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**DOE News Release**

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**For Immediate Release:**

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**Massive Cement Pour into Hanford Site Nuclear Facility Underway**  
*Recovery Act Funding Puts U Canyon in Home Stretch of Demolition Preparations*

*Note: Video is available on YouTube at: <http://ow.ly/5hrkD>; Photos are available on Hanford's website at <http://ow.ly/5gUA3>.*

RICHLAND, Wash. – Hanford workers are pouring enough cement-like material to fill six Olympic-size swimming pools in one of the U.S. Department of Energy's (DOE) largest nuclear facilities at the [Hanford Site](#) in southeast Washington State to prepare the massive building for demolition.

Over the next three months, DOE contractor [CH2M HILL Plateau Remediation Company](#) (CH2M HILL) will place more than 20,000 cubic yards of a cement-like material called grout in [U Canyon](#) to prepare it for demolition. The plant is one of five large chemical processing facilities at Hanford that operated during World War II and the Cold War to produce nearly two-thirds of the nation's supply of plutonium for nuclear weapons programs.

Called a "canyon" because of the high walls and large, narrow, open space inside the facility, U Canyon is 810 feet long, 66 feet wide, and 77 feet high. U Canyon will become the first facility of its kind at Hanford, or anywhere in the nationwide complex of DOE sites, to reach demolition-ready status, currently scheduled for this September.

In 2005, a [Record of Decision](#) was signed and laid out a path for the remediation of the entire U Plant complex by 2024, which includes the installation and re-vegetation of a barrier. With the arrival of [American Recovery and Reinvestment Act](#) funds in April 2009, DOE and CH2M HILL have been able to significantly accelerate those plans. By the end of 2010 the company had completed demolition and site remediation of U Plant's remaining five [support facilities](#), totaling more than 53,000 square feet.

"Using Recovery Act funding, CH2M HILL and Hanford Site workers are completing preparations years ahead of schedule to demolish the canyon," said J.D. Dowell, DOE's Assistant Manager for the Central Plateau of the Hanford Site where the facility is located. "This will reduce the overall cost of cleanup because the work is being done at today's prices, and we will no longer have to pay for monitoring and maintenance of several support structures next to the plant that were torn down."

CH2M HILL and its local subcontractors, AGECE and Central Pre-Mix, filled two small sections of U Canyon in test pours in April. The grout filled the void spaces and encapsulated equipment and debris as planned. Now, the grouting of the canyon itself is underway.

A common construction material, grout resembles mortar used in bricklaying and masonry. At U Canyon, CH2M HILL uses a grout mixture designed to flow through holes drilled in the Canyon walls and concrete blocks covering 40 below-grade cells. The grout will fill the cells, ducting, piping, and vessels to provide stability and trap residual contaminants in preparation for the building's demolition. According to a Record of Decision, plans call for demolishing U Canyon by collapsing the walls outward and constructing a special barrier over the demolished facility to prevent moisture from mobilizing contaminants in building debris.

U Plant was built in 1944 as one of three original chemical separation plants (along with B Plant and T Plant) for extracting plutonium from fuel rods irradiated at Hanford's production reactors along the Columbia River. U Plant was first used to train B Plant and T Plant operators and later converted to recover uranium from waste from other canyon facilities. In 1958, U Canyon was placed in standby mode and used as a storage facility for hundreds of pieces of contaminated equipment from other Hanford Site processing facilities. Support facilities next to the U Canyon building operated through 1993.

It has taken intricate and complex work to prepare U Canyon for grouting. CH2M HILL crews mapped out the spaces available in U Canyon's 40 process cells and used the building's existing overhead crane to [place remaining equipment](#) inside. The cells were covered and the canyon deck coated with fixative to stabilize any residual contamination.

Outside the canyon, a batch plant was built to produce the large quantity – more than 20,000 cubic yards – of grout needed to fill the canyon. Nearly 100 eight-inch-wide holes, ranging from 5 to 17 feet long, were drilled through the canyon's exterior walls, through process-cell covers, and elsewhere in the canyon facility to deliver the grout into all of the canyon's void spaces.

“The sheer size of the building has been the main driver of our planning all along,” said CH2M HILL U Canyon project manager Dave Chojnacki. “This summer, as we move from preparation toward completion, we'll be able to work these last activities at the same time, and have U Canyon demolition ready by the end of September.”

Demolition of the plant is currently scheduled to begin in 2015, after higher priority work along the Columbia River on the Hanford Site is completed. Demolition of U Plant will be completed before the regulatory deadline of 2017.

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*Historical/ background information about U Canyon (part of the U Plant complex) can be found on the Department's of Energy's Hanford Site website at <http://ow.ly/59Iu2>.*