Tour of DOE Oak Ridge Office of Environmental Management's Projects

March 2026

OREM
Oak Ridge Office of Environmental Management

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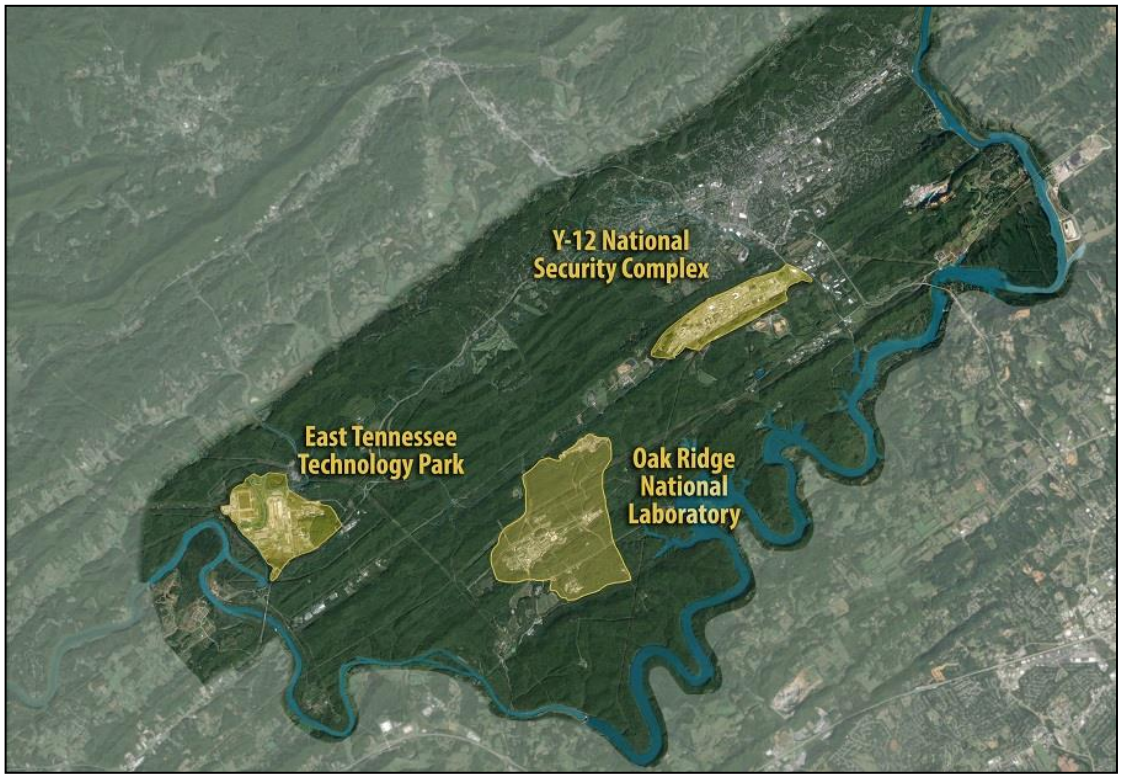
Introduction and Background (1 of 4)

In 1989, the U.S. Environmental Protection Agency (EPA) placed the Oak Ridge Reservation on its National Priorities List to be cleaned up under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The reservation spans approximately 32,000 acres in Anderson and Roane Counties and is also within the city limits of Oak Ridge. As a result of decades of operations in nuclear research and weapons development, about 10,500 acres of land and related buildings may have been impacted by previous operations at the site.

The tour and this book identifies many Oak Ridge Office of Environmental Management (OREM) projects associated with the cleanup mission and explains what has been finished, what is underway, and what is planned for the future.



Introduction and Background (2 of 4)

KEY DATES

1989:	Oak Ridge Reservation placed on National Priorities List; the Department of Energy (DOE) establishes the Office of Environmental Management (EM)
1992:	Federal Facility Agreement (FFA) implemented
1995:	Oak Ridge Site Specific Advisory Board established
2003:	First waste disposed at the EM Waste Management Facility (EMWMF)
2006:	Melton Valley remediation completed
2008:	First shipment of contact-handled (CH) transuranic (TRU) waste sent to the Waste Isolation Pilot Plant (WIPP) in New Mexico
2009:	First shipment of remote-handled (RH) TRU waste sent to WIPP in New Mexico
2011:	First shipment of uranium-233 (U-233) material sent from Oak Ridge
2015:	Manhattan Project National Historical Park (MPNHP) established
2016:	Vision 2016 achieved – completed demo of all gaseous diffusion plants (K-25, K-27, K-29, K-31, K-33)
2017:	Crews began addressing mercury-contaminated column exchange (COLEX) equipment at Alpha-4
2019:	Construction began on Outfall 200 (OF200) Mercury Treatment Facility (MTF) at the Y-12 National Security Complex (Y-12)
2019:	U-233 direct disposition campaign completed

Introduction and Background (3 of 4)

KEY DATES CONTINUED

2020:	Vision 2020 achieved – all demolitions at the East Tennessee Technology Park (ETTP) completed
2020:	K-25 History Center opens to the public
2021:	Biology Complex demolition completed at Y-12
2022:	Bulk Shielding Reactor (BSR) demolished at Oak Ridge National Laboratory (ORNL)
2022:	Processing began on high-dose inventory of U-233 stored at ORNL
2022:	Demolition of Building 3010 (BSR) completed
2022:	Startup of U-233 Hot Cell downblending
2023:	Low-Intensity Test Reactor demolished at ORNL
2023:	Early site prep began on the EM Disposal Facility (EMDF)
2024:	Vision 2024 achieved – all soil remediation complete at ETTP
2024:	Began demolition of the largest facility to date on the Y-12 footprint, Alpha-2
2025:	K-25 Interpretive Center opens to the public

Introduction and Background (4 of 4)

MAJOR RECORDS OF DECISION (RODs)

1995:	Lower East Fork Poplar Creek (LEFPC), Watts Bar
1997:	Gunite Tanks, Clinch River/Poplar Creek, Union Valley
1999:	EMWMF
2000:	Melton Valley, Bear Creek Valley
2002:	Bethel Valley, Upper East Fork Poplar Creek (UEFPC) (Soils & Sediment)
2002:	Bethel Valley (Soils & Sediment, Subsurface Structures, Deactivation and Decommissioning [D&D], and Surface Water)
2002:	UEFPC Phase I Interim Source Control Actions
2003:	ETTP – Zone 1 Soil
2005:	ETTP – Zone 2 Soil
2005:	UEFPC Phase 2 Interim Remedial Actions for Contaminated Soils and Scrapyard
2022:	EMDF
2022:	Transuranic Waste Processing Center (TWPC) transitioned to United Cleanup Oak Ridge, LLC
2024:	Interim Record of Decision (ROD) for Groundwater in the Main Plant Area at ETTP
2024:	ROD for Groundwater in the K-31/K-33 Area at ETTP
2025:	Final Soils Actions in Zone 1 at ETTP

The Cleanup Challenge

The location and history of the Oak Ridge Reservation present some of the greatest challenges to cleanup activities at any DOE site in the country.

Diversity of Contaminants

Fission Products – strontium, cesium, etc.
Transuranics – plutonium
Metals – mercury, uranium, beryllium
Organics – polychlorinated biphenyls (PCBs)
Others – nitrates, asbestos, etc.

Surface and Groundwater Flow

Abundant rainfall in the area (55 inches annually) enhances transport of contaminants.

Groundwater and surface water are interconnected, enhancing movement of contaminants.

Geology

Because underlying rocks are fractured, predicting groundwater flow is difficult. Some rock units contain caves and cavities that allow wide-ranging groundwater flow.

Population Centers

The entire reservation is in the Oak Ridge city limits, and many people live near our cleanup sites.

There are also 14,000 employees working at active cleanup sites (ORNL and Y-12) not associated with OREM's mission.

Y-12 National Security Complex

The Y-12 Plant (now known as the Y-12 National Security Complex) began as a uranium-enrichment facility during World War II. Previous operations during the 1950s and 1960s used large amounts of mercury. During that time, a significant amount was released into the environment, and it is the most notable environmental risk OREM is working to address at the site.

Today, Y-12 is responsible for maintaining the safety, security, and effectiveness of the U.S. nuclear weapons stockpile. There are five distinct facets of this mission: weapons component production, mission-critical modernization, surveillance, dismantlement, and storage.

Y-12 has approximately 8,000 employees who work on the 800-acre site supporting national security missions. The site is owned by the National Nuclear Security Administration (NNSA) and operated by Consolidated Nuclear Security. The site is less than half a mile to the nearest Oak Ridge resident.

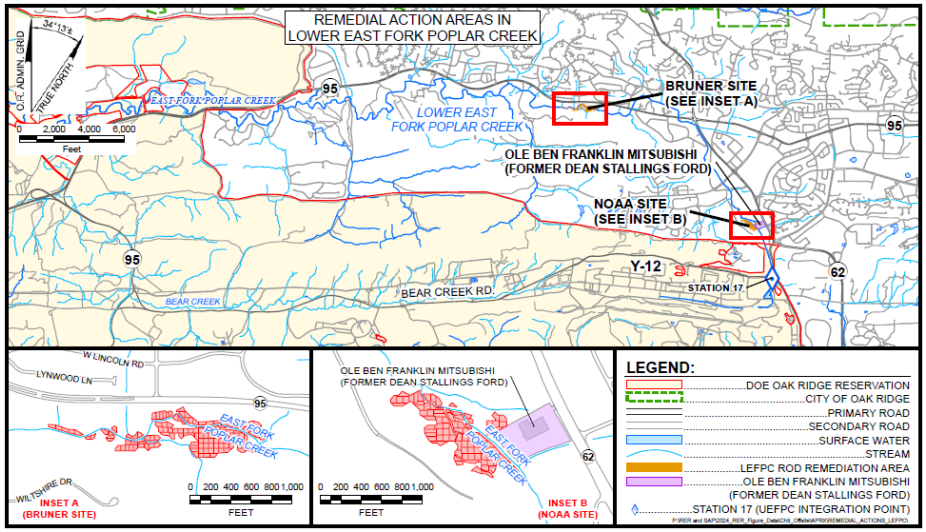
High-priority risk-reduction actions at Y-12 include actions to mitigate mercury migration into surface water, and demolition of process buildings and other legacy Manhattan Project and Cold War facilities. Near-term and future actions include remediating Chestnut Ridge, Bear Creek Valley (including Bear Creek Valley Burial Grounds), WWSY, and remaining soils, slabs, and below-grade structures identified in the UEFPC Phase II ROD.

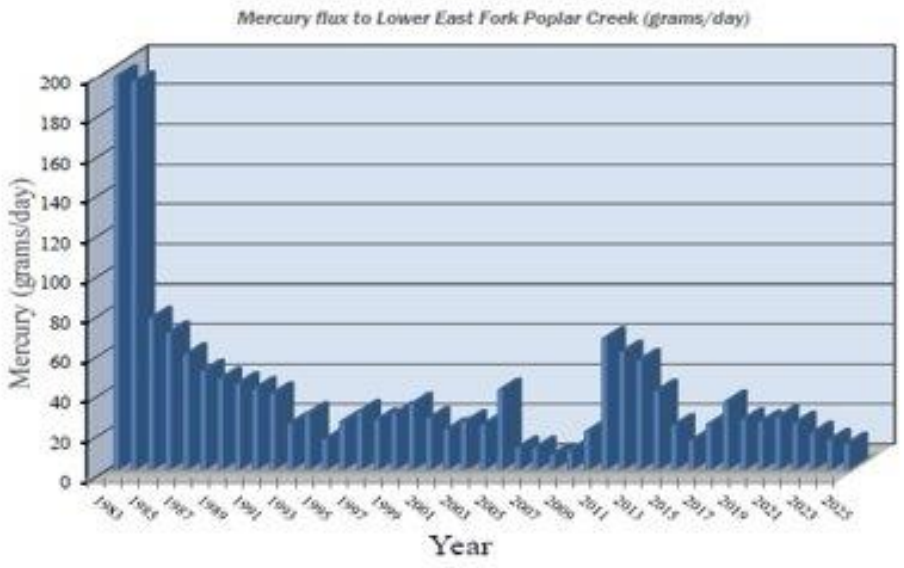
Lower East Fork Poplar Creek (LEFPC)

LEFPC flows from Y-12 from its integration point with the UEFPC at Station 17. The creek meanders through business and residential portions of the City of Oak Ridge. Its position downstream of Y-12 resulted in contamination of the stream's floodplain with mercury and other releases that occurred during Cold War-era operations.

The LEFPC ROD included a publicly-supported 400 parts per million (ppm) cleanup level for mercury in floodplain soil. Remedial actions were completed in 1997 through excavation of two areas and placement of an asphalt cover at a third area that is inspected annually to confirm the action remains protective.

A final remediation alternative for LEFPC surface water and streambed sediments will be decided following completion of soil remediation and mercury-mitigation activities within the Y-12 site.





Upper East Fork Poplar Creek (UEFPC)

An estimated 700,000 pounds of mercury were lost into the environment or unaccounted for at Y-12 during production of materials used in nuclear weapons during the Cold War era. Thousands of pounds of mercury found its way to UEFPC. Mercury levels in the creek have been reduced significantly, but they still exceed established regulatory levels. Mercury remaining in the soils, sediments, and surface water is still a concern, especially in contributing to the buildup of mercury in fish and aquatic life.

Researchers gather data in the UEFPC to support future cleanup

In April 2006, the FFA tri-parties (EPA, Tennessee Department of Environment & Conservation [TDEC], and DOE) agreed to the UEFPC Phase II ROD for interim remedial actions to address accessible soil, buried waste, or subsurface structures that contribute significantly to contamination above acceptable risk levels in UEFPC.

Construction of the Mercury Treatment Facility (a.k.a. OF200 MTF) began in 2019 to reduce mercury levels in nearby surface water and prevent potential impacts from demolition activities. Additional solutions to address mercury concentrations in surface water are being evaluated to help achieve the regulatory goals.

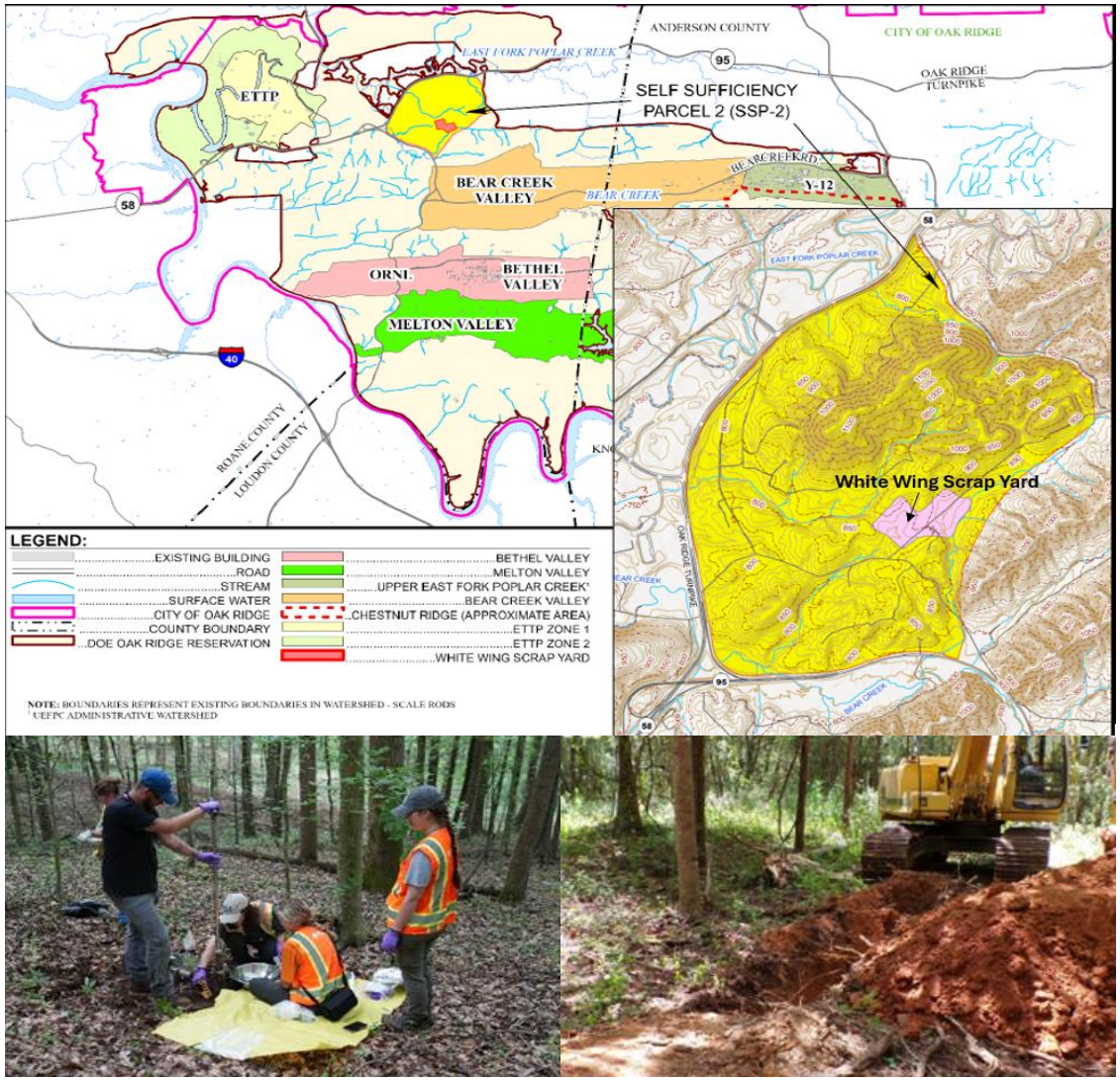
UEFPC Phase II remedial actions will continue as DOE continues to demolish legacy facilities and reduce environmental liabilities across the Y-12 footprint.

Y-12 Soil Remediation

Historical processes and programs at and around the Y-12 complex contaminated soils, sediment, surface water, and groundwater. The UEFPC Phase II ROD for interim remedial actions was developed to address accessible soil, buried waste, or subsurface structures that contribute to contamination posing unacceptable risk to industrial workers as well as address sources representing a threat to groundwater.

Remediation of soil at Y-12 was initiated shortly after completion of the Biology Complex demolition and is continuing via a phased approach on the east end of Y-12. These efforts support EM's mission to protect human health and the environment while providing land for beneficial reuse. At Y-12, this mission is supporting NNSA modernization. At other areas under the Y-12 portfolio, including White Wing Scrap Yard (WWSY), this mission has been initiated in areas close to transferred property which supports the new nuclear initiative.

Location of White Wing Scrap Yard (pink outline) within Self-Sufficiency Parcel 2.



Mercury Technology Development and the Aquatic Ecology Laboratory

ORNL is home to the Aquatic Ecology Laboratory. This facility has been upgraded as part of the Y-12 Mercury Technology Development work to allow for extensive mercury testing of actual creek water in various situations – including those involving biological, ecological, and chemical aspects of mercury in the environment. The work also supports CERCLA regulatory agreements.

Research and technology development activities have focused on understanding how mercury moves and changes in the East Fork Poplar Creek (EFPC) system. Monitoring sites in EFPC were established to measure flow, water chemistry, groundwater, and biota. Field studies have pointed to bank soil erosion as a source of mercury to the creek. Instream factors, such as water chemistry and flow characteristics, also influence mercury concentrations, including the production of harmful methylmercury.

Research is underway to understand methylmercury formulation and bioaccumulation as well as off the shelf solutions to reducing mercury concentrations.

Researchers test different sorbents in creek banks that could aid future mercury cleanup

Efforts to understand the watershed have added significantly to our understanding of key mercury source areas. The watershed-scale is informing models that OREM can use for future technology development, and with ongoing research is informing remedial decision making at EFPC.

Criticality Experiment Lab (completed)

Building 9213, also known as the former Criticality Experiment Laboratory, was an excess contaminated facility that OREM demolished in 2022. Prior to demolition, the building had been closed since 1992.

Built in 1949, the two-story, 24,000-square-foot laboratory was used to conduct experiments with fissile uranium isotopes for nuclear reactor designs. Employees performed more than 9,700 experiments there in its first decade, and the facility later supported the ORNL's High Flux Isotope Reactor program along with limited U.S. Army field-training operations.

Workers spent significant time deactivating the facility leading up to its teardown. They removed nearly 1,500 linear feet of asbestos-insulated piping, 300 linear feet of process piping, and 8,500 square feet (ft^2) of other asbestos-containing material. Demolition generated 525 truckloads of debris.

Demo underway on Building 9213

Crews finished demolition in 2022

Biology Complex (completed)

A major step toward changing the Y-12 skyline and reducing risks at the site was removing the 11 facilities that comprised the former Biology Complex. OREM removed six of these structures in 2010, which accounted for 135,000 ft^2.

The remaining facilities included two of the largest: Buildings 9207 and 9210. Crews conducted hazardous waste abatement, including removing 800 tons of asbestos material. Demolition of these buildings began in 2020 and was completed in 2021, removing another 320,000 ft^2 of deteriorated buildings. Crews also removed the slabs and the surrounding soil.

This cleanup project cleared 18 acres of land that NNSA could reuse to support national security missions at the site. OREM returned operational responsibilities of this parcel to NNSA in November 2022. It is now the future site of the new Lithium Processing Facility. Officials held the groundbreaking for early site preparation on that facility in October 2023.

Building 9207 demolition

Biology Complex demolition complete

Alpha-2 (9201-2)

Alpha-2 (9201-2) is a multi-story, 325,000 f^2 facility that was built in 1944 to aid in uranium-enrichment as part of the Manhattan Project. It was later used for research and development. The massive structure spans 2.5 acres.

Deactivation began in 2020 and continued through 2024 due to the condition of the building and the complexity of the project. The later phases of that process involved pouring more than 32,000 cubic yards (y^3) of concrete in the basement and rerouting utilities, since Alpha-2 is co-located with other active facilities at Y-12.

Demolition began on the Alpha-2 Complex in September 2024. This project marks OREM's largest demolition to date at Y-12, and the first teardown of a former uranium enrichment facility at that site. Alpha-2 is categorized as a high-risk excess contaminated facility, and its removal eliminates hazards and opens land for national security missions moving forward.

The demolition project is slated for completion in 2027.

Alpha-2 building at Y-12

Demolition underway at Alpha-2

Beta-1 (9204-1) and Building 9401-1

Beta-1 (9204-1) is a two-story, 210,000 ft^2 facility built in 1944 to enrich uranium during the Manhattan Project, and it was later converted to laboratory space for fusion-energy technology. Building 9401-1 was a former steam plant that operated until 1954 and was later used for maintenance and storage.

Workers have finished deactivating the above-ground floors and basement of Beta-1, but large amounts of concrete must be poured into the basement and utilities must be rerouted before teardown can begin.

Large amounts of groundwater filled the basement due to failed sump pumps. Crews installed a water treatment system and have treated and removed more than 15.1 million gallons of water that previously stood in that area.

Demolition is expected to begin on Beta-1 in late 2026.

During the deactivation at the Alpha-2 complex, employees rerouted utilities since that building is co-located with other active facilities at Y-12. Those utility reroutes also enable future demolition of the former steam plant, which is planned to start in FY 2027.

Beta-1 building at Y-12

Building 9401-1 at Y-12

Alpha-4 (9201-4)

Alpha-4 (Building 9201-4) is a former Manhattan Project uranium-enrichment facility that later supported lithium-separation operations during the 1950s and 1960s at Y-12. Alpha-4 is also one of three mercury-contaminated facilities at Y-12 (along with Alpha-5 and Beta-4).

Crews are taking the first steps to deactivate the massive 500,000 ft^2 facility, which spans 13 acres. These efforts are moving OREM closer to addressing one of the largest high-risk buildings at the site.

Alpha-4 building at Y-12

Currently, crews are sampling, marking potential hazards, and removing combustible materials from Alpha-4, while isolating the structure from any potential hazardous energy sources. Crews are also sorting and segregating legacy waste for disposal and have retrieved 6.5 tons of mercury.

Deactivation work at Alpha-4 is expected to continue for several years, and demolition is not expected to begin for another decade.

COLEX Equipment Removal

OREM completed removal of the COLEX equipment on the west side of the Alpha-4 facility at Y-12 in 2018. That project led to the recovery of nearly 8,400 pounds of mercury from the rusted and structurally degraded equipment, and it prevented a major environmental release. Crews removed and disposed of more than 10,000 feet of mercury-contaminated piping along with tanks, condensers, heat exchangers, and a 1.6-million-pound mezzanine structure.

A view of the west side of Alpha-4 after crews removed the COLEX equipment

Crews transitioned to the east side of Alpha-4 and finished deactivating the COLEX equipment there in 2022. They recovered another 4,600 pounds of mercury from the piping, tanks, and pumps that were deactivated. OREM will perform demolition of the COLEX equipment on the east and south sides of the facility at a later date.

Now, work is beginning to prepare Alpha-4 for deactivation and future demolition. Its removal will eliminate of one of the highest-risk excess contaminated facilities in the DOE complex.

Alpha-5 and Beta-4 Legacy Material Disposition

Alpha-5 (9201-5) and Beta-4 (9204-4) are large former Manhattan Project uranium-enrichment facilities that date to the 1940s. The American Recovery and Reinvestment Act of 2009 (Recovery Act) provided funding that DOE used to characterize and remove legacy materials from both buildings, including:

- 3,400 cubic meters of material from the second floor of Beta-4 (approximately 84,000 ft^2)
- 31,000 cubic meters of material from 613,000 ft^2 of floor space in Alpha-5

Both facilities are categorized as high-risk excess contaminated facilities, and Alpha-5 was listed in a report to Congress as being "the worst of the worst" in the DOE complex. These facilities contain high levels of mercury and radiological contamination, and demolition cannot begin until solutions that obtain agreement with the regulatory goals for mercury in UEFPC have been satisfied.

The West End Protected Area Reduction Project is an NNSA-led project that reduced the size of the high-security Protected Area (PA) by nearly 50%, enabling easier access for future crews. This project removed Alpha-5 and Beta-4 from the PA in September 2025.

View of Beta-4 (bottom) and Alpha-5 (middle)

Interior of Alpha-5 after cleanout

Environmental Management Waste Management Facility

EMWMF is an above-grade disposal facility for low-level radioactive waste generated from CERCLA-related cleanup. It has multiple layers of protective geotextiles and low-permeability clays above and below the disposed waste, to prevent contaminants from leaching into the groundwater.

EMWMF only accepts wastes that meet specific waste-acceptance criteria developed in accordance with EPA and state regulations. Waste types that qualify for disposal include soil, dried sludge and sediment, solidified wastes, stabilized waste, building debris, scrap equipment, and secondary waste such as personal protective equipment.

EMWMF has been instrumental in OREM's success and pace of cleanup. The facility consists of six disposal cells with a total capacity of 2.3 million y^3. EMWMF began accepting waste in 2003, and it is currently at 86 percent capacity. It is expected to reach capacity in the late 2020s. With additional capacity required to complete cleanup at Y-12 and ORNL, OREM is working to build another onsite disposal facility to maintain its momentum and finish that work.

EMWMF is nearing full capacity

Trucks use private Haul Road to transport waste to the EMWMF

Environmental Management Disposal Facility

EMDF will be an above-grade disposal facility for low-level radioactive waste generated from CERCLA-related cleanup at ORNL and Y-12. It is designed to have multiple layers of protective geotextiles and low-permeability clays above and below the disposed waste, to prevent contaminants from leaching into the groundwater.

EMDF will accept low-level radioactive wastes that meet specific waste-acceptance criteria developed in accordance with EPA and state regulations. The facility will consist of four disposal cells with a proposed final capacity of up to 2.2 million y^3.

The first phase of the project is separated into five subprojects:

- Early Site Prep: Involves rerouting Bear Creek Road and Haul Road and creating construction support areas. That work was completed in 2024, five months ahead of schedule and $11 million under budget.
- Groundwater Field Demonstration Study: Involves installing a temporary geomembrane liner to simulate how groundwater levels will adjust following construction of the landfill. The study will span two wet seasons to capture data that will help inform and finalize EMDF's design. Fieldwork is complete and monitoring began in December 2024.
- Support Facilities and Infrastructure: Involves construction of the support facilities needed for future operation of the disposal facility.
- Landfield Wastewater Treatment System: Involves construction of the wastewater treatment system, tanks and piping to treat contact water and leachate.
- Balance of Construction: Includes completing the final design and constructing the first two waste-disposal cells.

Future phases will complete buildout of remaining cells for additional capacity.

Haul Road

In May 2005, construction began on a private haul road to transport waste generated from cleanup activities at ETTP to EMWMF without using public roadways.

Construction was finished in January 2006, at a cost of about $20 million. DOE has significantly reduced risks by utilizing Haul Road to prevent waste transportation on public roadways. To date, 200,000 truckloads have been diverted from public roads. Shipments from ORNL cleanup projects use Reeves Road, which connects to Haul Road.

Bear Creek Valley Burial Grounds

The burial grounds are located approximately two miles west of Y-12 and were operated from 1955 to 1993. They were primarily used for the disposal of uranium turnings and industrial waste contaminated with uranium from nuclear weapons production.

The burial grounds include walk-in pits, uranium vaults, and several waste disposal units known as BCBG-A, -B, -C, -D, -E, and -J. Each disposal unit contains a series of trenches that are 14 to 25 feet deep. A concrete blanket covers the burial grounds to mitigate risk posed by buried shock-sensitive materials.

To begin addressing remediation concerns, DOE prepared a remedial investigation/feasibility study (RI/FS) in 1997 followed by a focused feasibility study and proposed plan in 2008, allowing the FFA tri-parties to evaluate remediation alternatives for addressing contamination at the burial grounds. Approval of the proposed plan was paused in 2009 due to FFA tri-party disagreement and concerns. During the ensuing years, DOE continued collecting data and evaluating options, including a recent non-time-critical action to address and evaluate uranium contamination in North Tributary 8 (NT-8), which flows out of the southwestern area of the burial grounds area. DOE is entering into project team discussions with EPA and TDEC regarding additional cleanup actions that can be completed in support of a future final CERCLA decision.

Aerial view of NT-8 and the burial grounds

Oak Ridge National Laboratory (ORNL)

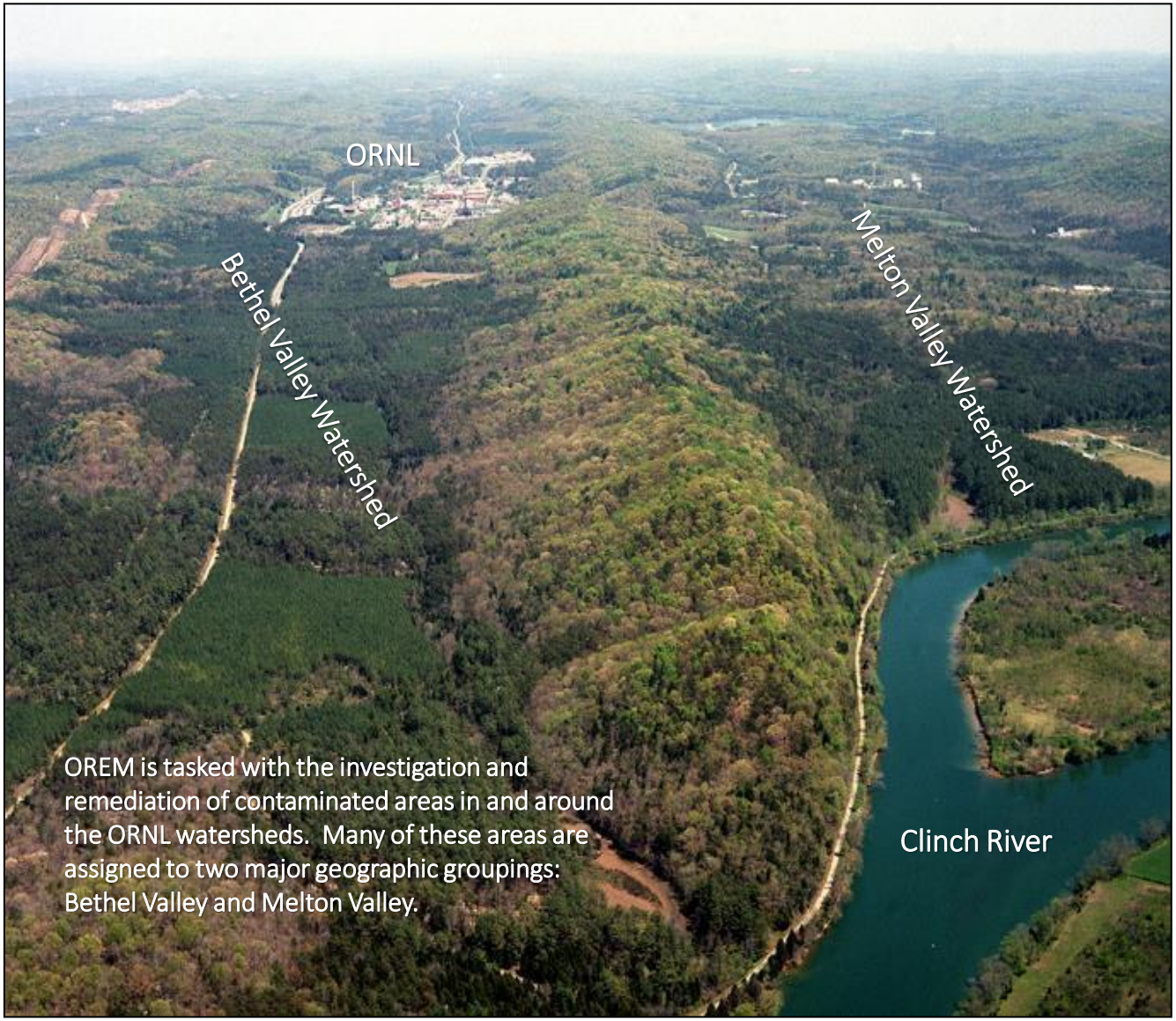
The 3,000-acre site employs approximately 6,000 researchers and staff, and it is managed for DOE by UT-Battelle.

Remediation efforts at the lab focus on its two watersheds: Bethel Valley (which includes the main lab area) and Melton Valley (see photo next page). Some remediation in Melton Valley, which posed the highest environmental risk, was completed in 2006.

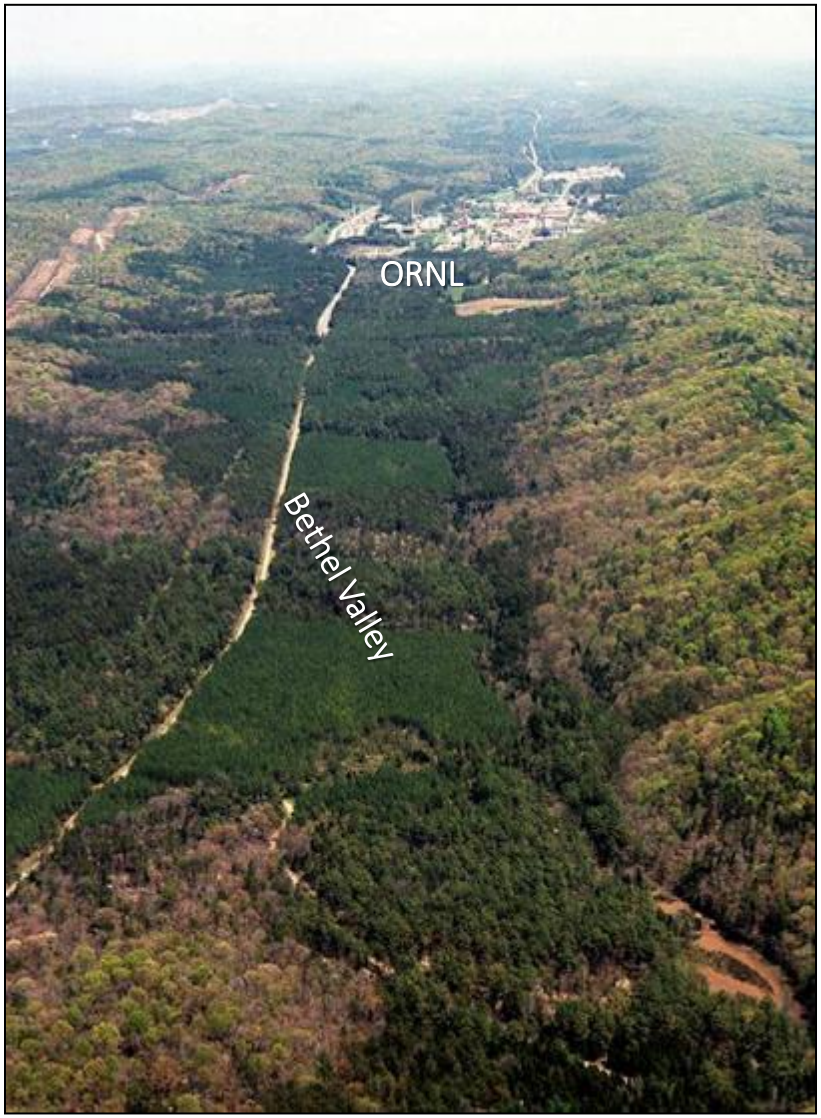
Cleanup work in Bethel Valley includes a variety of challenges: contaminated soil and groundwater, buried inactive process tanks and transfer pipelines, inactive radiochemical processing facilities, and inactive nuclear reactors, totaling more than 250 facilities. Many of these areas must be addressed in the middle of an active and operating laboratory site.

ORNL was constructed as part of the Manhattan Project during World War II and was where the first gram quantities of plutonium were produced. The lab is now an internationally-renowned research institution with ongoing missions in areas such as energy, biology, materials, neutron science, supercomputing, and national security.

ORNL Watersheds



Bethel Valley Watershed



Bethel Valley encompasses about 1,700 acres of land, including the main area of ORNL. The watershed contains approximately 150 facilities that OREM will address and remove.

Cleanup involves addressing contaminated soil and groundwater, buried process tanks and transfer pipelines, inactive radiochemical processing facilities, and inactive nuclear reactors.

Because of this diversity, the valley has been divided into four regions, based on area hydrology, the level and type of environmental management activities, and the knowledge that the end use of the regions may vary.

The *Record of Decision for Interim Actions in Bethel Valley* was issued in May 2002 and presents the remedies for selected inactive units, accessible sources of contamination, and contaminated media.

High-priority actions have included facility demolition, soil and sediment remediation, burial ground capping, and groundwater. Current missions are focused on disposition of legacy materials and wastes, operation of onsite treatment facilities, and managing excess facilities awaiting D&D activities.

Uranium-233 Disposition Project

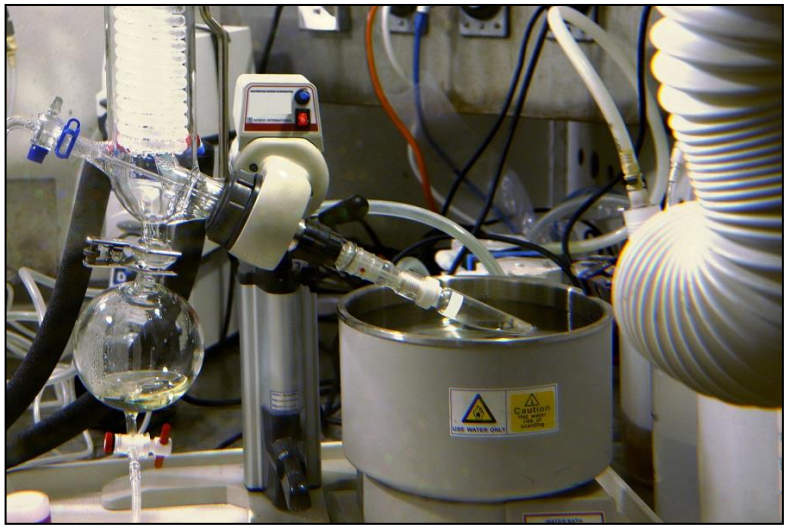
Building 3019 stores the nation's inventory of U-233, and it is the oldest operating nuclear facility in the world. U-233 was created as an alternative nuclear fuel source in the 1950s and 1960s. However, due to its trace amounts of U-232, a highly unstable radioactive isotope, it was too difficult to use. Eventually, it was sent to ORNL for storage.

The U-233 Disposition Project is required by Congress to resolve safety and security issues associated with the continued storage of U-233. The project involves either: 1) identifying programmatic uses, 2) directly dispositioning applicable containers, or 3) processing and shipping the remaining inventory for disposal.

OREM completed the direct disposition campaign in 2017, which identified items that could support ongoing missions and disposing other containers as waste. From 2019 through 2021, employees down blended an inventory of low-dose material in gloveboxes for disposal. In 2022, employees began processing the high-dose inventory in hot cells for disposal and, as of March 2026, we have processed 50% of inventory. This work is scheduled to continue through the early 2030s.

Through a partnership with TerraPower, employees are able to extract rare nuclear isotopes during processing operations to use for next-generation cancer treatment research.

Downblended U-233 material is loaded for disposal



Employees extract rare isotopes for cancer treatment research

Liquid/Gaseous Waste Operations (LGWO)

DOE operates three waste treatment systems on a 24/7 continuous operation: the Liquid Low-Level Waste (LLLW) System, the Process Waste (PW) System, and the Gaseous Waste (GW) System. These systems are comprised of 16 Category 2 nuclear, eight radiological, and 34 industrial facilities, and more than 20 miles of underground piping and ductwork at ORNL. OREM is performing significant upgrades to replace aging systems and equipment on this important infrastructure that ensures ORNL missions can continue uninterrupted.


LLLW Evaporator Facility


Upgrades at Building 3608

LLLW System:

The LLLW System is comprised of 16 Category 2 nuclear facilities. It consists of a series of dedicated tanks and underground piping used to collect LLLW from generating facilities at ORNL and transfer the waste to Building 2531, the LLLW Evaporator Facility, for volume reduction. The concentrated LLLW is then transferred to storage tanks in Bethel Valley (Building 2537) and Melton Valley (Buildings 7830 and 7856) for long-term storage.

PW System:

The PW System includes seven facilities categorized as radiological facilities and 16 industrial facilities. It collects wastewater from generators and contaminated storm/ground water throughout Bethel Valley and Melton Valley using a series of single-contained hard-piped connections to pumping stations. Pumping stations transfer the wastewater to a tank farm in each valley, where wastewater is stored until transferred to the Process Waste Treatment Complex at Building 3608. The PW System processes over 100 million gallons of ORNL wastewater, in addition to over 4.3 million gallons of leachate from the EMWMF each year by tanker for treatment.


3039 Stack

GW System:

The 3039 Stack Ventilation System includes five industrial facilities that provide off-gas and cell ventilation services to generators throughout the main ORNL Complex in Bethel Valley. Major repairs to the 3039 Stack were completed in 2024, allowing continued safe operation.

Besides the three systems listed here, LGWO also has 14 support facilities, including a contaminated equipment maintenance facility, a change house, and a centralized monitoring facility.

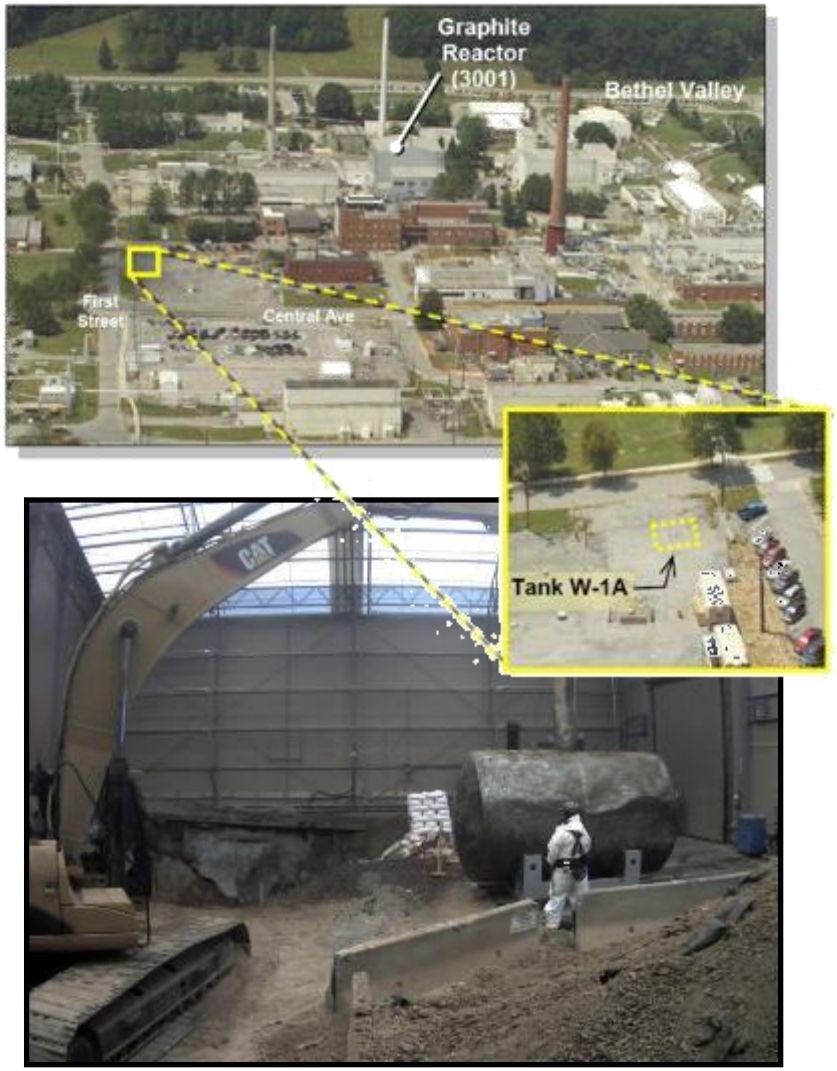
Core Hole 8 Plume/Tank W1-A (completed)

Core Hole 8 is an area of groundwater contamination located in the central campus at ORNL. The plume originated from leaks from the underground Tank W-1A, which OREM has since excavated and removed, and it migrates west to First Creek.

In Fiscal Year (FY) 2011 and FY 2012, OREM installed two bedrock wells to extract contaminated groundwater and send it to the LGWO PW treatment system. Older system components were replaced, and new wells and a refurbished pumping system began operation in March 2012.

Monitoring in First Creek shows the plume has been contained. Any remaining contamination will be addressed under the Bethel Valley Interim ROD as part of the soils and sediment actions addressing the exposure units (EUs).

Excavation began in September 2011 to remove Tank W-1A. The tank was successfully removed in January 2012 and was sent to be cut up and disposed of off site. Soil and secondary waste disposals were completed in May 2012.



Tank W-1A was removed from the Core Hole 8 area in January 2012

ORNL Reactor and Hot Cell D&D

Most of the facilities at ORNL in the current EM baseline slated for D&D are reactors, laboratory facilities with hot cells, and their associated support facilities. Many of these facilities have high levels of radiation and contain contaminated equipment. They might also contain shock-sensitive, pyrophoric materials and other biological and chemical hazards. Several facilities have confined spaces that are unsafe for human entry and are near other operating facilities.

Additionally, there are many facilities at ORNL that are structurally unsound. Structural deterioration of abandoned facilities has occurred, some to the point that it is potentially unsafe for workers to access the facilities for surveillance and maintenance or demolition.

Crew have already taken down two reactor facilities in ORNL's central campus, and deactivation activities are underway in a dozen former isotope labs and research reactor facilities.

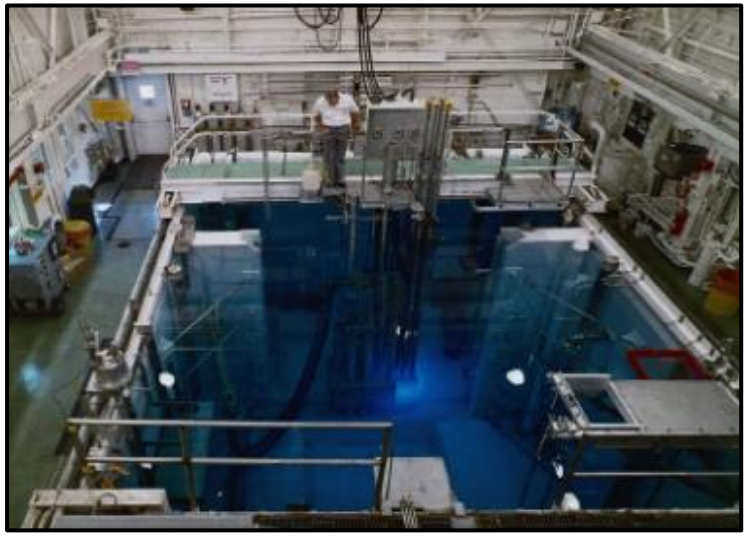
Significant safety hazards include facility instability, failure of upper floors and ceilings, falling debris, asbestos, PCBs, lead paint, high radiation activity, chemical hazards, and bats, fleas, roaches, molds, and other biological hazards from bird and rodent infestation.

ORNL's central campus contains many old reactor facilities and isotope labs

Building 7500 at ORNL

Bulk Shielding Reactor D&D Project (completed)

Bulk Shielding Reactor demolition



Building 3010 Reactor Pool

The first-ever demolition of a reactor facility in ORNL's central campus occurred in 2022 with the Bulk Shielding Reactor, also known as Building 3010.

The BSR was constructed in 1950 with the initial mission of advancing nuclear-powered aircraft. In 1963, the mission changed to a general-purpose research reactor for activities such as isotope production, material irradiation, and material effect experiments. The facility utilized a 27-foot-deep reactor pool to contain the water used for both shielding and cooling during experiments.

The facility operated until 1987, permanently shut down in 1991, was defueled in 1998, and was in a state of surveillance until D&D field activities started in 2018. Removal of hazardous and radioactive materials began after utility isolations were completed in 2019. This included removing submerged irradiated items in the reactor pool. The pool was then dewatered, decontaminated, and backfilled to support demolition. OREM completed demolition of the facility in 2022.

Demolition of the facility eliminates a high-risk excess contaminated facility and opens land to support future research missions at ORNL.

Low-Intensity Test Reactor D&D Project
(completed)

The second demolition of a reactor facility in ORNL's central campus occurred in 2023 with the Low-Intensity Test Reactor, also known as Building 3005. The facility was adjacent to the previously-demolished BSR that was torn down in 2022.

It was built in 1949 as a criticality testing facility that used highly-enriched fuel with water as a coolant. It operated until 1968. It was an aboveground tank type reactor vessel that was three stories tall. The facility pioneered water-cooled reactor development, radiation testing of various materials, and radioisotope production.

Demolition progressing

Building 3005 before major demolition

Removing the reactor vessel

D&D field activities started in 2019. Removal of hazardous and radioactive materials began after utility isolations were completed in 2020. The most challenging removal activities included removal of lead brick and concrete shield blocks and hoisting and rigging of the reactor vessel. Demolition to slab was completed in the fall of 2023, and the reactor vessel was shipped for disposal in 2024.

Oak Ridge Research Reactor D&D Project

The Oak Ridge Research Reactor (Building 3042) was an isotope production and irradiation facility from 1958 through 1987. It was permanently shut down in July 1987 and defueled.

It is the largest former research reactor in ORNL's central campus, and removing this high-risk excess contaminated facility will transform the site.

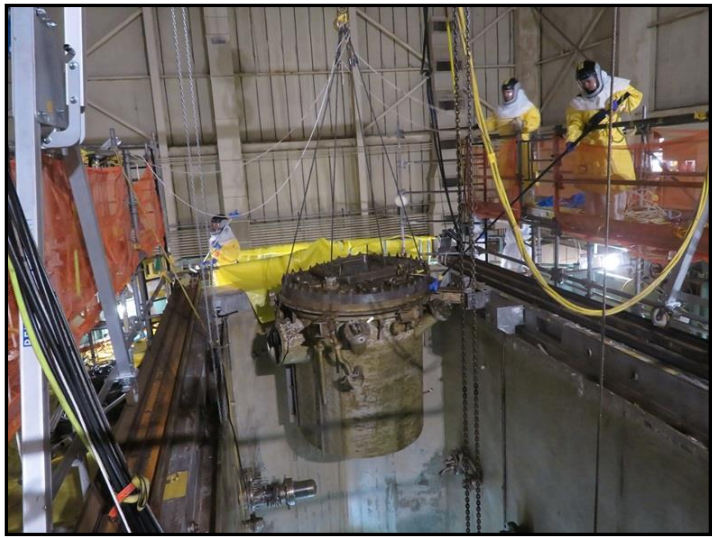
Crews safely removed the facility's 32-foot-tall reactor vessel. They removed the top portion in 2023, and the bottom portion in 2024.

Workers removed 127,000 gallons of water to reach the lower portion of the vessel, which sat on the pool floor. They also took out the lead brick shielding, comprised of 157,000 contaminated bricks, in the basement that surrounded the pool.

The vessel removal is the first step before preparing the remainder of the facility for demolition.

This work comes nearly a decade after employees first began work in the building after discovering water seepage from the reactor pool. To address the issue, workers placed concrete shielding and containment panels over the pool, drained it, and injected a fixative to keep contamination in place.

Demolition is scheduled to begin in the early 2030s.



Crews lift and remove a portion of the reactor vessel

Teams remove waste from deactivation activities inside Building 3042

Building 3026 Hot Cell D&D Project

Constructed in 1943-45, Building 3026 was one of the original Clinton Laboratory buildings built to support the war effort. It was later used for a variety of processing and research activities. The facility had been restricted from entry since 1998 and had fallen into severe disrepair.

The project objective was to remove any remaining legacy materials, abate hazardous materials, characterize hot cells and process equipment, decontaminate as needed, remove the hot cell concrete to slab or grade, and decontaminate the slab.

The building's outer structure was demolished in early 2010, and the six hot cells were encased in a heavy epoxy fixative.

In April 2012, four cells were demolished and removed from the "C" side of the building. The remaining cells on the "D" side were found to be more contaminated than anticipated and were deferred until more data could be safely collected.

Planning for the "D" hot cells resumed in 2018 and, in 2019 using a 175-ton crane, workers installed a protective cover to keep nearby research facilities protected while the final two hot cells (heavily-shielded concrete rooms) were demolished. The West Cell Bank was demolished in the summer of 2021 and deactivation efforts are ongoing for the highly-contaminated East Cell Bank. Demolition began on the final hot cell with demolition of "B" Cell in May 2025. Deactivation continues in "A" Cell with demo planned for 2026.

Building 3026 hot cells demolition enclosure

Demolition on the West Cell Bank

Graphite Reactor Support Facilities

The Graphite Reactor support facilities include the filter house (Building 3002), fan house (Building 3003), and exhaust stack (Building 3018). They were previously used to filter and release exhaust from Graphite Reactor operations.

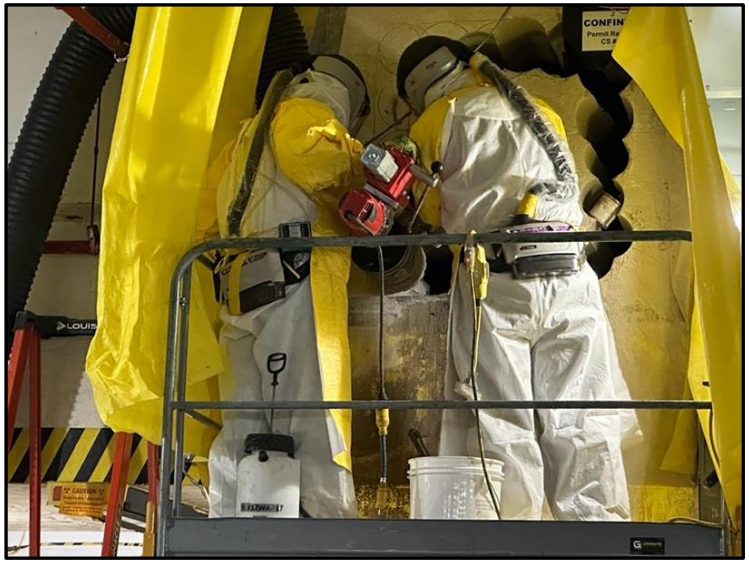
Their removal will continue OREM's transformation of ORNL's central campus, eliminate hazards, and enhance visitor access to a historic Graphite Reactor.

Constructed in 1948, the filter house filtered air from the air-cooled Graphite Reactor prior to exhaust through the fan house and adjacent stack. Building 3003 housed the fan room, providing ventilation for the reactor and exhausting to the 200-foot-tall stack, which dates to 1943.

These ancillary facilities are located on a hill approximately 100 feet from the Graphite Reactor, which is a key component of the Manhattan Project National Historical Park, and within 20 feet of a fence line for a neighboring operational facility.

Demolition began on the 3003 facility in June 2025. Crews are currently working on deactivation of Buildings 3002 and 3018 to prepare them for demolition, which is expected to begin in the mid-2030s.

Aerial view of the Graphite Reactor support facilities



Crews are actively preparing the facilities for demolition

The Graphite Reactor

The Graphite Reactor was built in 1943 to test the feasibility of producing plutonium for use in atomic weapons on a scale larger than laboratory experiments. It was the pilot for the larger Hanford B Reactor in Washington.

Built in just 11 months, the reactor went critical at 5 a.m. on November 4, 1943. It produced the first few grams of plutonium about four months later.

After World War II, the Graphite Reactor was the first facility to produce radioactive isotopes for peacetime use. The first isotope intended for medical use was produced in August 1946.

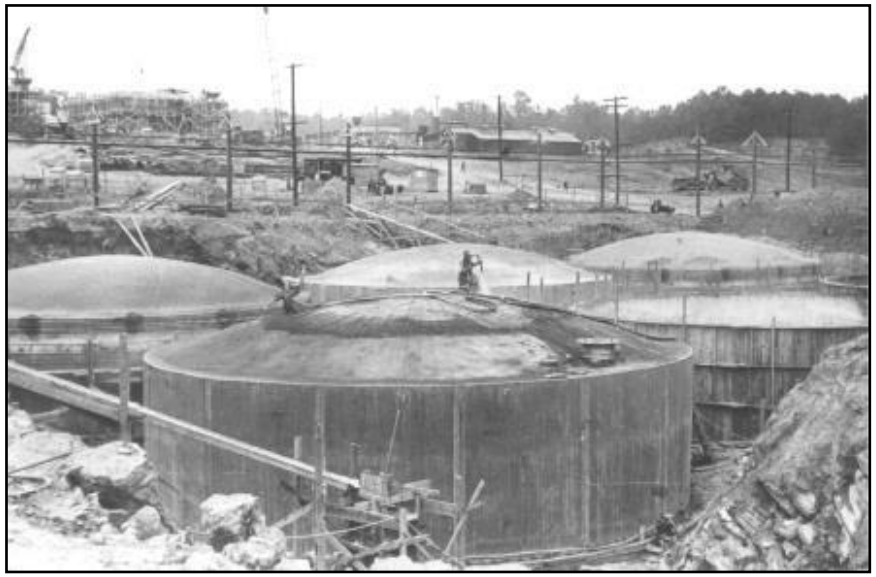
Subsequent shipments of radioisotopes were intended for scientific, industrial, and agricultural uses.

The Graphite Reactor was shut down in 1963, after twenty years of use. It was designated a national historic landmark in 1966 and is now a part of the MPNHP, established November 10, 2015.

Gunite and Associated Tanks (GAAT)
(completed)

The GAAT project, completed in August 2001, was charged with remediation of eight underground storage tanks (W-3 through W-10) constructed during the Manhattan Project in 1943. These tanks stored radioactive liquid waste until the early 1970s, when they were taken out of service. The original design life of the tanks was five years.

The GAAT project was the first of its kind completed in the United States. Integrated, remotely-operated robotic equipment was used to clean the tanks.



GAAT construction, 1943

Parking area at former GAAT site

Twenty-eight technologies were used to perform tank characterization, plus waste characterization, removal, mixing, and transfer activities. Retrieved supernate and sludge were transferred to the Melton Valley Storage Tanks (Building 7830) for final waste treatment and disposal. The empty tanks were filled with grout and left in place. The removal action report was issued in January 2002.

Melton Valley Watershed

*SWSA = Solid Waste Storage Area

More than 50 years of operation, production, and research activities at ORNL left a legacy of contaminated facilities and areas of secondary contamination on 160 acres of the watershed's 1,062 acres. In the 1950s, the area was also used as the Atomic Energy Commission's Southeastern Regional Burial Ground. During this time, largely uncharacterized radioactive wastes from more than 50 other facilities or federal programs were disposed here. The watershed has approximately 100 facilities that OREM will address and remove.

SWSA 4 Burial Grounds (completed)

SWSA 4 during operation in the 1950s

SWSA 4 was used from 1951 to 1959 for disposal of various liquid and solid radioactive wastes in unlined trenches and auger holes. In Spring 2001, DOE released the Remedial Design Report/Remedial Action Work Plan for the SWSA 4 Area and the Intermediate Holding Pond, which outlined remediation of the area.

The SWSA 4 project included construction of a 32-acre, multi-layer cap over the area to minimize infiltration during precipitation, protecting workers and wildlife. Approximately 2,400 linear feet of upgradient diversion trench and 1,200 linear feet of downgradient collection trench were installed. A groundwater treatment plant was constructed, and Lagoon Road was relocated as part of the project. Work was completed in September 2006.

Remediation activities in 2005

SWSA 5 Burial Grounds (completed)

SWSA 5 was used to dispose of a variety of waste types, including low-level wastes, TRU wastes, and spent nuclear fuel. During the 1970s, TRU wastes were stored in trenches in retrievable containers. After the 1970s, newly-generated TRU wastes were stored in constructed facilities. The SWSA 5 trenches contained 204 concrete casks, 18 boxes, and 12 drums of TRU waste.

During remediation activities, all retrievable TRU waste containers from 22 trenches were removed and taken to TWPC, where they are being segregated and prepared for disposal at WIPP in New Mexico. The exception is the retrievable waste in Trench 13, where work was suspended because of a flame-up incident. The remediation of Trench 13 will be addressed at a later date.

Waste disposal practices at SWSA 5, 1950s through 1970s

TRU waste retrieval operations

Soil exceeding remediation levels (as designated in the Melton Valley ROD) and debris waste associated with excavation were disposed at EMWMF and other appropriate facilities. Spent nuclear fuel stored in SWSA 5 was retrieved, repackaged, and shipped to DOE's Idaho National Laboratory and Savannah River Site in 2004. Waste management facilities in SWSA 5 were demolished in 2005.

Multi-layer caps were installed in SWSA 5 to minimize water infiltration and protect workers and wildlife. Capping activities were completed in 2006.

SWSA 6 Burial Grounds (completed)

SWSA 6 was used for the disposal of solid low-level and mixed radioactive waste in trenches, auger holes, silos, and storage pads called tumuli. Only low-level waste was disposed in SWSA 6 after May 1986. Trenches and auger holes that received hazardous and/or mixed waste after November 8, 1980, were designated as "Resource Conservation and Recovery Act regulated sites" that require a closure plan.

Remediation activities included demolition of surplus waste management facilities in 2005 and installation of multi-layer caps to minimize infiltration during precipitation, protecting workers and wildlife. Spent nuclear fuel stored in SWSA 6 has been retrieved, repackaged, and shipped to off-site disposal facilities.

Melton Valley Burial Grounds

The Melton Valley Burial Grounds posed the highest risks to human health and the environment on the Oak Ridge Reservation, so this project provided an opportunity for early and significant risk reduction. Remediation was completed in 2006. Cleanup actions included hydrological isolation through installation of multilayer caps; retrievable TRU waste removal, treatment, and disposal; soil and sediment excavation and disposal; small facilities demolition; in-situ grouting; hydrofracture well plugging/abandonment; and legacy waste and spent nuclear fuel disposition.

Transuranic Waste Processing Center

TWPC began operations in 2004 for OREM to process and ship the site's legacy inventory of CH and RH TRU debris generated from research at ORNL. Processed waste is shipped to WIPP near Carlsbad, New Mexico, for permanent disposal. TWPC is located next to the Melton Valley Storage Tanks, which contain liquid TRU wastes.

Storage tank supernate processing operations began in January 2004 and was completed in ten months, disposing of more than 400,000 gallons of highly radioactive liquids containing approximately 30,000 curies.

CH TRU operations began in February 2006, and the first TRU waste shipment left Oak Ridge on September 28, 2008, for final disposal at WIPP. Of the 1,588 cubic meters of CH waste, 98.7 percent has been processed and 94 percent has been shipped for disposal.

Of the 695 cubic meters of RH waste, approximately 98 percent has been processed and approximately 78 percent has shipped. OREM will address inventory of sludge TRU waste in future years.

Note: Two incidents in early 2014 caused the temporary shutdown of WIPP. WIPP reopened in December 2016, and TWPC began shipment of CH TRU waste to WIPP in August 2017. Once WIPP's ventilation system is modified and TWPC is upgraded to accept use of Shielded Container Assemblies, TH TRU waste shipments are expected to resume.

Aerial view of TWPC

Loading drums of processed waste for shipment

Molten Salt Reactor Experiment (MSRE)

MSRE operated from 1965 to 1969. Unlike most reactors that use fuel rods, MSRE was fueled by molten salt that flowed through the reactor chamber. When MSRE was shut down, the salt was drained into two storage tanks, where it solidified. A flush salt was circulated through the reactor, drained into a third tank, and solidified. All three storage tanks are in an underground, concrete-shielded cell.

From 1987 to 1994, surveillance activities detected a migration of radioactivity from the tanks to other process lines. A two- to three-kilogram uranium deposit in the charcoal bed that filtered the off-gas from the tanks was also detected. Because of concerns about a release of contamination or nuclear criticality, all staff at the facility were relocated and a remediation project began in 1994.

Molten Salt Reactor Experiment

Removal of the uranium, as uranium hexafluoride (UF_6) gas, was essentially completed in 1997, although small amounts of UF_6 are still being generated in the tanks and require periodic removal. In 2001, uranium was removed from the charcoal bed to levels that would prevent criticality.

Processing of the initial flush salt tank was initiated in December 2004 and completed in June 2005. The majority of the U-233 was removed from the drain tanks in March 2008. The uranium was separated from the salts and then transferred to sodium fluoride traps, which were sent to Building 3019 at ORNL for storage.

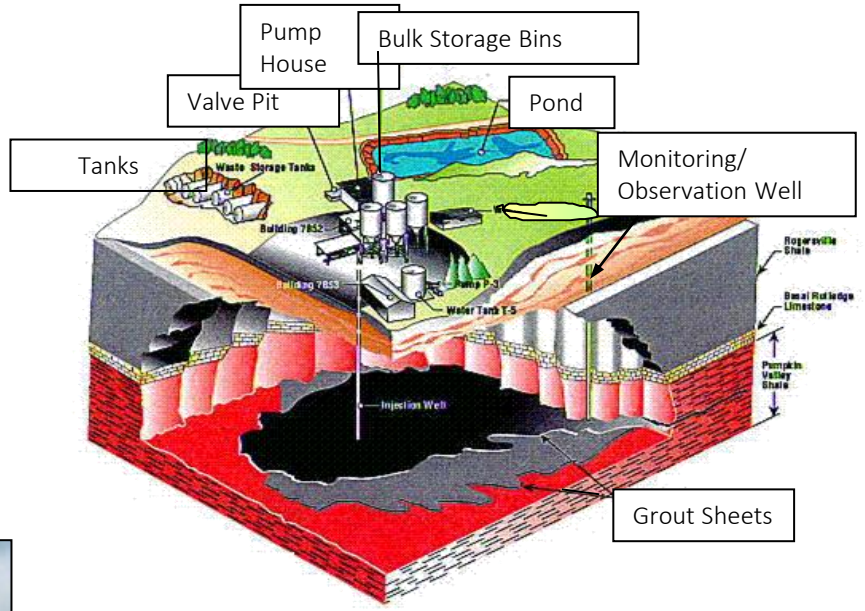
An engineering evaluation was completed to determine actions that can be taken to reduce risks at MSRE until D&D can occur. As a result of the recommendations from that evaluation, DOE is pursuing projects to provide continuous ventilation of the fuel salt drain, flush tanks, and charcoal bed, as well an upgrade of the facility electrical systems for critical equipment. Installation of the continuous purge system was completed in 2024 and, after readiness assessments of the new facility upgrades, MSRE will be maintained with minimal operations until future D&D.

Hydrofracture Facilities and Wells (completed)

The technique of waste disposal by hydrofracture was pilot tested at ORNL to meet the need for permanent disposal of low-level radioactive waste. From 1959 to 1984, 42 injections were made into two wells at the old and new hydrofracture facilities. More than five million gallons of waste grout were injected into the wells.

Research has shown that a contaminated filtrate plume surrounds the grout, and that observation wells are contaminated and provide a potential pathway for contaminant migration.

Remediation activities at the New Hydrofracture Facility



108 monitoring wells and four injection wells have been plugged to prevent migration of contaminated fluids to more shallow groundwater zones. The hydrofracture facilities were demolished in 2003 and the waste was removed, with the exception of three hot cells. Site restoration was completed in 2006. Groundwater contamination associated with the hydrofracture facilities continues to be monitored in five onsite wells near the former injection wells and in a multi-zone well array near Clinch River comprising of 40 individual groundwater sampling zones.

East Tennessee Technology Park (ETTP)

The K-25 plant was constructed in 1943 to enrich uranium for the first atomic weapon, using the gaseous diffusion process. Due to the success of this technique, the plant was expanded during the Cold War. At its peak, the site contained five enormous uranium-enrichment facilities (K-25, K-27, K-29, K-31, and K-33) and hundreds of support facilities. DOE ceased all gaseous diffusion operations at the plant in 1987.

Environmental cleanup to address the deteriorating facilities and environmental hazards created during decades of uranium enrichment began shortly after. In addition to conducting much needed cleanup, DOE pursued a vision to convert the site into a private industrial park by transferring land and infrastructure back to the community. The site was renamed the East Tennessee Technology Park in 1997.

OREM has completed the demolition of all excess facilities and all soil remediation at ETTP. Work remaining includes completing groundwater remediation, transferring cleaned land to the community, and transitioning the site to long-term stewardship.

View in 1989 prior to cleanup

Current day view with major fieldwork complete

The cleaned site offers an abundance of flat real estate and robust infrastructure to attract large industry to the region. To date, more than 1,800 acres have been transferred with that purpose. OREM constructed a history center that tells ETTP's rich history, and it also created a 3,000-acre conservation easement adjacent to ETTP that protects wildlife and provides residents with nature-friendly trails. The following slides are organized by in-process cleanup and completed accomplishments.

ETTP Completed Demolition Projects

Vision 2016 Achieved - Completed demolition of all five gaseous diffusion plants (K-25, K-27, K-29, K-31, K-33).

Vision 2020 Achieved - Completed demolition of all ~500 contaminated or excess facilities covering 13.6 million ft^2, a space that could cover 225 football fields, and disposed off site, clearing hazards, enabling access to address soil and groundwater contamination, and opening land for beneficial reuse. Completing this work allows transfer of the site to the community, creating future savings to taxpayers and providing new economic opportunities.

ETTP Completed Environmental Projects

UF_6 Cylinder Program (2004-2006)

~7,000 deteriorated cylinders were shipped off site, reducing human health risk and opening land for beneficial reuse.

K-1070-B Burial Ground (2006-2012)

More than 100,000 y^3 of soil and debris were removed from six trenches and two hot spots within the 6.5-acre landfill near the K-25 Building site and disposed off site, reducing human health risk, protecting groundwater, and opening land for beneficial reuse.

Releases to Mitchell Branch (2012-present)

The operation of a Chromium Water Treatment System captures hexavalent chromium that would otherwise enter Mitchell Branch, improving water quality in Mitchell Branch and Poplar Creek, reducing human health and ecological risk, and allowing beneficial reuse.

Technetium-99 (Tc-99) Contaminated Soils Removal (2017-2020)

~ 90,000 y^3 of soil was removed from the K-25 footprint and disposed off site, reducing human health risk, protecting groundwater, and opening land for beneficial reuse.

Trichloroethylene (TCE) Contaminated Soils Removal (2020-2024)

~103,000 y^3 of soil was removed from the K-25 footprint and disposed off site, reducing human health risk, protecting groundwater, and opening land for beneficial reuse.

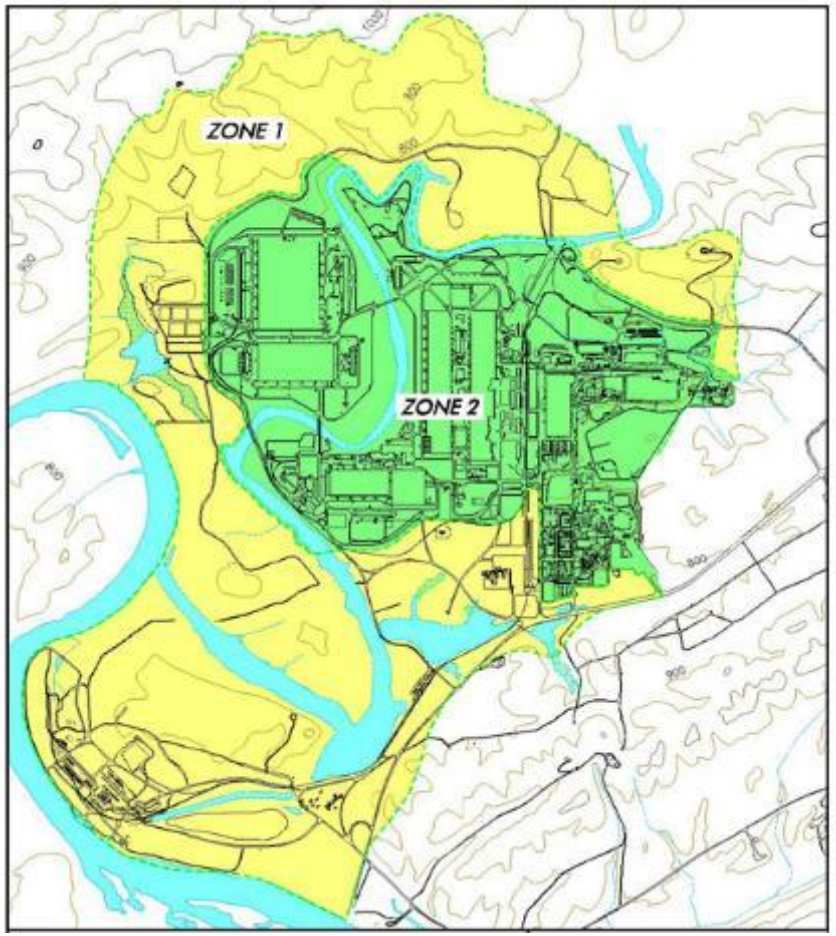
ETTP Zone 1 Soils ROD

Zone 1 encompasses approximately 1,400 acres wrapping around the site's northern, western, and southwestern boundaries.

In September 2000, DOE, EPA, and TDEC agreed to a path forward for the cleanup of ETTP. This agreement includes an interim decision on soil remediation in Zone 1. DOE, EPA, and TDEC signed the ROD for Interim Actions in Zone 1 in November 2002.

All required soil-remediation projects in Zone 1 have been completed and No Further Action decisions have been reached. The exception is the K-720 Fly Ash Pile, which has been moved to the Zone 1 Groundwater Plumes project so that an integrated approach can be taken.

The Final Zone 1 Soils ROD was signed on June 17, 2025, by TDEC, EPA, and DOE.

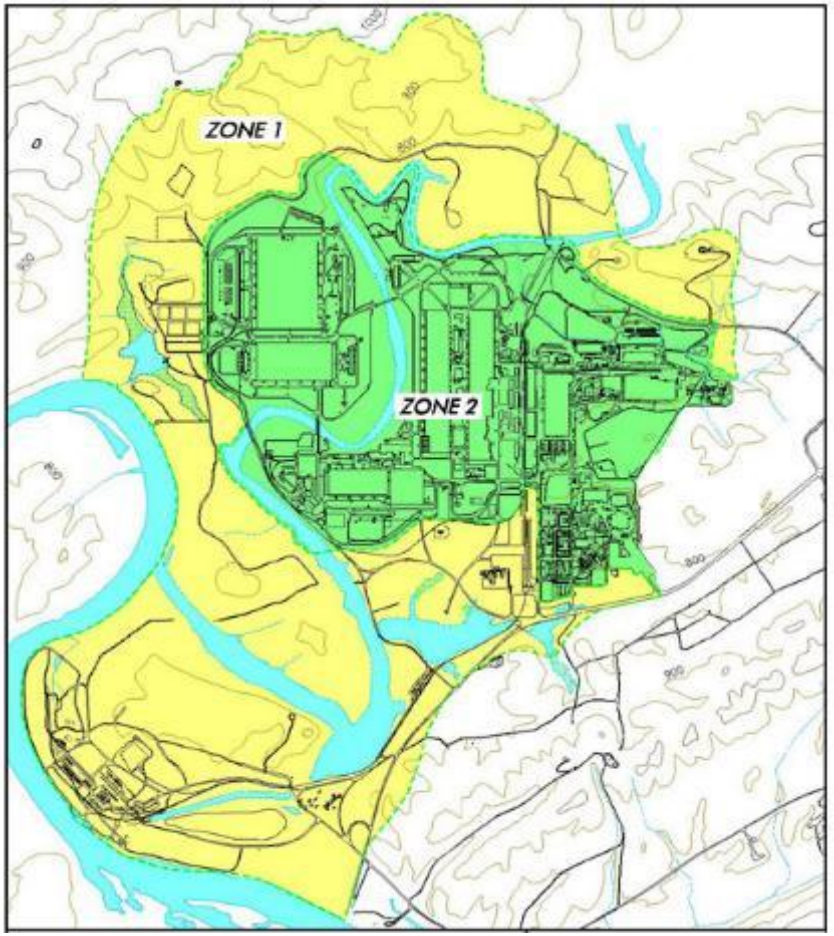


ETTP Zone 2 Soils ROD

Zone 2 encompasses approximately 800 acres within the former main industrial area of ETTP. Soil is contaminated primarily with metals, chlorinated volatile organic compounds (CVOCs), and radionuclides throughout Zone 2 that could pose future risks or contribute to groundwater contamination.

DOE, EPA, and TDEC signed the *Record of Decision for Soil, Buried Waste, and Subsurface Structures in Zone 2* in April 2005.

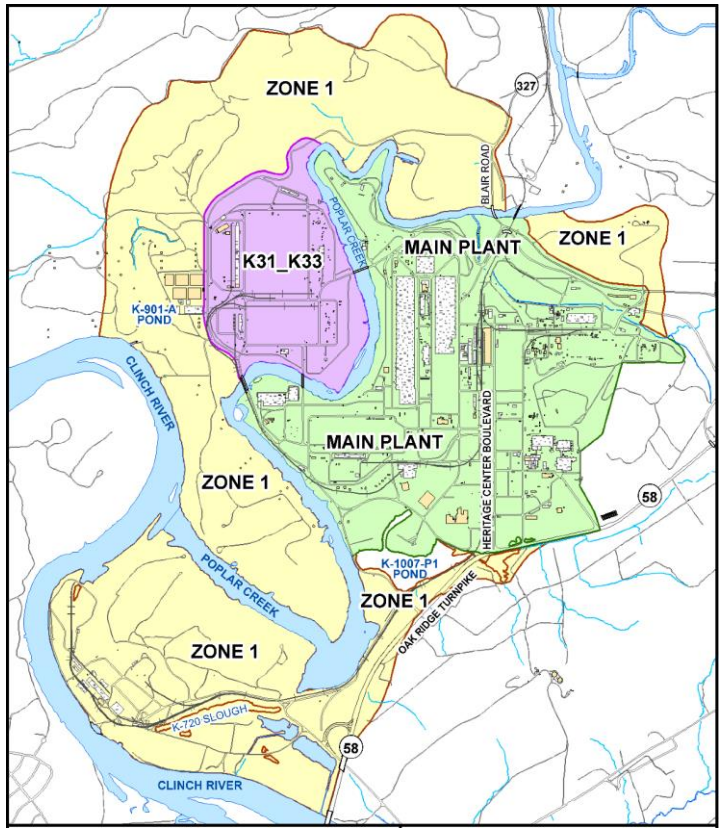
The selected alternative identified in the ROD calls for removal of contaminated soil to a depth of ten feet, buried waste removal from the K-1070-B Pond area, and partial removal of the K-1070-C/D classified burial ground. Soil removal was extended to include deeper soil that could contribute to groundwater contamination. All remaining soil remedial actions covered by the Zone 2 Soils ROD were completed in 2024 – achieving Visions 2024. Subsurface structures are being evaluated.



ETTP Groundwater RODs

Groundwater at ETTP is contaminated due to historical activities and practices across the site footprint. It has been investigated since the 1990s and monitoring is ongoing. The three primary groundwater areas of concern include:

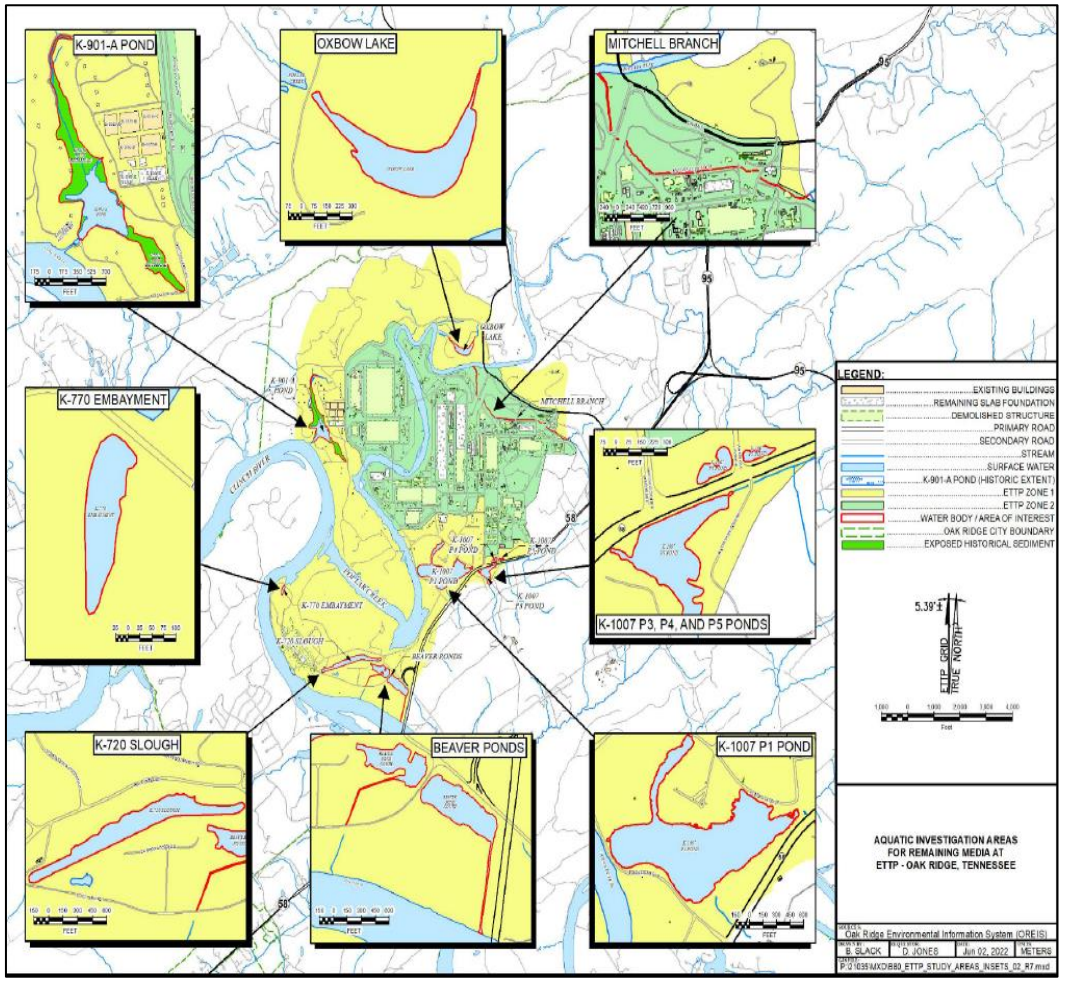
- K-31/K-33 Area: Main contaminants of concern include chromium and nickel. A RI/FS evaluating remedial action alternatives was approved in 2022, a proposed plan was approved in 2023. A monitored natural attenuation ROD was approved in 2024.
- Main Plant Area: Primary contaminants of concerns include various metals, CVOCs, and radionuclides. A proposed plan focusing on six CVOC plumes representing some of the highest contaminant concentrations with a preferred enhanced in-situ bioremediation treatment alternative was approved in 2023. The Interim ROD for enhanced insitu bioremediation was approved in 2024 and additional investigations for the remaining plumes are planned.
- Zone 1 Groundwater Plumes: Investigations are in process following the Remedial Investigation Work Plan (RIWP), which was approved in 2022. An addendum to the RIWP for additional investigation in the K-1085 area was transmitted to EPA and TDEC in 2024.



An addendum to the RIWP addressing the K-720 Fly Ash Pile was approved in 2023. This work will support CERCLA decision documents for groundwater at ETTP, which will become a priority once soil remediation is complete.

ETTP Remaining Media (Ecology/Surface Water/Sediment) ROD

Sediment and surface water at ETTP may have potential contamination due to discharges from previous onsite operations. A RIWP was approved in 2022, and the first phase of field investigations are complete with a second phase currently being implemented. A RI/FS will follow that will support a final ETTP CERCLA decision for surface water, sediment, and protection of ecological and recreational receptors that might use any of the eight surface water bodies seen in the figure.



Reindustrialization

Oak Ridge established DOE's first Reindustrialization Program nearly 30 years ago. In recent years, there has been tremendous momentum transferring land and infrastructure to the community for economic reuse. This was made possible primarily through OREM's cleanup and transformation of the East Tennessee Technology Park, which was previously a shuttered Manhattan Project and Cold War era uranium enrichment facility.

To date, DOE has transferred more than 2,500 acres for economic development, which includes land at ETTP (also known as Heritage Center), Horizon Center industrial park, and an area known as Self-Sufficiency Parcel 2. This land is home to more than 25 businesses that have announced over $10 billion dollars in new investment in Oak Ridge. Many of these businesses are in the nuclear industry making Oak Ridge a national hub for next-generation energy projects.

OREM is in the process of transferring the 3,000-acre Black Oak Ridge Conservation Easement to the Tennessee Wildlife Resources Agency in 2026. OREM also is slated to transfer another 200 acres for economic development at ETTP by the end of 2028.

K-25 Historic Preservation

Since K-25 played such an important role in the Manhattan Project, DOE signed a multi-project agreement in 2012 to preserve and commemorate the history of the site since the original buildings would be taken down. That agreement included launching a virtual museum, constructing the K-25 History Center, constructing the K-25 Interpretative Center, preserving and delineating the footprint of K-25, and the installation of wayside exhibits around the footprint. OREM completed construction of the History Center in 2020. It features 7,500 ft^2 of exhibits with more than 250 original artifacts on display. Nearly 1,000 oral histories were collected over a ten-year span from former Manhattan Project and Cold War-era workers that museum professionals used to develop the exhibits and interactive galleries.

K-25 History Center

K-25 Interpretive Center

Construction of the K-25 Interpretive Center is complete and it opened to the public on August 23, 2025. The center enables visitors to discern the sheer scale of the 44-acre footprint of the former K-25 Building. To increase understanding of the size and scope of this area, the U.S. Army Corps of Engineers will install flagpoles and flags delineating the former corners of the K-25 footprint at the site.

The K-25 building was a signature facility of the Manhattan Project, which ushered in the nuclear age with the development of the world's first atomic bombs. The footprint of the former building is part of MPNHP.

Notes