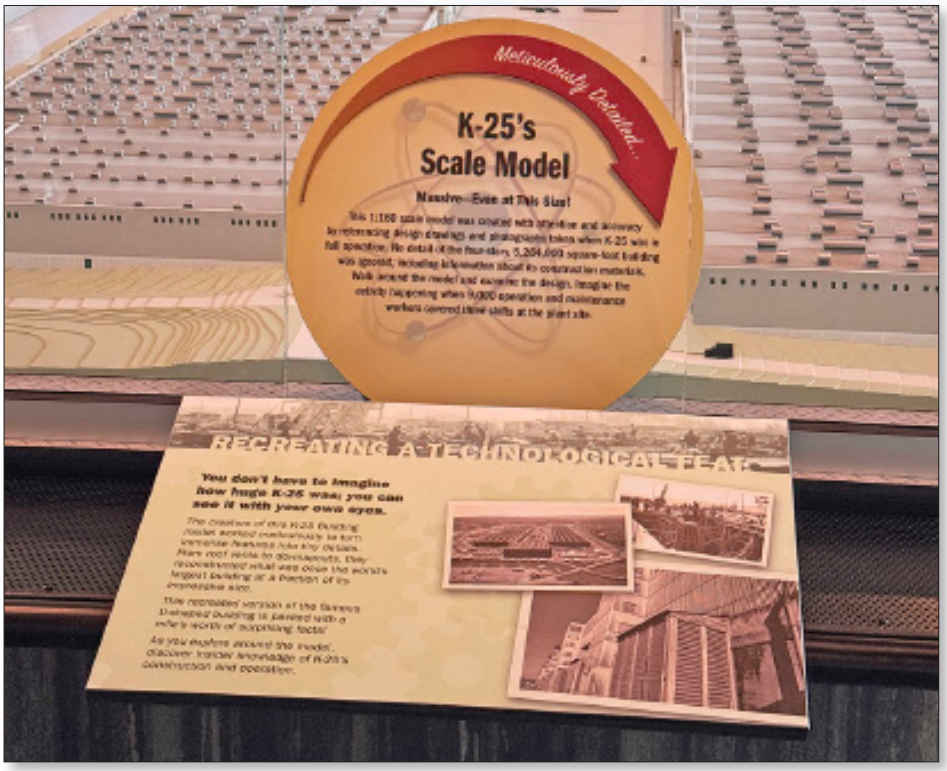
Advocate

A publication of the Oak Ridge Site Specific Advisory Board – a federally appointed citizens panel providing independent recommendations and advice to DOE's Environmental Management Program

K-25 Interpretive Center Brings Footprint into Focus



A scaled model of the K-25 Building on the top floor of the K-25 Interpretive Center provides additional insight into the size of the former structure as visitors view the building's massive 44-acre footprint.

Visitors to the former Oak Ridge Gaseous Diffusion Plant can view the entire footprint of what was once the world's largest building from a new vantage point now that an interpretive center overlooking the site of the mile-long K-25 Building has opened.

K-25 was one of five large gaseous diffusion uranium enrichment facilities at the Oak Ridge location, now called East Tennessee Technology Park (ETTP). Constructed in 1943, it produced enriched uranium used in the weaponry that helped end World War II.

Local elected officials and other dignitaries recently gathered to celebrate the opening of the viewing facility, called the William J. Wilcox Jr. K-25 Interpretive Center.

The center is named after Oak Ridge's first official historian, an original resident of the city when it came into existence in the 1940s. The late Wilcox ultimately became the technical director for all research and development programs for the plant, and he used his extensive knowledge from his 43 years of service to educate future generations about what was accomplished at the site.

"Our employees are proud to be part of the accomplished history of this site, and their efforts have played a pivotal role in making today possible," said Oak Ridge Office of Environmental Management (OREM) Manager Erik Olds.

"Our cleanup has paved the way for the public to be able to enter and experience a site that was once off limits, and it has created an exciting next chapter involving new businesses, new jobs, and new visitors through our land transfers, historic preservation, and conservation."

A scaled model of the K-25 Building is located on the top floor of the K-25 Interpretive Center. It provides additional insight into the size of the former structure as visitors view the building's massive 44-acre footprint.

OREM and cleanup contractor UCOR completed demolition of the K-25 Building in 2013, leaving behind a massive 44-acre footprint that was impossible to fully view from ground level. With the interpretive center's elevated view, the entire footprint is visible. The facility also features displays and exhibits, including a scaled model of the building, detailing K-25's

*(See **K-25** on page 7*

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IN THIS ISSUE

Reservation Update

Workers perform deactivation activities inside Building 3003 at ORNL before demolition begins.

Crews Tackle Multiple Demolition Projects at ORNL

For the first time, UCOR cleanup crews conducted more than one demolition project simultaneously at Oak Ridge.

While crews began demolishing Building 3003, another team was tearing down the former Radioisotope Development Lab, one of the most contaminated structures at the site.

Used during the Manhattan Project, Building 3003 was one of three support facilities for the former Graphite Reactor, the world's oldest reactor. The structures were located on a small footprint in a heavily congested area on top of a hill. Removing Building 3003 provides space to support teardowns of the neighboring facilities.

This project clears 10,000 feet for workers and heavy equipment operators to demolish the adjacent Building 3002 and Building 3018, a 200-foot-tall stack.

Built in 1943, Building 3003 contained a fan house and provided ventilation for the Graphite Reactor. The fan house drew air from the reactor through underground ducts and released it through the stack.

To prepare for demolition, workers made multiple entries into the subgrade duct space to perform sampling, survey and spray fixative. They removed general debris and hazardous waste, and poured a concrete mixture into the exterior utility trench to ensure a flat working surface around the building.

The removal of these facilities clears away aging, contaminated structures, opens land for reuse and enhances accessibility to the Graphite Reactor, which is part of the Manhattan Project National Historical Park.

EM Assistance Keeps Energy Project on Track in Oak Ridge

In a unique collaboration, OREM and UCOR recently assisted one of the largest companies locating at ETTP, helping keep a key energy project on track.

OREM completed a two-decade cleanup effort at ETTP in 2024 that removed 500 buildings and excavated more than 50,000 dump truck loads of soil. This work cleared away old, contaminated infrastructure and environmental risks, providing the community with large amounts of reusable land to attract new economic opportunities.

One such opportunity came when Kairos Power announced a $100 million investment on the former DOE-owned land at ETTP in 2021. The company purchased a 185-acre parcel that previously housed the massive K-31 and K-33 uranium enrichment buildings demolished as part of the cleanup. While OREM removed the buildings

Workers supporting construction of Kairos Power's low-power demonstration reactor at the East Tennessee Technology Park load sacks of lead and copper from excavations for recycling, which will generate savings for the company.

and slabs, some subsurface electrical infrastructure was left in place.

Constructing a sturdy foundation for the company's Hermes Low-Power Demonstration Reactor involved deep digs requiring the removal of that subsurface infrastructure, including large amounts of lead and copper wire.

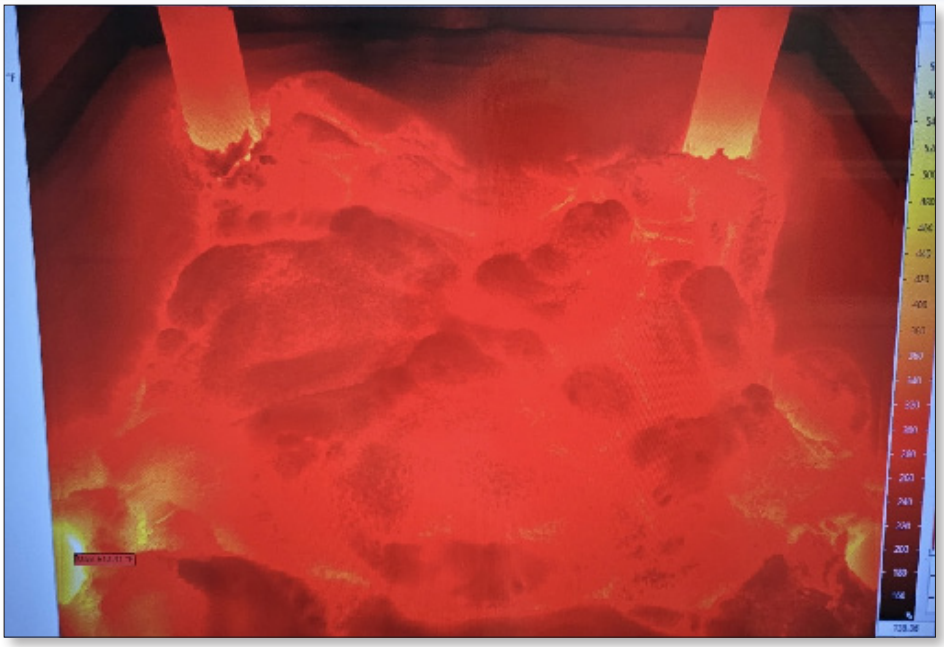
Through coordination and support from OREM and UCOR, Kairos Power was able to confirm the excavated materials were safe for normal disposal, while a significant portion could be recycled to generate major savings. With this confirmation, Kairos Power was able to recycle 18 super sacks containing more than 70,000 pounds of lead and copper.

Through this partnership, the company was able to maintain the timetable for the Hermes project, which is helping to commercialize advanced reactor technology to support the nation's energy future. This ongoing effort avoids costly disposal pathways, generates revenue, and provides lessons learned and best practices for future digs across the site as industrial development continues.

Innovation Addresses Waste Disposal Path Challenges

Drawing from an innovative technology, OREM and contractor UCOR have achieved a breakthrough set to eliminate a complex legacy waste stored at ORNL for the past 50 years.

EM crews recently shipped the first of several large aluminum and steel containers filled with highly reactive metals — called sodium shields — for use in a demonstration of the technology that provides a pathway for their permanent disposal. The demonstration was completed successfully.



The GeoMelt technology heats the sodium shields to more than 2,700 degrees Fahrenheit, turning the reactive metal into a stable glass form for safe, permanent disposal through a process known as vitrification.

The sodium shields were used in the 1960s and 1970s to pioneer radiation shielding research. The largest of them is about 5 feet high and weighs over 30,000 pounds.

This breakthrough effort was made possible through EM's Technology Operations Office funding the demonstration project to ship and process the first sodium shield.

The first challenge involved shipping the sodium shields from Oak Ridge. That challenge was solved after OREM and UCOR obtained a special permit from the U.S. Department of Transportation, thanks to a months-long effort by subject matter experts to conduct an extensive safety analysis and develop a packaging strategy for the waste.

The second challenge was determining if the selected technology could successfully process the reactive metals from the sodium shields. OREM and UCOR employed Veolia Nuclear Solutions' patented GeoMelt technology at the Waste Control Specialists facility in Andrews, Texas. The vitrification process proved successful by converting the metals into a stable glass form for safe, permanent disposal.

In a demonstration at the Waste Control Specialists facility in Andrews, Texas, a vitrification process successfully converted the first of the sodium shields stored at ORNL into stable glass for disposal.

Sodium metal presents unique hazards because it is unstable and can be highly reactive when mixed with water. The GeoMelt process is unique because it does not use any liquid to support treatment and avoids generating other challenging waste steams during the treatment process. After treatment, the vitrified waste form no longer exhibits reactive or ignitable characteristics.

The Veolia demonstration project represents a crucial step in addressing challenging legacy waste streams from America's nuclear research history, establishing a potential template for handling similar reactive metal waste streams across the DOE complex.

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Recent Recommendation

Recommendation 258: On FY 2027 OREM Budget Priorities

Each year the DOE-EM Program develops its budget request for the fiscal year (FY) two years beyond the current year, including requests from DOE field offices to develop the EM Program budget request to the president.

DOE-EM Headquarters typically issues guidelines to the field offices advising them how much funding they should reasonably expect. The field offices then brief the public, the regulatory agencies, and the respective site-specific advisory boards and seek input from each.

On May 14, 2025, representatives from OREM presented information about its FY 2027 budget formulation process to ORSSAB. This presentation provided content and discussions that ORSSAB used to draft its recommendations.

In creating its recommendations, ORSSAB focused on general near-term and long-term cleanup priorities identified by OREM. Project-specific objectives provided additional details for discussions that took place at the May EM & Stewardship Committee meeting.

The board also referred to the current EM Budget Request, and the board's previous Recommendations for additional guidance.

Recommendations

ORSSAB supports OREM's cleanup plan and recommends fully funding the activities that are currently supported by that Plan for FY 2027, broadly understood as follows:

- Continue demolition of excess contaminated facilities at ORNL and Y-12 National Security Complex (Y-12).
- Accelerate infrastructure development to enable future cleanup at ORNL and Y-12.
  - The primary focus being on the Mercury Treatment Facility construction and operation at the Y-12 National Security Complex.
- Continue disposition of U-233 material and other legacy materials.
  - Nickel, sodium shields, and other materials.

*(See **Recommendation** on page 7)*

FY 2026 ORSSAB Workplan Topics

ORSSAB meetings are held in person at the DOE Information Center, located at 1 Science.gov Way in Oak Ridge, and virtually via Zoom. Board recommendations are based on topics presented by DOE.

The board meets the second Wednesday of most months. In-depth discussion follows in the EM & Stewardship Committee meeting on the fourth Wednesday.

Questions? Want to attend virtually? Email *orssab@orem.doe.gov* at least two days before the meeting.

Note: Meeting dates, times and topics may change.

February

OREM Public Involvement & Outreach - How the organization communicates about its work and involves area residents in decision-making

March

Efforts to Assure Waste Disposal Capacity - Waste from cleanup activities is disposed of in a variety of ways, including a new landfill being built.

April

Reindustrialization and Historic Preservation Activities at ETTP - Transfers of clean land are bringing new companies and jobs to the area, while other projects memorialize local involvement in the Manhattan Project.

National EM SSAB Chairs meeting - Officers from boards like ORSSAB across the country meet to discuss best practices and hear from DOE on topics of nation-wide impact.

May

FY 2028 Budget Development/Prioritization - OREM discusses how local needs are included in the President's budget request to Congress and invites board input.

June

Y-12/ORNL Update - Discussion of specific cleanup projects affecting two active DOE sites.

July

No meeting due to new member training

August

Annual Planning Meeting for next year's topics

September

No meeting

Cleanup Progress Paves Way for Nuclear Industry Growth

Advances on OREM's cleanup mission are creating unique opportunities for the nuclear industry. The effect was evident at a crowded Nuclear Opportunities Workshop last fall.

This marks the seventh edition of the annual event hosted by the East Tennessee Economic Council (ETEC). What began with 85 attendees in a conference center at ORNL in 2018 has grown into a two-day conference at the Knoxville Convention Center with attendance surging to 800 attendees and more than 175 students.

"Building on our Manhattan Project-era legacy of nuclear innovation, East Tennessee is again at the forefront of new nuclear technologies that have the potential to change the world," said Tracy Boatner, ETEC president and CEO. "The state of Tennessee has many valuable resources for companies in the nuclear industry. The Nuclear Opportunities Workshop provides a platform to display those resources for companies interested in joining the nuclear renaissance occurring in our state."

One of the featured panels at this year's conference was titled, "Cleanup Today for a Nuclear Tomorrow." Participants included OREM Manager Erik Olds, UCOR Director of Critical Projects Joe Aylor, Orano USA President and CEO Jean-Luc Palayer, and Oak Ridge Corridor Development Corporation President Mike Magill.

Panelists shared insight about the connection between cleanup and economic opportunities happening in the region — specifically, how successful cleanup of ETTP has led to the siting of the nation's first nuclear innovation hub.

Oak Ridge's landscape was markedly different only seven years ago when the workshop launched. Cleanup progress since then has paved the way for a business boom.

NOW Conference panelists, including OREM Manager Erik Olds, center, discuss "Atomic Insights: Cleanup Today for a Nuclear Tomorrow."

Since 2018, OREM and UCOR crews have finished demolition and completed soil remediation at ETTP, marking the first removal of a former enrichment complex in the world. OREM has also transferred 730 acres for economic reuse and development over that span.

Those efforts have transformed the site from a government-owned, shuttered uranium enrichment complex into a privately owned industrial park that has become a hub for nuclear energy development that will play a crucial role in the nation's energy future.

That land is now home to more than 25 businesses that are making a projected capital investment of $10 billion with an expectation to generate 2,500 new private sector jobs.

Cleanup is also generating benefits for the nuclear industry that extend beyond ETTP. OREM's work is also having a major impact at ORNL and Y-12.

OREM projects in recent years have cleared away numerous aging and contaminated structures — including former research reactors, laboratories and enrichment facilities — to make way for new infrastructure that will aid innovation and national security for the nation in the years ahead.

-Contributor: Ryan Getsi

> *"Building on our Manhattan Project-era legacy of nuclear innovation, East Tennessee is again at the forefront of new nuclear technologies that have the potential to change the world..."*
>
> *—Tracy Boatner, East Tennessee Economic Council president and CEO*

DOE Selects Thompson as New Division Director

Karen Thompson

DOE has named Karen Thompson as OREM's Planning and Execution Division Director. She had served in the role in an acting capacity since March.

"Karen's ownership of our mission, commitment to excellence, and people-first approach have always been at the forefront of her leadership style," stated OREM Manager Erik Olds. "These qualities and her values make her a key addition to our management team."

Thompson, who served as the Planning and Baseline Management Branch Chief since 2014, is a familiar face to many current and former ORSSAB members, having frequently presented information to the board about OREM's budget process.

In her role as Planning and Baseline management Branch Chief, Thompson was responsible for managing the day-to-day activities for property, budget formulation, baseline and planning, and project controls.

Prior to that, she was the ETTP Project Controls Analyst and the Coordinator for the K-25 Historic Preservation effort.

Manager

(Continued from page 8)

but its value as a resource goes well beyond that, Olds said, with perspectives that are different and valuable to a department that can be very focused and technical. The volunteer nature of the board and the accompanying variety of individuals it attracts gives OREM a "one-stop shop" to field questions and receive feedback from a broad slice of the community. Members have a wide variety of backgrounds—both technical and non-technical—and they all come to discuss cleanup projects in Oak Ridge for various reasons.

Formal recommendations are always useful, he said, but the process of getting people together and talking about things is often just as valuable and can give OREM "food for thought" that may impact project decisions in new and unexpected ways.

As ORSSAB works on its recruitment for 2026 members, Olds especially wants to encourage those new members as well as current members who may be hesitant to jump into the conversation.

"I always tell people you are at your most golden at the moment you come into an organization; You are best positioned to ask questions, challenge assumptions, and offer new perspectives," said Olds.

This will apply even more as OREM exclusively focuses on cleanup at Oak Ridge National Laboratory and Y-12 National Security Complex, which have their own unique situations after decades of work primarily at East Tennessee Technology Park.

"There are no wrong questions, there are no wrong perspectives," he said. "You're there because you have something unique to offer and unique questions to ask. So do it."

Erik Olds speaking at the Energy Technology and Business Association (ETEBA) Business Opportunities & Technical Conference.

Opportunities for growth

Olds also sees the board as a training ground for a new generation of OREM leaders and plans to incorporate more of his team into board presentations in the future.

He learns new things at almost every advisory board meeting, he said, and wants to give those opportunities to others serving OREM in different capacities so they see themselves as potential "ambassadors" of the program.

"[Everyone] should be able to go out and discuss the work that we do, and broadly describe why it is that we do that work," he said. "I think for anybody that's going to grow ... those are skills that you should always continuously work on."

For that, there's nothing like sitting at the table and being "on the spot," he added.

Recommendation

(Continued from page 4)

- Continue processing and disposition of legacy transuranic debris and sludges, including contact-handled and remote-handled wastes.
- Maintain and operate facilities at ORNL and Y-12.
- Continue funding support at ORNL's Aquatic Ecology Laboratory for research into mercury and methylmercury pollution and development of new and improved technologies.
- Continue funding to enable property transfers, including reindustrialization and site reuse support programs, to further the current nuclear renaissance taking place in the Oak Ridge corridor.
    - o Efforts from Tennessee Governor Bill Lee, Secretary of Energy Chris Wright, and President Donald Trump show the need for funding support for the nuclear industry.
    - o Support research and development activities and fund contracts for academia for the next generation of nuclear workers.

ORSSAB recommends funding the FY 2027 budget to include all activities necessary to complete these cleanup priorities in an effective, timely and safe manner.

OREM and its contractors have continuously demonstrated an effective cost-to-value that leads the nation among federally funded facilities over a significant period of time and are recognized for their cleanup progress. Based on OREM's record of performance and effective project management, ORSSAB recommends additional funding wherever possible to accelerate the FY 2027 cleanup plan. With this support, OREM will continue to play a pivotal role in the nation's nuclear renaissance.

DOE Response

While DOE does not have to agree with ORSSAB recommendations, it must respond.

OREM Manager Erik Olds provided favorable responses to each of the board's seven recommendations. Additional context was provided for several of the items, including plans for the Mercury Treatment Facility, disposition of sodium shields, and reindustrialization and site reuse programs.

The full text of DOE's response is included on the board's website along with the recommendation and those documents can also be accessed in person at the DOE Information Center.

K-25

(Continued from page 1)

extraordinary contributions through the years.

Construction of the center fulfills an agreement OREM signed in 2012 to commemorate the history of the former Oak Ridge Gaseous Diffusion Plant. That commitment also included construction of the K-25 History Center next to the interpretive center, as well as preservation of the historic Alexander Inn.

Crews completed construction of the interpretive center through a partnership among OREM, the U.S. Army Corps of Engineers and contractor Geiger Brothers. UCOR and subcontractor Smee + Busby Architects designed the facility.

"This center is an important piece commemorating the historical significance of the K-25 Building, and its construction completes one of the final tasks to achieve our vision for the site," said Mark McIntosh, ETTP portfolio federal project director. "We've finished major field work to clean the site, and our efforts have also made it possible for future generations to learn about what was accomplished here."

The interpretive center is the latest installation on a site that has seen major transformation during the past three decades. OREM and UCOR have completed demolition and soil remediation at the site, marking the first-ever cleanup of a gaseous diffusion complex.

As OREM completed cleanup, it simultaneously made land available for new businesses. To date, 1,800 acres of former government land have been transferred to the community for economic development. That land is attracting companies investing billions of dollars, creating new jobs and advancing energy technologies to meet the nation's future power needs.

-Contributor: Wayne McKinney

Join Us for a Discussion on Ensuring Waste Disposal Capacity

6 p.m. Wednesday, March 11
1 Science.gov Way and
Virtually via Zoom

Questions? Want to attend virtually? Contact us at 865-241-4584 or orssab@orem.doe.gov

Advocate
Oak Ridge Site Specific Advisory Board
January 2026

New manager recognizes advisory board as key resource

Erik Olds was named manager of OREM in June of this year after serving in an acting capacity following the retirement of former manager Jay Mullis in March.

Looking back, Olds said his time in Oak Ridge has been an incredible journey so far. He's especially excited about the acceleration of the cleanup work following a host of executive orders from the new administration emphasizing efficiency, doing things faster, deregulation, and a shared focus on the cleanup mission enabling opportunities for new nuclear and career opportunities. Those initiatives were some of what he talked about at the National Cleanup Workshop in September.

Olds brings more than 30 years of experience from around the DOE complex to the new position, including more than a year as OREM deputy manager. He has been a familiar face at ORSSAB meetings in that time. It's a practice he plans to continue as manager in keeping with a firm belief in the importance of the board to DOE's decision-making.

"Discussions with the board really, really improve and help the decisions that we make and they enrich them," he said, adding that even when there's broad agreement, the dialogue can result in positive subtle changes.

Olds is no stranger to the advisory boards, thanks to a wide-ranging career. He first encountered the citizen board in Nevada, while working at what was then known as the Nuclear Test Site, then more directly at the Hanford site in Washington state. For part of his 20 years at Hanford, Olds was director of communications, which included oversight of the advisory board there. He also spent time in positions at DOE headquarters in Washington, D.C., where he interacted with the Portsmouth and Paducah boards, and attended SSAB Chairs Meetings where he was able to meet officers from most other boards.

Power of perspective

ORSSAB serves as an avenue for transparency and public involvement,

(See Manager on page 6)

Oak Ridge Site Specific Advisory Board
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UPCOMING MEETINGS

Meetings are 6 p.m. at 1 Science.gov Way, Oak Ridge & virtually via Zoom. Email orssab@orem.doe.gov to attend virtually.

Board: March 11, 2026
EM & Stewardship Committee: March 25, 2026

ABBREVIATIONS

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund
DOE – Department of Energy
EM – Environmental Management
EMWMF – Environmental Management Waste Management Facility
ETTP – East Tennessee Technology Park
OREM – Oak Ridge Environmental Management
ORNL – Oak Ridge National Laboratory
ORR – Oak Ridge Reservation
ORSSAB – Oak Ridge Site Specific Advisory Board
TDEC – Tennessee Department of Environment & Conservation
UCOR – United Cleanup Oak Ridge
Y-12 – Y-12 National Security Complex

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