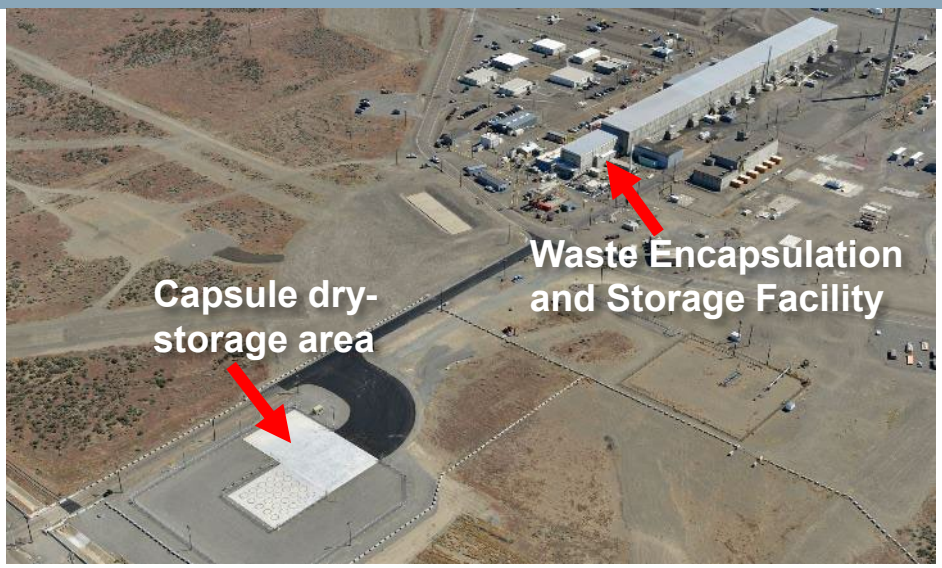
CPCCo
Central Plateau Cleanup Company

Waste Encapsulation and Storage Facility

September 2026



CPCCo is transferring 1,936 capsules of radioactive waste from a water-filled basin to an interim dry storage pad.

Background

The Waste Encapsulation and Storage Facility (WESF) has provided safe and compliant underwater storage for 1,936 highly radioactive capsules containing cesium and strontium for more than 50 years. In the early 1970s, cesium and strontium were removed from Hanford's underground tanks to reduce the temperature of the waste inside. Both elements were placed in sturdy, stainless-steel capsules at the facility for safe storage and monitoring. The capsules contain about one-third of the total radioactivity on the Hanford Site.

Mission

In October 2025, workers at WESF began moving the radioactive capsules out of the water-filled basin to a dry storage configuration in engineered concrete casks. Workers in the facility use remote equipment to place the capsules inside the casks. Each cask can hold up to 132 capsules. As of September 2026, six of 18 planned casks have been moved from WESF to the nearby dry storage pad.

Dry storage will eliminate the possibility of a release of radioactive material in the unlikely event of a loss of storage-pool water and allow for eventual deactivation of the aging WESF facility.

The transfer of the capsules to dry storage is expected to be completed by September 2029. The Waste Encapsulation and Storage Facility can be viewed using the self-guided Hanford Virtual Tour.

Workers remove a concrete cask filled with radioactive cesium capsules from the Waste Encapsulation and Storage Facility.

A cask filled with radioactive capsules is placed on an interim dry storage pad near the Waste Encapsulation and Storage Facility.

The water around the cesium and strontium capsules stored in the Waste Encapsulation and Storage Facility pools glows blue. As the elements undergo radioactive decay, the radiation causes the water to produce the blue light known as Cherenkov Radiation.