



By the Numbers Hanford Site Cleanup

The Hanford Site sits on 586 square miles of desert in southeastern Washington state, adjacent to the Columbia River. From 1943 to 1987, chain reactions inside Hanford’s nine nuclear reactors changed uranium’s chemical composition by exposing it to extra neutrons, producing plutonium that went into nuclear weapons used during World War II and were stockpiled during the Cold War.

Hanford’s last reactor was shut down in 1987, but 44 years of plutonium production at the site generated millions of tons of solid waste and contaminated soil, as well as billions of gallons of contaminated liquids. In 1989, the Energy Department’s current mission at Hanford — cleaning up the waste — began.

6 of Hanford’s nine reactors have been “cocooned” or demolished down to the reactor building and covered with steel and cement. With this process, the radioactivity in the reactors will continuously and safely decrease over many decades, making the reactor cores easier and safer to dismantle in the future.

2 more reactors will be cocooned in coming years, with the final — B Reactor — remaining as a National Historical Landmark.

100 PERCENT — or about **2,300 tons** — of the site’s spent fuel, a type of radioactive waste, has been removed from areas around the Columbia River and placed in safe, secure dry storage.

12K  **cubic meters of waste** stored underground have been removed for disposal.

844 **buildings**, many contaminated, have been demolished.

 **50K** visitors from around the globe have toured the B Reactor National Historical Landmark since the start of public tours in 2009. B Reactor was the world’s first full-scale plutonium production reactor, built secretly in less than 11 months in 1943. Plutonium produced at Hanford in 1944 was used in the “Fat Man” bomb dropped on Nagasaki, Japan.



957 waste sites along the Columbia River’s south shores have been remediated — or cleaned of pollution and contaminants — to ensure future protection of human health and the surrounding environment.

7.5M gallons of pumpable liquid waste have been removed and transferred from underground single-shell tanks to safer double-shell tanks, completing the interim stabilization project for the 149 single-shell tanks. These tanks vary in size from 55,000 to 1 million gallons each.

2.5M gallons of chemical and radioactive thick sludge and saltcake waste have been retrieved from 10 single-shell tanks, reducing the risk to workers and the environment.

13B gallons of contaminated groundwater have been treated using five Columbia River facilities that together process 200 million gallons of water per month.



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