



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

Effluent Treatment Facility Gets Ready for Hanford Tank Waste Treatment

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The Effluent Treatment Facility is one of several facilities and projects critical to the Direct-Feed Low-Activity Waste system that will transform the Hanford Site by enabling a shift to tank waste treatment operations.

RICHLAND, Wash. – **EM** is implementing a series of robust upgrades to increase the capacity and reliability of a critical effluent treatment facility to ensure it is ready to carry out its mission when 24/7 operations to treat tank waste begin at the **Hanford Site**.

“The facility is essential to the success of Hanford’s tank waste treatment mission,” said Richard Valle, EM program representative for the facility. “The upgrades ensure the Effluent Treatment Facility (ETF) is capable of maintaining the needed pace of operations.”

The ETF is one of several facilities and projects critical to the **Direct-Feed Low-Activity Waste system** that will transform the site by enabling a shift to tank waste treatment operations. The approach is a system of interdependent projects and infrastructure improvements that will operate together to send pretreated waste from Hanford’s tank farms directly to the Low- Activity Waste Facility at the **Waste Treatment and Immobilization Plant**, where it will be **vitrified**, or immobilized in glass. The effluent facility will treat an estimated 5 million gallons of wastewater per year from the Low-Activity Waste Facility during treatment operations.

As part of the upgrades, the EM **Office of River Protection** and its contractor Washington River Protection Solutions are replacing an aging monitoring and control system with one that will communicate more efficiently with other site facility systems. Crews are also replacing equipment that treats contaminants. Later this fiscal year, workers will also begin construction of a new retention basin to increase the storage capacity for wastewater that will be processed through the effluent facility.

The facility and its retention basins are also important to ensuring there is enough space in Hanford’s double-shell tanks to store waste throughout the storage and treatment mission. As tank waste is concentrated to make more space in the existing tank system, the process condensate from the evaporative process is sent to ETF for treatment. Since 1995, the facility has processed more than 330 million gallons of contaminated wastewater to remove radioactive and chemical waste.