DOE News Release Media Contact:Geoff Tyree, DOE
(509) 376-4171, Geoff_Tyree@rl.gov

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U.S. Department of Energy Announces Start of Construction on Hanford's Largest Groundwater Treatment System

Treatment system funded by American Recovery and Reinvestment Act

RICHLAND, Wash. – Dr. Inés Triay, U.S. Department of Energy Assistant Secretary for Environmental Management, today announced that construction of the largest treatment system for contaminated groundwater to date at the U.S. Department of Energy's Hanford Site in southeast Washington State is underway. The \$80 million facility is funded by the American Recovery and Reinvestment Act.

Dr. Triay provided remarks at the groundbreaking ceremony, where she was joined by officials from the Washington State Department of Ecology, U.S. Environmental Protection Agency, local labor unions, and contractor CH2M HILL Plateau Remediation Company. Hanford employees joined with community members from the region to visit the site where the treatment facility will be built and operational by 2012. Contractors are currently designing the facility and installing several wells that will be part of a treatment system that will pump more than 85 million gallons of contaminated groundwater per month from a large area in the center of the Hanford Site known as the Central Plateau.

"The Recovery Act is already having a big impact on Hanford cleanup," said Dr. Inés Triay, U.S. Department of Energy Assistant Secretary for Environmental Management. "This project is just one example of how the additional funding is creating jobs, protecting the nearby Columbia River, and reducing the long-term costs of cleanup."

Up to 100 construction jobs will be created using Recovery Act funding as the facility is built over the next two-and-a-half years, and eight operators will be employed using non-Recovery Act funding to operate the groundwater treatment facility. The estimated cost of designing, building, and operating the facility over the estimated 25 years until active treatment is complete is \$174 million. Originally, officials were planning to design and build the facility in two phases due to available funding. By using \$80 million in Recovery Act funding, Hanford officials will build a larger facility in one phase, allowing the treatment system to operate at full capacity five years earlier, potentially reducing the time required for cleanup, and saving an estimated \$25 million in long-term cleanup costs.

"We're holding the line on groundwater contamination in this area and not letting it get to the Columbia River," said Dave Brockman, Manager of DOE's Richland Operations Office. "This treatment system will not only remove contamination but also shrink the area of contamination so it won't move from the center of the Hanford Site to the river."

The new treatment system will pump contaminated water from the ground and remove several chemical and radioactive contaminants. The facility will cover an area about the size of a football field and is expected to treat an estimated 25 billion gallons of groundwater beginning in December 2011. The facility will bring together for the first time technologies that will be able to remove nitrates and metals, as well as radioactive and organic contaminants, and return the water to the aquifer cleaned to the Federal Drinking Water Standard.

"The facility is expected to pump nearly 2,000 gallons a minute with the goal of returning the aquifer to levels that will meet drinking water standards," said Dennis Faulk, Program Manager, Hanford Project Office, U.S. Environmental Protection Agency.

During the Cold War, billions of gallons of liquids contaminated with chemicals and radioactive elements were discharged from plutonium production facilities to several soil disposal sites across the Hanford Site. Discharges in the western area of Hanford's Central Plateau resulted in a five-square-mile area of groundwater contaminated above drinking water levels. Leaks from large underground storage tanks also contributed to a much smaller area of contamination. The primary contaminants of concern are carbon tetrachloride, a solvent used in processing facilities, and Technetium 99, a radioactive byproduct of processing. Smaller areas of other contaminants in the same area will also be treated by this system.

"Both the Governor and I are pleased with USDOE's commitment to groundwater protection," said Jay Manning, Director, Washington State Department of Ecology. "This important event today will take us one step closer to treating some of the most highly contaminated parts of the groundwater aquifer."

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