

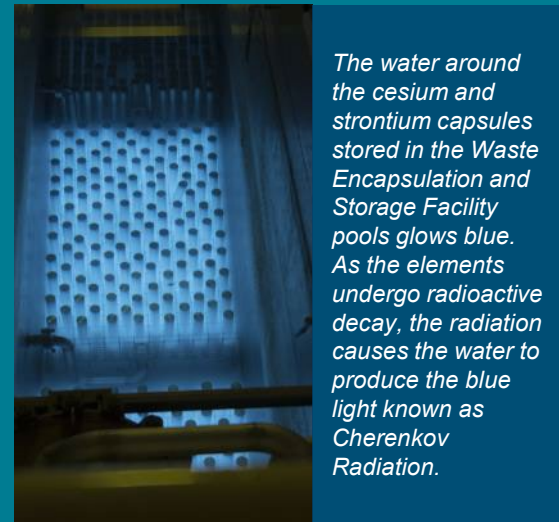
The U.S. Department of Energy and contractor Central Plateau Cleanup Company are preparing to move some of Hanford's most hazardous waste from a water-filled basin to interim dry storage.

Background

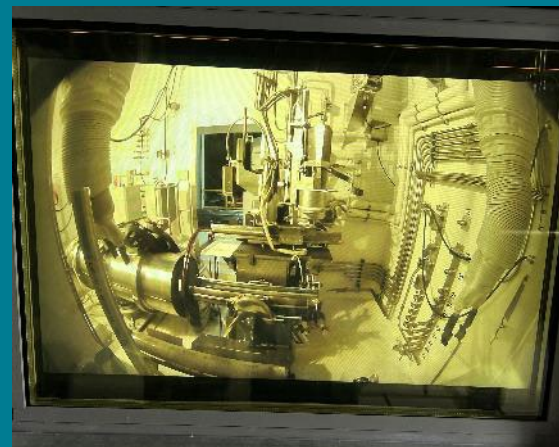
The Waste Encapsulation and Storage Facility (WESF) provides safe and compliant underwater storage for 1,936 highly radioactive capsules containing cesium and strontium. In the 1970s, cesium and strontium were removed from underground waste-storage tanks at Hanford to reduce the temperature of the waste inside. Both elements were ultimately placed in sturdy, stainless steel capsules at WESF for safe storage and monitoring.

Mission

The cesium and strontium capsules are being safely stored at WESF until they can be transferred to interim dry storage pending final disposition. While the capsules are currently in a safe configuration, the WESF is an aging facility. Dry storage would eliminate the possibility of a release of radioactive material in the unlikely event of a loss of storage-pool water, and subsequent overheating and breach of the capsules. A mock-up facility for testing the capsule transfer equipment and for operator training has been constructed at Hanford. A dry-storage area for the concrete casks that will contain the capsules was completed in 2022. Installation of the capsule transfer equipment at WESF is planned to be complete in fall 2024 and transfer operations are expected to start in 2025. The transfer will allow for the eventual deactivation of WESF. The WESF can be viewed using the self-guided [Hanford Virtual Tour](#).



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.



Test equipment installed at a mock-up facility.



Concrete casks designed to hold cesium and strontium capsules are staged on an interim dry-storage pad.

