



100 K Area aerial, January 2023.

The U.S. Department of Energy (DOE) and contractor Central Plateau Cleanup Company manage the demolition of facilities, and remediation and Interim Safe Storage of the last reactors in Hanford's 100 Area.

## Background

The K East and K West Reactors and associated spent-fuel storage basins were built in the mid-1950s in support of Hanford's plutonium production mission. The reactors' fuel storage basins provided temporary storage of irradiated fuel discharged from the reactors prior to shipment to fuel processing facilities at the Hanford Site. The reactors were shut down in the early 1970s; however, spent fuel storage basins were later modified and reactivated to provide temporary storage of N Reactor fuel awaiting processing at Hanford's Plutonium Uranium Extraction Plant. The plant was shut down in 1988, leaving 2,100 metric tons of fuel in the basins. The bulk of the fuel was removed from both basins between 2000 and 2004 and the K East Basin was demolished in 2009. Over 100 facilities in the K Area supported basins operations, including burial grounds for disposal of waste generated during reactor operations. Additionally, over 150 waste sites requiring remediation were created as a result of reactor and facility operations.

## Mission

The DOE's mission is to complete remediation of the 100 K Area waste sites, deactivate and demolish the K West Basin and other structures, and place the K East and K West Reactors into a long-term storage configuration called Interim Safe Storage.

## Progress

- Completed removal of spent nuclear fuel from both reactor basins in 2004.
- Completed demolition of the K East Basin in 2009.
- Completed removal of radioactive sludge from the K West Basin in 2019.
- Completed Interim Safe Storage of the K East Reactor building in 2022.
- Completed remediation of 100 waste sites and demolition of 70 facilities.
- Initiated K West Basin debris sorting and staging in preparation for basin demolition.



K East Reactor Interim Safe Storage enclosure, completed in October 2022.



Vacuuming of solid material from the basin floor to reduce basin radioactivity, as part of the deactivation process. – January 2023



Long-reach cutting tools are used to cut hoses in the K West Basin for sorting and staging on the basin floor. – December 2022

