

Waste Treatment and Immobilization Plant (vit plant)

Operating Unit #10

- Permitted for storage and treatment of Hanford's tank waste in unique phased permit agreement.
- Four main facilities, plus support buildings:
 - Pretreatment facility (PTF), to separate waste into low-activity and high-level waste streams.
 - High-level waste vitrification facility (HLW).
 - Low-activity waste vitrification facility (LAW).
 - Laboratory to support all this work.
- On 65 acres east of 200 East Area.
- Under construction; starts operation in 2019.

Where does the waste come from?

56 million gallons of waste from World War II and Cold War plutonium production await treatment in 177 enormous, aging underground tanks. There is enough waste for everyone in the USA to have one 22-oz glass of it. All 308,400,408 million of us!

How will the waste be treated?

The waste will be thoroughly mixed with super-heated, liquefied glass – a process called vitrification (where the “vit” in vit plant comes from). Then it will be poured into large, stainless steel canisters and sealed. The waste canisters will still be radioactive, but will be safer because waste can no longer seep into places it shouldn't, like our water and soil.

Where will the waste go?

LAW canisters will go to shallow disposal at Hanford's Integrated Disposal Facility. HLW canisters will go to a deep geologic repository when one is available. Until then, it will be stored on-surface at Hanford in a facility not yet designed.



Aerial view of construction, July 2011



What's the risk?

Safe disposition of our nation's most dangerous waste relies on the vit plant's safe completion and ability to process waste for 20+ years.



DEPARTMENT OF
ECOLOGY
State of Washington

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