## Cleanup Progress at Hanford

The U.S. Department of Energy is responsible for one of the largest nuclear cleanup efforts in the world, managing the legacy of five decades of nuclear weapons production. At its peak, this national weapons complex consisted of 16 major facilities, including vast reservations of land in the States of Idaho, Nevada, South Carolina, Tennessee, and Washington.

Nowhere in the DOE Complex is cleanup more challenging than at the Hanford Site in southeastern Washington. Hanford made more than 20 million pieces of uranium metal fuel for nine nuclear reactors along the Columbia River. Five huge plants in the center of the Hanford Site processed 110,000 tons of fuel from the reactors, discharging an estimated 450 billion gallons of liquids to soil disposal sites and 56 million gallons of radioactive waste to 177 large underground tanks. Plutonium production ended in the late 1980s.

Hanford cleanup began in 1989, when a landmark agreement was reached between DOE, EPA, and Washington State. The Tri-Party Agreement established 161 milestones for completing cleanup. Since then, hundreds of milestones and target dates have been added, with 96 percent (1,630) completed on or ahead of schedule.

After more than 25 years of cleanup, considerable progress has been made at Hanford, reducing the risk the site poses to the health and safety of workers, the public, and the environment.

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Hanford Site Cleanup	
Before Cleanup Began (1989)	Examples of Cleanup Work Completed (as of March 2017)
586-square-mile footprint of active cleanup	82-square-mile footprint of active cleanup remaining
2,300 tons of spent nuclear fuel near Columbia River; 20 tons of leftover plutonium	COMPLETED: Moved all spent fuel to dry storage; stabilized and shipped plutonium off-site
1,715 total facilities 2,032 total waste sites	<ul> <li>879 facilities demolished</li> <li>1,326 waste sites remediated</li> <li>18 million tons soil/debris moved to engineered landfill (incl. 16.5 million tons from areas near Columbia River)</li> </ul>
Nine former plutonium productions reactors	6 reactors cocooned (associated facilities demolished); 1 preserved
More than 100 square miles of groundwater contaminated	17 billion gallons treated, 350 tons contamination removed
56 million gallons of waste in 177 underground tanks; up to 67 tanks presumed to have leaked	<ul> <li>Pumpable liquids and 2 million gallons of solids transferred to newer, double-shell tanks</li> <li>17 tanks retrieved and 1 more underway</li> </ul>
One tank waste retrieval technology available	• 10 retrieval technologies available
No treatment capability for underground tank waste	Waste Treatment Plant under construction – 63 percent complete
15,000 cubic meters of plutonium-contaminated waste buried or stored on site	<ul> <li>12,417 cubic meters of waste retrieved</li> <li>649 shipments of waste off-site</li> </ul>
Hanford Site Employment*	
Employees	9,211

<sup>\*</sup>Includes federal employees and employees of Hanford prime contractors and pre-selected subcontractors (as of June 30, 2017)

For more information, visit www.hanford.gov

