

Agreements for Tank Waste Treatment and System Plan



The proposed judicial Consent Decree and Tri-Party Agreement (TPA) modifications will set new, enforceable and achievable schedules for the retrieval of wastes from Hanford's underground storage tanks, and close the tank farms. The Consent Decree has milestones (commitments with deadlines) for the construction, commissioning, and startup of the Waste Treatment Plant (WTP), as well as continued retrieval of waste from single-shell tanks (SST). The settlement among the TPA agencies also includes milestones that will go into effect under the TPA once the Consent Decree is approved by the Court.

Waste Treatment Plant (WTP) Construction

- Pacing milestones for WTP facilities (Consent Decree, Appendix A)
- Complete WTP construction and hot start by 2019 (Consent Decree)
- Achieve initial plant operations by 2022 (Consent Decree)
- Starting in 2023, issue a report each year certifying that the rate of treatment being achieved is sufficient to treat all waste by 2047, or provide plans to increase processing rate (TPA M-062-21).

Supplemental Treatment

Choose technology for supplemental treatment by April 30, 2015 (TPA M-062-45)

In 2011, USDOE must submit a report which demonstrates the WTP is designed to:

- Pretreat 100% of retrievable tank waste
- Vitrify 100% of the separated high-level waste
- Vitrify 100% of the separated low-activity waste (LAW) with the WTP LAW Facility, combined with supplemental treatment. (bulk vitrification or second LAW Facility) (TPA M-062-49).

System Plan

Establishes a process for USDOE to work with Ecology to review and potentially improve the 2040/2047 completion dates for retrieving all single-shell tank waste and treating all Hanford tank waste.

TERMS TO KNOW

Tri-Party Agreement – [the Hanford Federal Facility Agreement and Consent Order](#). This landmark 1989 agreement defines roles and sets cleanup schedules that will bring the US Department of Energy's Hanford Site into compliance with key federal environmental laws.

Tri-Party Agencies – The agencies that signed and are bound by the Tri-Party Agreement. They are the [U.S. Environmental Protection Agency](#), [Washington state's Department of Ecology](#), and two branches of USDOE at Hanford – [the Office of River Protection](#) for tank wastes, and the [Richland Operations Office](#) for the rest of Hanford cleanup.

Waste Treatment Plant (WTP) – The massive construction project to build the treatment facilities to immobilize Hanford's tank wastes in a glass formation. It has a Pretreatment Facility, a high-level waste treatment facility, a low-activity waste treatment facility, a laboratory, and related buildings and facilities.

Hot start – the start of operating all WTP facilities at the same time, with Hanford tank wastes and producing a waste glass product.

Initial Plant Operations – Running the WTP for 3 months and producing high-level glass at a rate of at least 4.2 metric tons of glass (MTG) per day, and low-activity waste at a rate of at least 21 MTG/day.

Supplemental treatment – Since the WTP is not designed to treat all of the low-activity waste, more treatment capability is needed to treat all of the low-activity waste.

Starting in October 2011, USDOE must submit a System Plan every three years describing disposition of all tank waste and the completion of the treatment mission (M-062-40).

The system plan will address:

- Description for each system utilized
- Description of key issues, assumptions, and vulnerabilities
- Estimated schedule impacts of alternative cases relative to the baseline, including cost comparisons
- Identification of new equipment and technology
- Identification of issues, techniques and technologies needing further evaluation
- Impacts on closure activities
- Planning for if double-shell tank space is not sufficient
- Planning for if any part of the WTP cannot meet the hot start date in 2019
- Describe how much total sodium will need to be treated
- Submit a one-time Hanford Tank Waste Supplemental Treatment Technologies Report
- Facilities for WTP secondary waste management.

USDOE and Ecology will review and potentially improve final completion dates every six years beginning 2014 (M-062-45).

Other questions?

For the actual language, go to <http://www.ecy.wa.gov/programs/nwp/index.html> or www.hanford.gov.

For more information on Hanford cleanup, call the Hanford Cleanup toll-free number at 1-800-321-2008.