

Waste Encapsulation and Storage Facility (WESF)

Operating Unit #14

- Adjoins south end of B Plant.
- Built in 1974.
- Stores 1,902 stainless steel capsules holding cesium and strontium.
- Capsules are about 21 inches long, stored underwater in pools.

In the 1970s, workers separated cesium and strontium from Hanford's high-level waste tanks. The intent was to remove the extremely radioactive materials from the tanks and store them more safely. Workers chemically stabilized the waste by combining the cesium with chloride and the strontium with fluoride. Chloride and fluoride are dangerous wastes, so we regulate the storage of the capsules.

What will happen to the waste?

We have a milestone in the Tri-Party Agreement, due in June 2017, to decide the final fate of the capsules and to set a schedule for that work.

What part of this permit differs from the usual?

The waste is stored in capsules underwater. The usual requirements for aisle space, inspections, and labeling can't apply due to the water and the hazard of the waste. We have imposed alternative requirements that essentially meet the same objective.

What's the risk?

The waste is very radioactive — a significant number of Hanford's curies are stored here! The permit protects the environment by requiring training for the workers, and following plans for inspections, security, and preparedness and prevention.

This waste actually glows in the dark



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Protecting our air, land and water — today and for the future.