



## 200 West Groundwater Treatment Project

*The U.S. Department of Energy and contractor CH2M HILL Plateau Remediation Company operate the 200 West Pump and Treat Facility to treat contaminated groundwater in the center of the Hanford Site in southeast Washington state.*



*The 200 West Pump and Treat System will treat 25 billion gallons (94 billion liters) over the lifetime of the facility.*

### Project Facts

- Up to 110,000 pounds (34,927 to 49,895 kilograms) of carbon tetrachloride to be removed
- 108-million-gallon (409-million-liter) per month treatment capacity
- Treats nine contaminants of concern
- Treatment methods include bioreactors, ion exchange and air stripping
- Thirty-five miles (56 kilometers) of piping
- 17,500-square-foot (1,626-square-meter) radiological process building and 35,000-square-foot (3,251-square-meter) main process building with Leadership for Energy and “Environmental Design (LEED®) gold” certification for sustainable design

For more information:

Destry Henderson, CHPRC  
(509) 376-8644, [Destry\\_J\\_Henderson@rl.gov](mailto:Destry_J_Henderson@rl.gov)

Mark Heeter, U.S. Department of Energy  
Richland Operations Office  
(509) 373-1970, [Mark.Heeter@rl.doe.gov](mailto:Mark.Heeter@rl.doe.gov)

Or visit us on the web at:  
[www.hanford.gov](http://www.hanford.gov)  
[www.platauremediation.hanford.gov](http://www.platauremediation.hanford.gov)

### Background

The 200 West Pump and Treat System is one of the largest groundwater treatment facilities in the Department of Energy’s (DOE) Environmental Management complex. Operations of the facility began in 2012.

During the Cold War, liquids contaminated with chemicals and radioactive elements were discharged from plutonium production facilities to several soil disposal sites on the center of the site, resulting in a 5-square-mile area of groundwater contaminated above drinking water levels. Leaks from large underground storage tanks also contributed, but in a much smaller area.

### Mission

The treatment system pumps contaminated water from the ground and removes several chemical and radioactive contaminants, including the primary contaminant of concern—carbon tetrachloride.

The system works by extracting contaminated groundwater from the aquifer through a network of wells and transfer it to a facility for treatment. The treated water is injected back into the aquifer to help drive the contaminated groundwater toward the extraction wells.

The 200 West Pump and Treat Facility not only removes the contaminants, but helps contain them to the center of the Hanford Site.



*A pipefitter in the 200 West Pump and Treat’s Radiological Building installs components to remove uranium from groundwater.*

