

December 27, 2016

DOE Media Contact:

Yvonne Levardi

Office of Communication and Information Management

509-376-8625/ORP_Office_of_Communication@rl.gov

WTP Media contact:

Todd Nelson

(509) 371-2121

tanelson@Bechtel.com

DOE, Bechtel launch final phase of WTP full-scale vessel testing

RICHLAND, Wash. — The U.S. Department of Energy Office of River Protection (ORP) and Bechtel National Inc., the contractor responsible for the Hanford Waste Treatment and Immobilization Plant (WTP), late last week kicked off the final stage of testing intended to resolve one of the remaining technical issues at the WTP Project.

WTP personnel have begun the final phase of full-scale testing of control equipment and systems designed to safely mix radioactive waste in vessels at the WTP Pretreatment Facility. The vessels will store and process liquid radioactive waste before it is vitrified in other WTP facilities.

“This represents substantial progress and will lead to restarting engineering, procurement and construction on the Pretreatment Facility,” said Bill Hamel, ORP assistant manager for the WTP Project.

The full-scale test vessel is outfitted with an array of six pulse jet mixers designed to keep the contents of the 22,000-gallon vessel safely mixed by precluding solid particles in the waste from settling at the bottom of the vessel. Testing focuses on the equipment used to properly mix the waste.

“Proper mixing of waste in the vessels is critical to safely processing and treating the waste stored in Hanford’s underground tanks,” said Peggy McCullough, Bechtel project director for the WTP Project.



The inside of the test vessel contains six pulse jet mixers used to keep the solids suspended in the simulated radioactive waste. More images available at <http://bit.ly/2iB4EpW>.

The 65-ton full-scale vessel being used in the current tests is 16 feet in diameter and 36 feet high. It will weigh 310 tons when filled with liquid and simulated waste used to mimic the characteristics of the radioactive waste stored at the Hanford tank farms.

This is the third and final phase of vessel testing and is expected to take less than a year to complete. Results of this testing will be used to inform final design of the vessels intended to be installed in the Pretreatment Facility.

Video is available at <https://vimeo.com/194884183/3edd282a5c>. Additional photographs are available for download at <http://bit.ly/2iB4FpW>.

#

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.