



October 21, 2010

30-ton melter lids arrive at Hanford Waste Treatment Plant

MEDIA CONTACTS:

Suzanne Heaston, Bechtel, (509) 539-7765

Carrie Meyer, Department of Energy, (509) 438-5836

Richland, Wash. -- Today, the Hanford Waste Treatment Plant (WTP) construction site received the giant shield lids that will top off two 300-ton melters for the Low-Activity Waste Vitrification (LAW) Facility. Each lid, made primarily of carbon steel, weighs about 30 tons and measures 26 feet long, 15 feet wide and 3 feet tall. The lids were transported via two tractor-trailers.

“Delivery of the LAW melters and associated components, including these lids, represents the culmination of extensive vitrification research and testing focused on removing the threat posed by Hanford’s 53 million gallons of tank waste,” said Gary Olsen, DOE Federal project manager for the LAW Facility. “When operational, these melters will immobilize millions of gallons of radioactive tank waste.” The melters will be used to heat the waste and glass-forming materials to 2,100 degrees Fahrenheit before the mixture is poured into stainless steel canisters for permanent storage. The Vit Plant will use four melters in total: two 300-ton melters in the LAW Facility and two 90-ton melters in the High-Level Waste Vitrification Facility.

“The melters are the core of the vitrification process, and receiving major components for them is a significant step for the project,” Bill Clements, area project manager for the facility, said. “It demonstrates that our construction focus is pivoting -- from concrete and steel activities to equipment deliveries and installations. This pivot will enable us to complete construction of LAW Facility by 2015 and reach full WTP operations by 2019”

A single LAW melter is composed of a melter assembly (melter base and walls); a gas barrier lid; a shield lid; a refractory brick interior; and other components that will feed, stir, and monitor the glass mixture. Each assembly weighs about 110 tons and measures 30 feet long, 21 feet wide, and 13 feet tall. Because of their size, the melters will be delivered using a specially configured heavy-haul transporter and will require two separate trips. They are scheduled to arrive later this fall.

“The LAW melters are the largest waste-processing melters ever built, and there’s been considerable work dedicated to manufacturing and delivering them,” Rich Brown, area project manager for plant equipment, said. “It’s exciting to see the lid arrive on site and build anticipation for receiving the melter assemblies next month.”

The melters are being shipped from the manufacturer Petersen, Inc., in Ogden, Utah.

(continued)



A 30-ton LAW Melter lid is off-loaded at the Waste Treatment Plant construction site.

Bechtel National, Inc. 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 \$12.2 billion Waste Treatment and Immobilization Plant (WTP), also known as the "Vit Plant," will immobilize the radioactive liquid waste currently stored in 177 underground tanks using a process called "vitrification."

Vitrification involves blending the waste with molten glass and heating it to high temperatures. The mixture is then poured into stainless steel canisters. In this glass form, the waste is stable and impervious to the environment, and its radioactivity will dissipate over hundreds to thousands of years.

The WTP will cover 65 acres with four nuclear facilities -- Pretreatment, Low-Activity Waste Vitrification, High-Level Waste Vitrification and Analytical Laboratory-- as well as operations and maintenance buildings, utilities and office space.

Construction of the WTP began in 2001 and is now 56 percent complete. The plant will be operational in 2019.

###