DOE Makes Significant Progress at Hanford Waste Treatment Plant in FY 2016

Construction of Low Activity Waste (LAW) Facility Scheduled for Completion in 2018

RICHLAND, Wash. — The U.S. Department of Energy Office of River Protection (ORP) and contractor Bechtel National Inc. (BNI) have completed significant work at the Hanford Waste Treatment and Immobilization Plant’s (WTP) Low-Activity Waste (LAW) Facility in FY 2016 and are now preparing the LAW Facility site for the final stages of construction.

Employees at the WTP, also known as the “Hanford Vit Plant,” completed fabrication work on two 300-ton melters that will be the heart of the vitrification process in the LAW Facility to treat the Hanford tank waste. The vitrification process blends waste and glass-forming elements into the melters and then heats the mixture to 2,100 degrees Fahrenheit. The molten material is poured into containers, where it solidifies as it cools. The containers will be placed in a permanent disposal facility on-site.

To date, WTP employees have installed two of the three major components of the melter off-gas treatment system, with the third and final piece scheduled to arrive later this fall. The off-gas treatment system is used to capture and remove contaminated materials and harmful gases, or effluents, from the melter’s exhaust so that it is suitable for release.

"The physical progress made this past year at the Vit Plant is very apparent to our staff and visitors," ORP Manager Kevin Smith said. "The construction progress move us closer to achieving our direct feed of low-activity waste as soon as 2022."

The LAW Facility is the centerpiece of DOE’s sequenced approach to beginning the treatment of Hanford’s tank waste as soon as 2022, known as Direct Feed LAW (DFLAW).
“By the end of this year, we will have received all of the major pieces of engineered equipment for the LAW Facility,” BNI Project Director Peggy McCullough said. “It puts us in an excellent position to declare ‘construction complete’ in 2018.”

About the Office of River Protection
The U.S. Department of Energy’s (DOE) Hanford Site in southeast Washington State is home to 56 million gallons of chemical and radioactive waste stored in underground tanks -- the result of more than four decades of plutonium production. The Office of River Protection (ORP) is responsible for the retrieval, treatment, and disposal of this waste in a safe, efficient manner. The River Protection Project is the largest and most complex environmental remediation project in the nation.

About Bechtel
Bechtel is designing and building the world’s largest radioactive waste treatment plant for the U.S. Department of Energy at the Hanford Site in southeastern Washington state. The Waste Treatment and Immobilization Plant, also known as the Vit Plant, will immobilize the millions of gallons of radioactive liquid waste stored in 177 underground tanks using a process called vitrification. Visit www.hanfordvitplant.com.