



Preparing U Plant for Demolition

A Department of Energy Recovery Act Project

May 2010



The Department of Energy is using American Recovery and Reinvestment Act funding to accelerate a first-of-a-kind demolition project at the Hanford Site in southeast Washington State.

Workers are preparing to demolish U Plant, one of five large, chemical processing facilities at the government site that supported the production of plutonium during the Cold War, and the first facility of its type to be demolished in the DOE Nuclear Weapons Complex.

Located in Hanford's 200 West Area, the centerpiece of U Plant is the massive U Canyon. The canyon stretches 810 feet across the desert and is 70 feet wide, 80 feet high, and extends 30 feet below the surface. The walls of the plant are several feet thick in places. Chemical tanks and smaller support, or ancillary, facilities made up the balance of the plant's infrastructure.

Until 1952, U Plant was used for training operators of two other chemical processing facilities, T Plant and B Plant. In 1952, the facility was converted to recover uranium from waste generated by the other plants. Through 1964, U Plant was used to receive, decontaminate, maintain, and store equipment from other Hanford Site processing facilities.

Cleanup of U Plant includes demolishing large chemical tanks and ancillary facilities near the canyon building; removing some waste for disposition; and moving the contaminated equipment on the canyon deck into lower levels of the plant, into openings called cells. Then, any void spaces, including the cells, internal vessel spaces, and other areas of the canyon will be filled with grout. The facility's roof and upper sections of the walls will be removed. An engineered barrier will be built over the remnants of the canyon building and vegetation will be planted on the barrier to prevent surface moisture from pushing contaminants down toward groundwater.

U Plant Cleanup Efforts

Current activities

- 15 large chemical tanks demolished
- All chemicals in the facility inventoried
- Movement of more than 125 major pieces of equipment from the canyon deck into below-grade cells (87% complete)
- Demolish remaining ancillary structures

By the end of 2011

- All equipment moved into cells
- All void spaces filled with grout

2012

- Begin demolition of U Canyon

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