



# U Plant Ancillary Facility Demolition

## A Department of Energy Recovery Act Project

May 2010



The Department of Energy is using American Recovery and Reinvestment Act funding to remove the last five ancillary facilities adjacent to the U Plant, one of five former nuclear fuel reprocessing plants at the Hanford Site in southeast Washington State. Demolition of the facilities is a major step in preparing U Plant for a first-of-a-kind demolition project.

The U Plant Ancillary facilities once supported the processing of liquids generated during uranium recovery at the adjacent U Canyon reprocessing plant and at the PUREX reprocessing plant in the 200 East Area. The facilities were used to convert uranyl nitrate liquid into uranium trioxide powder.

Today, the buildings contain radiological and industrial contaminants such as friable asbestos insulation that had to be removed before demolition could begin. With support of Recovery Act funds CH2M HILL Plateau Remediation Company plans to have the ancillary facilities removed and the canyon ready to begin demolition in 2012.

### Ancillary Facilities at U Plant

**211-U Tank Farm:** Five 10,000 gallon above grade tanks used to supply nonradioactive chemical solutions to the U Canyon uranium recovery process.

**211-UA Tank Farm:** 10 above grade stainless steel (six 100,000- and four 50,000 gallon) tanks used to supply or store chemical solutions in support of the U Canyon or uranium trioxide (UO<sub>3</sub>) plant operations.

**224-U UO<sub>3</sub> Plant Concentration Building:** Radioactively contaminated 35,346 square foot multi-storied concrete structure used for the concentration of liquid uranium solutions and UO<sub>3</sub> powder conversion equipment.

**224-UA Calcination and Loadout Building:** 9,934 square foot multi-storied structure used for the conversion of uranium solutions to UO<sub>3</sub> powder.

**203-UX Concentrated Uranium Storage Tank Enclosure:** Two outdoor concrete enclosures containing 100 percent uranyl nitrite hexahydrate feed storage tanks, filters, and associated piping systems.

### For more information:

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