

UPDATE C-Farm Closure

Hanford Waste Management Area C (WMA-C)

*** Dates revised in the Proposed Settlement:**

* 2043: Complete closure of all SSTs

* 2040: Complete retrieval of waste from all SSTs

* 2019: Waste Treatment Plant begins treating waste

**WMA-C
Closure
Actions
Complete
2019**

* 2014:
Complete
WMA-C
Closure Demo

2003: First SST
emptied - C-106,
followed by C-203

1989: Tri-Party
Agreement signed



Retrieval Stalls at Single Shell Tank C-104

At single-shell tank (SST) C-104, an obstruction prevented further lowering of the pump through the contaminated sludge, stopping waste retrieval. About 75% of the waste was retrieved from C-104 since retrieval started in January. The waste was being transferred to double-shell tank (DST) AN-101.

Unfortunately AN-101 equipment is also inoperable. Spare equipment is onsite, but removal of the pump and installation of a new one will take about four months. AN-101 will be accepting waste from three more SSTs, so repairs are critical to the retrieval process.

In the meantime, an articulating mast system with a backstop is being designed and will be installed in C-104. The hope is that this tool will dislodge the obstruction below the waste removal pump in C-104.

Status of Other C-Farm Activities

C-107: This is the tank that will have a hole cut in the top of the tank dome to install the Mobile Arm Retrieval System. The results of the dome-cutting demonstration were documented. This evaluation looked at abrasiveness scenarios, settling/suspension, grain size, volume, and resulting grain shape. Information on tank waste delivery, including the additional cutting abrasive volume, will need to continue to be communicated between the tank farm contractor (Washington River Protection Solutions) and the Waste Treatment Plant contractor (Bechtel).

C-111: The old saltwell screen was removed from this tank, and it read 137 Rem from 30 cm away. This equipment is presently on a 90-day storage pad, awaiting disposal. Retrieval is planned to start by August 2010.

C-108: Hard-to-remove heel waste retrieval operations are planned for fall 2010. Estimated remaining waste volume is 6,800 gallons (908 ft³).

C-110: Initial waste retrieval started in September 2008, and operations are planned to continue in July 2011. Remaining waste volume is estimated at 17,200 gallons (2,300 ft³).

C-109: Further waste retrieval operations are planned to start in November 2011. The estimated remaining waste volume is 8,600 gallons (1,150 ft³). Retrieval of C-109 waste started in June 2007.

C-Farm Exhaust Stack Extension

Workers near C-Farm experienced difficulty with odors during the C-104 retrieval operations. Industrial hygiene technicians continuously monitored for vapors and have had difficulty determining exactly what affected workers.

At times, a weather condition known as an inversion layer trapped the vapors close to the elevation of the existing exhaust stack release.

In an effort to move tank exhausts above the workers *and* the work trailer, contractors will be adding a 23-foot-tall extension to the two C-Farm portable exhausters.

Contractors expect to install the stack extension by June.



An extension will add 23 ft., to an exhaust stack similar to this one at 296-P-49, which is planned for use at C-107.

Work in other Hanford tank farms

TY-Barrier

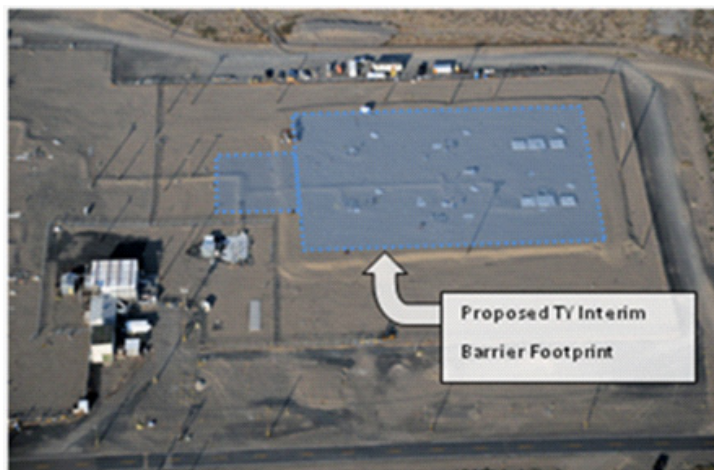
An interim surface barrier is being installed over the TY tank farm to prevent precipitation from pushing contamination in the soil into the groundwater. This will be the second barrier; the first was at T farm.

At TY farm, the contaminants of most concern are nitrate and technetium, which readily move with water.

The majority of these contaminants are still found in the vadose zone, the area between ground surface and the groundwater table.

Precipitation is minimal in our arid region; however, the gravel surfaces in tank farms promote infiltration.

As rain or snowmelt seeps through the ground, it may carry contamination deeper into the soil, regardless of volume. The deeper the contamination, the more difficult soil cleanup becomes.



Aerial view of the TY Farm, with graphic overlay depicting interim surface barrier.