



## Tri-Party Agreement

U.S. Department of Energy  
Washington State Department of Ecology  
U.S. Environmental Protection Agency

# FACT SHEET

## HANFORD'S 100 AREA

### WHAT IS HANFORD'S 100 AREA?

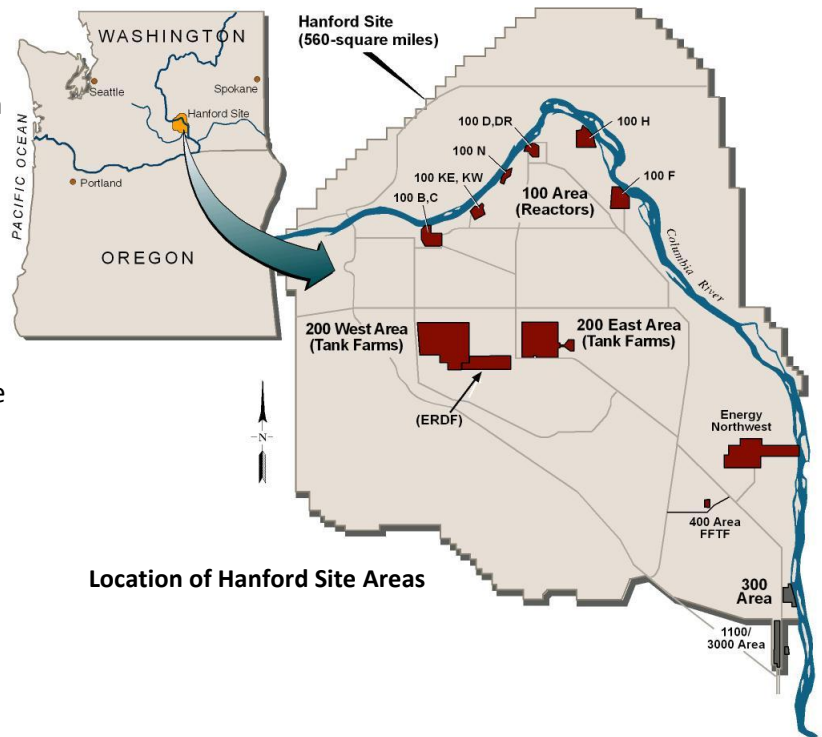
Hanford's River Corridor, formally known as the 100 Area and 300 Area, is the part of the Site located along the banks of the Columbia River. From 1942 to 1990, the primary mission of the Hanford Site was the production of nuclear materials for national defense. Hanford's 100 Area consists of nine nuclear reactors (B Reactor, C Reactor, D Reactor, DR Reactor, F Reactor, H Reactor, K-East Reactor, K-West Reactor, and N Reactor) which were constructed to support this effort. During their operations, plutonium production activities at the reactors resulted in large amounts of chemical and radioactive waste being discharged into the surrounding land and groundwater.

All of the reactors have been shut down as of 1988. The B Reactor has been named a National Historic Landmark and is being preserved as a museum. The current mission at the Hanford site is to clean up the contamination.

### HOW IS CLEANUP DONE?

The land around the reactors has been contaminated. For a majority of these waste sites, cleanup is done by digging up the contaminated soil and safely disposing of it. This cleanup approach is known as **RTD: Remove, treat, and dispose**. Soil and debris from cleanup activities are disposed of at Hanford's landfill, the Environmental Restoration and Disposal Facility (ERDF), which is located near the center of the site, an area known as the Central Plateau.

Groundwater beneath the reactors is also contaminated. Some of this groundwater can be treated by use of **pump-and-treat systems**. This approach uses wells to extract contaminated groundwater, a treatment system to remove the contamination, and other wells to reinject the treated water back into the groundwater. Other cleanup approaches include installing **chemical reaction barriers** to bind contaminants in the soil, which will reduce or stop the contamination reaching the Columbia River.



Location of Hanford Site Areas



Backhoe and disposal trucks used during cleanup



Treatment tanks used in pump-and-treat systems

## HOW MUCH CLEANUP HAS BEEN COMPLETED?

DOE is responsible for cleanup of the Hanford Site while EPA and Ecology are responsible for oversight of the cleanup. Since 1989, under the Tri-Party Agreement, cleaning up the contamination along the Columbia River has been a top priority for these agencies. As of 2012, cleanup in the River Corridor included:

- Demolishing more than 300 of approximately 500 facilities
- Cleaning up more than 600 of approximately 1,000 waste sites
- Treating contaminated groundwater to decrease chromium concentrations

## HOW MUCH MORE NEEDS TO BE DONE?

Although a significant amount of work has been completed in Hanford's River Corridor, there is still more that needs to be done. The nuclear reactors are enclosed in a structure of cement walls and a steel roof called a cocoon. The cocoon prevents any radiation or contamination left over from the nuclear operations from escaping to the environment. The C, D, DR, F, and H Reactors are already cocooned, with K-East and K-West Reactors next in line.

The next major step will be developing and issuing final cleanup decisions for soil and groundwater in each reactor area, which will be a total of five cleanup decisions in Hanford's 100 Area. These decisions will be grouped as the 100-B/C, 100-D/H, 100-K, 100-N, and 100-F areas.

### Why should I care?

Land, groundwater, and buildings located near the reactors were contaminated during operations. This means that radioactive and/or chemical substances (such as chromium, strontium-90, and cesium-137) are present at levels that can have a negative impact on people and the environment. You can provide input to help determine how this is cleaned up!



*C Reactor in a cocoon enclosure*

## HOW TO GET INVOLVED AND STAY INFORMED

The public can provide input on what cleanup decisions the Tri-Party Agreement agencies select. Before a cleanup plan is selected, a document called a Proposed Plan, is issued for public review and comment. Your input on the Proposed Plan is factored in to the decision-making process. If you want to be aware of upcoming Proposed Plans and other Hanford decisions, join the electronic mailing list. You will receive information on upcoming public involvement opportunities and updates on Hanford activities. Join the Hanford email list at <http://listserv.wa.gov>.

Information on upcoming events is also available on the following online calendars:

**Hanford Events Calendar:** [www.hanford.gov/pageaction.cfm/calendar](http://www.hanford.gov/pageaction.cfm/calendar)

**TPA Public Involvement Calendar:** [www.ecy.wa.gov/programs/nwp/public.htm](http://www.ecy.wa.gov/programs/nwp/public.htm)