242-A Evaporator

Operating Unit #4

- Removes water and volatile organics from tank waste.
- Decreases the volume of water to create room in double-shell tanks, allowing them to accept waste from noncompliant single-shell tanks.
- Treats up to 1 million gallons to free up about 500,000 gallons in the double-shell tanks in each campaign.
- Near PUREX and most of the double-shell tanks.
- Began operating in 1977.

Vital for making room in double-shell tanks for waste from single-shell tanks

Where does the waste come from?

Waste comes to the 242-A Evaporator from the double-shell tanks.

Where does the waste go?

Two new waste streams leave the evaporator: a concentrated slurry of waste that goes back to a double-shell tank, and condensed water that goes to the Liquid Effluent Treatment Facility.

What's the risk?

This middle-aged unit must keep operating for decades! The evaporator is extremely important for Hanford's cleanup. We depend on it to make space in the double-shell tanks (by evaporating liquid) so we can empty the noncompliant single-shell tanks. The permit requires vigilant upkeep and maintenance, such as the recent replacement of piping and upgrades to instrumentation. USDOE plans to clean close the facility when they are done using it.