

# Liquid waste moved to stabilize Hanford facility

With the removal of thousands of gallons of radioactive and hazardous waste, the Department of Energy and CH2M HILL Hanford Group are one step closer to stabilizing a facility that was once used to transfer waste between nuclear-materials processing buildings and large underground waste tanks at the Hanford Site.

Earlier this month, CH2M HILL crews pumped approximately 18,000 gallons of radioactive and hazardous waste from the facility, known as the 244-AR Vault, into Hanford's double-shell tank system. Transferring the liquid waste out of the vault is important to reducing the risk the facility currently poses to the environment.

"Removing the liquid waste from this aging facility is important to reducing the risk that waste could potentially leak into the soil," said John Swailes, the DOE Office of River Protection's assistant manager for Tank Farms. "Pumping out the liquid waste also sets the stage for interim stabilization of the vault, a Tri-Party Agreement milestone to be completed by Sept. 30."

Built between 1966 and 1968, the 100-foot-long, concrete-walled 244-AR Vault was used until the early 1990s to ensure safe waste transfers between Hanford facilities that processed irradiated nuclear fuel — specifically the Plutonium Uranium Extraction facility and B Plant — and the Hanford tanks. Sodium hydroxide was added in the 244-AR facility to make the waste from the processing plants less acidic so it wouldn't corrode the steel walls of the tanks.

Years of past processing history and water intrusions into the facility left 19,000 gallons of liquid in four different tanks in the facility and in a secondary containment system. The 244-AR cleanup project focused initially on consolidating that waste into one of the facility's tanks. Sampling was done to verify that the 244-AR waste was compatible with the double-shell tanks before it was transferred.

Work to complete interim stabilization of the facility will include plugging transfer lines and drains to prevent runoff water from entering the vault. ORP and tank-cleanup contractor CH2M HILL Hanford Group are stabilizing the facility so it can be closed, while continuing cleanup efforts on Hanford's 177 large radioactive waste tanks. ■