

Recently, workers at T Plant repackaged radioactive wastes generated on the Hanford Site.



The U.S. Department of Energy and contractor Central Plateau Cleanup Company manage the oldest nuclear facility in the United States that is still operating with a current mission.



To prepare for receipt and storage of sludge containers, crews cleaned out the T Plant canyon (left), modified the cells beneath to accept the containers, and performed extensive testing and training (right).



Background

When construction was complete on T Plant in 1944, it was the world's first large-scale plutonium separation facility. A series of chemical processes at T Plant extracted plutonium from fuel rods irradiated at Hanford's B Reactor. The plutonium processed at T Plant was used for the Trinity Test in New Mexico in July 1945, and was used in the atomic bomb that was dropped on Nagasaki, Japan, on Aug. 9, 1945. T Plant ceased plutonium separation in 1956 and the next year resumed service as a decontamination, repair and waste-handling facility.

Mission

Today T Plant is providing safe and compliant interim storage for highly radioactive sludge received from Hanford's 105 K West Reactor fuel storage basin, near the Columbia River. Removing that sludge from the basin and placing it into specially designed containers for storage approximately 12 miles away at T Plant significantly reduces risk to the Columbia River.

Prior to its current mission of sludge storage, T Plant was used to treat, verify and sample gases inside waste drums, and repackage waste generated at the Hanford Site to ensure waste packages complied with state and federal transportation, storage and disposal regulations. The T Plant can be viewed using the self-guided [Hanford Virtual Tour](#).

T Plant is located in the 200 West Area of the Hanford Site.



Irradiated fuel rods stored in the fuel storage pool contained tiny amounts of plutonium. Workers used chemicals to dissolve the fuel rods, allowing them to then recover the plutonium.



The transfer of 20 sludge storage containers was completed in September 2019

