



*The Waste Encapsulation and Storage Facility is adjacent to the B Plant processing facility in the 200 East Area of the Hanford Site.*

*The U.S. Department of Energy (DOE) and contractor Central Plateau Cleanup Company (CPCCo) are preparing to remove some of Hanford's most hazardous legacy waste to reduce any potential effects on people and the environment.*

## 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 waste tanks at Hanford to reduce the temperature of the waste inside the tanks. Both elements were ultimately placed in sturdy, stainless steel containers at WESF for safe storage and monitoring.

## Mission

The DOE and CPCCo are committed to safely storing the capsules until they can be removed for interim and final placement. While the capsules are currently in a safe configuration, WESF is an aging facility. Dry storage would eliminate the possibility of a release of radioactive material in the unlikely event of a major earthquake that might result in loss of pool storage water, and subsequent overheating and breach of the capsules. CPCCo has been constructing a mock-up facility for training, constructing the Capsule Storage Area, fabricating capsule transfer equipment, and modifying WESF to install equipment to facilitate transfer of the capsules to safer interim dry storage, allowing 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 in the Waste Encapsulation and Storage Facility pools glows a color of blue. The effect is known as the Cherenkov Glow, as the radioactive cesium and strontium decay and lose their radioactivity to become stable.*



*Workers recently constructed a mock-up structure of the Waste Encapsulation and Storage Facility to begin developing operational procedures and train personnel prior to moving capsules at the actual facility.*



*Conceptual illustrations of a large concrete cask (top) that was designed to hold capsules. Between 16 and 20 casks will be placed in a safe, compliant configuration in an outdoor storage area that is currently being constructed (bottom).*

