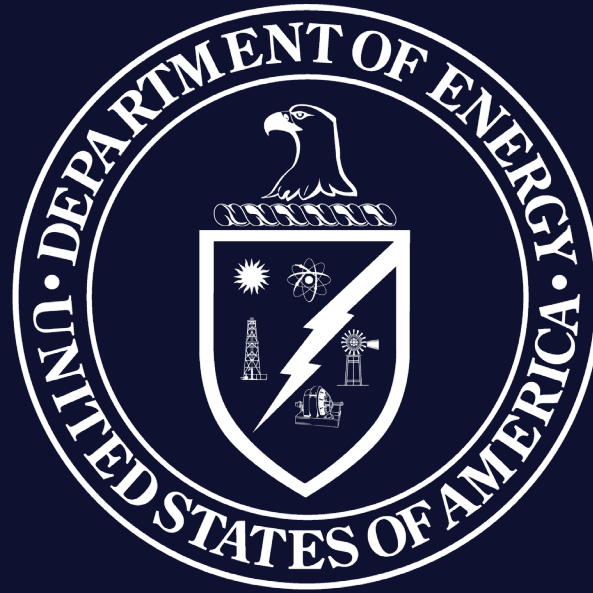




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TWPC PROJECT OVERVIEW

Transuranic Waste Processing Center (TWPC) Project Overview

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October 14, 2026



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Transuranic Waste Processing Center

- The Transuranic Waste Processing Center (TWPC) is located on approximately 25 acres of land owned by the Department of Energy (DOE) in the Melton Valley area of the Oak Ridge National Laboratory (ORNL)
- TWPC includes a 38,000 ft² processing building, various support buildings, and storage buildings



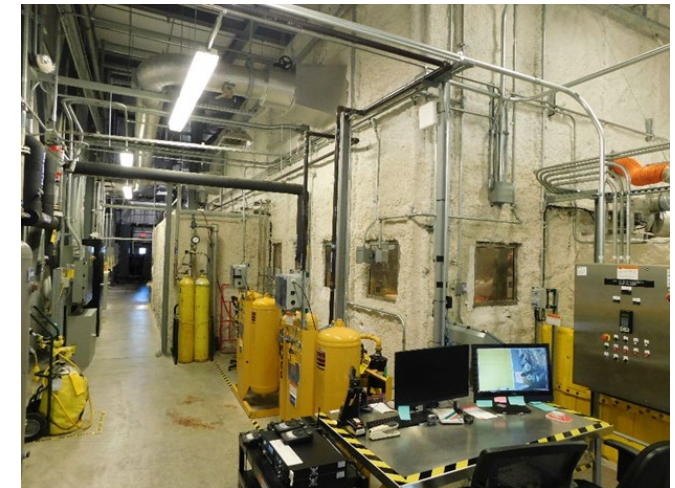
TWPC History/Mission

- DOE contractor Foster Wheeler completed construction of TWPC in 2003
- TWPC was designed to handle liquid and solid transuranic (TRU) waste
- TWPC's mission is to receive legacy defense TRU waste generated on the Oak Ridge Reservation and process, package, certify, and ship it to the Waste Isolation Pilot Plant (WIPP).
- The Central Characterization Program certifies TRU waste meets the WIPP waste acceptance criteria.



Current Processing Areas

- **Hot Cell** – Used to process remote-handled (RH) waste—utilizes remote manipulators and cranes to facilitate sorting, segregation, and size-reduction activities
 - Contact Handled < 200 mrem/hr < Remote Handled
- **Cask Processing Enclosure** – A contained area with three rooms allowing the processing of large boxes and other low-activity containers



Current Processing Areas

- **Contact Handled Glovebox** – A multi-station glovebox utilized to introduce drums, perform sorting, segregation, and size reduction activities; this was recently modified to allow for safely puncturing and remote venting of oxide containers
- **Box Breakdown Area** – A contained processing area with three rooms allowing the processing of large items, remote venting/puncturing of sealed drums, and a variety of other treatment methods



Fiscal Year 2026/2027 Priorities

- Complete installation of a 6-million-electron-volt High-Energy Real Time Radiography (aka RTG) unit
- Complete installation of a new Mobile In Situ Object Counting System Large Container Counter for non-destructive assay (NDA) drums and boxes
- Process Nuclear Fuel Services Transuranic waste
- Process 59 m³ of difficult waste, a regulatory Site Treatment Plan milestone
- Work to assist TRU waste disposition from across the DOE complex



Potential Future Activities

- Process defense TRU waste streams:
 - Lawrence Livermore National Laboratory; Los Alamos National Laboratory; Savannah River Site
 - Future generated ORNL TRU waste
- WIPP reestablishment of the remote-handled TRU waste disposition
 - RH waste is being accepted in Shielded Container Assemblies for disposition as contact handled waste.
- Continued implementation of critical elements defined in the TWPC Life Extension Study
 - Replacement of 4 obsolescent fire protection panels throughout the Facility
 - Replacement and upgrade of the degraded sprinkler system in the Multi-Purpose building used to support cask loading and waste storage.



Questions?





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