projects. "For some folks, this was the first pump pull they had been part of, for others it was just one of many in their careers."

A construction crew dedicated to WFD work began training last fall for the complex pump pull. The team practiced on multiple mock-ups and did extensive contingency planning. Dozens of workers were involved in the planning and execution of the event.

"The entire tank farm pump team performance was outstanding," said Ryan Stoner, tank farm pump team project manager. "It was incredible to see a team of people come together and execute flawlessly."