



# 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

## OREM Launches New Public Outreach Phase for EMDF



Local government officials, community and business leaders, advocacy groups and citizens from around the region were among those attending the Oak Ridge Office of Environmental Management’s May 17 public meeting on a proposed onsite disposal facility to allow for adequate waste disposal capacity to complete environmental cleanup at Y-12 and ORNL.

The DOE Oak Ridge Office of Environmental Management recently launched a new phase of public outreach for the proposed Environmental Management Disposal Facility (EMDF).

More than 100 people attended a May 17 meeting on OREM’s

proposed onsite disposal facility, with OREM leaders hosting the meeting and representatives from regulators EPA and the Tennessee Department of Environment and Conservation (TDEC) on hand. The meeting focused on three key areas related to the project:

- groundwater characterization,
- waste acceptance criteria, and
- ensuring the protection of Bear Creek’s water quality.

Fact sheets on each of these were developed and are available online, as is a recording of the meeting.

During the meeting, Roger Petrie, a lead with OREM’s regulatory affairs group, gave a presentation about the

project before opening the floor to the public for comments. More than 100 local government officials, community and business leaders, advocacy groups, and citizens attended the event.

The new public outreach phase, which also included a 30-day public comment period and a new website to inform area residents about the project, marks the second public comment period and public meeting on the project. When the comment period ended on June 7, OREM had received comments from 68 individuals, groups, and organizations.

The previous public meeting occurred in 2018 during a 120-day comment period when OREM released the proposed plan for EMDF.

“We are committed to keeping the community informed about the plans and details related to this project,” said Petrie during the meeting. “Public input is an important element of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, and we are doing everything we can to give people the information they need to provide meaningful feedback on this project.”

OREM’s Dennis Mayton and Brian Henry also spoke with ORSSAB members about the proposed EMDF and efforts to assure waste disposal capacity during the board’s May monthly meeting.

OREM makes every effort during its cleanup mission to recycle, reuse and

*(See EMDF on page 5)*

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## Reservation Update



*During an EM cleanup project, crews drained, retrieved mercury, and deactivated 8,500 feet of piping of the East COLEX equipment at the Alpha-4 facility at Y-12.*

### Crews Continue Progress Eliminating Risks at Y-12

EM crews recently prepared the East Column Exchange (COLEX) equipment at Oak Ridge for demolition following deactivation work that involved retrieving mercury from the deteriorating structures to prevent a potential environmental release.

“Removal of mercury to prevent future releases is a top priority at the Y-12 National Security Complex (Y-12),” Y-12 Portfolio Federal Project Director Brian Henry said. “This latest investment eliminates risks to the environment and lays the groundwork for larger mercury-related cleanup.”

COLEX equipment was installed in 1955 on three sides of the four-story, 500,000-square-foot Alpha-4 building. The equipment used large amounts of mercury. Although workers drained most of the mercury from the equipment when operations ceased in 1962, recoverable amounts remained in lines and equipment that rusted and deteriorated over decades.

In 2018, OREM contractor UCOR recovered 4.19 tons of mercury before demolishing the West COLEX. By deactivating the East COLEX and performing cleanup work in Alpha 4, UCOR retrieved another 2.3 tons. Over the past year workers drained about 8,500 feet of mercury contaminated piping -- nearly double the initial estimate.

Construction is also progressing on the Mercury Treatment Facility, which is the linchpin for EM’s cleanup strategy at Y-12. This vital piece of infrastructure will enable EM to begin demolition on large mercury-contaminated buildings and subsequent soil remediation at Y-12.

The facility will provide a mechanism to capture and safeguard against potential mercury releases into the Upper East Fork Poplar Creek that could occur during cleanup operations. When operational in 2025, the facility will be able to treat up to 3,000 gallons of water per minute.

### EM Transfers Unneeded Equipment to City for Reuse

OREM and its cleanup contractor UCOR recently transferred two large transformers, six pad-mounted transformers and more than 100 other electrical items at the East Tennessee Technology Park (ETTP) to the City of Oak Ridge, with more planned in the future. The equipment is no longer needed to support federal missions at the site, but provides a significant benefit to the city.

“Supply chain issues are making access to this type of equipment challenging,” said Ardo Ba, electric director for the City of Oak Ridge. “Having access

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#### STAFF

Editor: Shelley Kimel

Writer: Sara McManamy-Johnson

Review Board: Amy Jones, Shell Lohmann, Melyssa Noe, Michael Sharpe, Leon Shields, Ben Williams

to this equipment, especially the transformers, is essential to the operation and maintenance of the electrical power distribution infrastructure servicing the site. The wait can be up to two to three years to purchase substation transformers.”

It's the latest success in OREM's effort to identify beneficial reuse options for materials rather than disposing of them, said Morgan Carden, acting ETTP portfolio federal project director. Previously, OREM transferred six pole-mounted transformers. As workers wrap up removing numerous abandoned power poles at the site, OREM will complete the transfer of more than 250 additional pole transformers.

UCOR also plans to transfer three bucket trucks and one line truck to the city later this year.

EM has been steadily transferring land and infrastructure at ETTP to support industrial redevelopment. To date, OREM has transferred 1,300 acres to the community with more slated this year. As other soil remediation projects are completed, more land will become available for transfer to enable future development.

## Crews Begin Tearing Down Next High-Risk Y-12 Building

EM crews started tearing down a 1940s-era facility recently at Y-12 in the latest project to address a large inventory of high-risk excess contaminated facilities on the Oak Ridge Reservation.

UCOR is taking down the former Criticality Experiment Laboratory, also known as Building 9213, the first structure to reach the demolition stage at Y-12 since crews demolished the Biology Complex in 2021.

“This facility demolition is one of our immediate priorities at Y-12, and we are in the process of preparing numerous others for demolition,” said Laura Wilkerson, acting manager of DOE's Oak Ridge Office of Environmental Management. “These projects are eliminating risks and clearing land that can support national security missions in the future.”

Built in 1949, the two-story, 24,000-square-foot facility 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 it later supported the Oak Ridge National Laboratory's High Flux Isotope Reactor program. The building has been closed since 1992.

Crews brought the lab to the cold and dark stage — disconnection of all utilities to the facility — in 2021, along with several other Y-12 facilities.

“I am proud of what our workers have been able to safely accomplish at Y-12 under pandemic conditions and in a climate of supply chain shortages,” said UCOR President and CEO Ken Rueter. “In addition to starting demolition of this facility, our team demolished the last two buildings in the Biology Complex; fully deactivated the Old Steam Plant; and pressed forward with deactivating three former enrichment buildings that were part of the Manhattan Project.”

As part of deactivating the building, workers had safely removed, packaged and shipped 1,496 linear feet of asbestos-insulated piping, 323 linear feet of process piping and 8,540 square feet of other asbestos-containing material.

Demolition on the Criticality Experiment Laboratory is scheduled to be complete in fall 2022.

*Crews began demolishing the Criticality Experiment Laboratory on the Oak Ridge Reservation by removing some of the auxiliary facilities surrounding the main building.*



## OREM Invests in New Outreach Through Technology, Video, Broadcast



*"Energycast Oak Ridge" premiered on television stations across the eastern part of Tennessee on May 22. It expanded to middle Tennessee in June.*

OREM has expanded its outreach and storytelling efforts in a big way with the release of a new television broadcast show, "Energycast Oak Ridge."

The newscast will complement and sometimes include current efforts, like the Project Update series on the OREM YouTube channel, but the 30-minute timeslot will allow more explanation

of the often complex work that OREM oversees, which should make it understandable to a wider audience. It will also give the Oak Ridge office the opportunity to highlight more personal stories -- of employees, families, and business and community partnerships that help make the organization successful.

"We really want viewers to be proud of the people that work here," said Ben Williams, OREM public affairs specialist. "Whether it's people who live in the community that we're working to protect or whether it's lawmakers determining if we continue to get tax investments, we want them to know we're committed to doing it and doing it the right way."

The show's first episode aired in May to a local audience via Knoxville Community Media, which is Comcast Channel 12, Charter Channel 193, WOW Channel 6, Spectrum Channel 128, and AT&T Channel 99, and via BBB-TV Channel 12 in Roane, Anderson, and Morgan Counties. However, a partnership with the public access station has put future episodes in front of a much larger viewership.

Starting with the June 19 episode, the show will expand to Middle Tennessee and the Nashville market, which will allow it to reach residents of 23 counties across the state. It was also the first episode to feature a member of ORSSAB with a profile of former board secretary Bonnie Shoemaker and

*(See Outreach on page 6)*

## Dashe Brings News Know-how to Energycast Oak Ridge Project

### Seasoned professional

Heading OREM's new "Energycast" show is award-winning journalist Summer Dashe. She was most recently main anchor for WATE in Knoxville. While there she anchored several shows and served as director of storytelling. Dashe also led training workshops in shooting video, writing, and editing techniques. She has earned multiple Emmy Awards and many other broadcast awards during her career.

Summer lives in Knoxville with her husband and two dogs. In the fall, she'll be teaching a course on broadcast reporting at the University of Tennessee. On weekends she travels on shoots across the country producing a true crime documentary connected to a story she worked on at a previous job in Florida.

### Empathetic storyteller

Dashe left her dream job in news due to two incurable and debilitating medical conditions, Postural Orthostatic Tachycardia Syndrome (POTS) and Ehlers Danlos Syndrome. Since the diagnoses, she has used her skills and personal experiences to be a voice for the chronically ill.

"Journalism is the purpose I chose in life, but disability advocacy is the purpose life chose for me," she said.

Using brutal honesty, borderline inappropriate humor, and a sprinkle of humility, she hopes her work helps educate, spread awareness, and empower. And it's working. Dashe has been a guest lecturer in medical schools, emceed the largest annual international conference on POTS, and has amassed nearly 20,000 followers on social media after producing a viral video about the condition.

## EMDF

*(Continued from page 1)*

remove uncontaminated materials from the waste stream, but there's no getting around the fact that packing demolition debris of hundreds of buildings and adjacent soils into a safe disposal site takes a lot of space.

Current waste disposal options on the Oak Ridge Reservation (ORR) will allow for the remaining cleanup work at East Tennessee Technology Park, but a new facility is urgently needed to accept decommissioning and demolition waste from ORNL and Y-12, where OREM is currently working and plans to remove more than 200 facilities.

### RESOURCE

Scan the QR code below with your smart device to visit <https://ucor.com/additional-emdf-information/> for project fact sheets, project framework documents, and additional resources..



While the ORR has several regular landfills, referred to as “sanitary landfills,” a special type of landfill, permitted under CERCLA is also required due to the types of wastes present in the Oak Ridge facilities. The current CERCLA disposal facility, the Environmental Management Waste Management Facility (EMWMF), has been in operation since 2002 and is more than 80 percent full after taking in waste from demolition of more than 500 facilities at ETTP.

Mr. Mayton told members that EMWMF has been key to OREM's success in the cleanup at ETTP.

“Now that OREM has moved its cleanup focus to ORNL and Y-12, additional disposal capacity is needed to have the same success at those areas as OREM had at ETTP,” said Mr. Mayton.

He said OREM expects EMWMF to be filled by the late 2020s, depending on budget, and the current schedule for the proposed EMDF would have it operational by the late 2020s.

Mr. Mayton told board members that OREM submitted the first draft (D1) record of decision (ROD) on the proposed EMDF to EPA and TDEC for review and comments in July 2021. The D1 ROD included a summary of DOE's responses to public comments received during the 2018 public comment period. The second draft (D2) ROD, which Mr. Mayton said OREM will likely submit in late July, will include changes made in response to comments and meetings with regulators.

There are three major activities that must be completed in parallel to build

a new disposal facility. First, under DOE Order 435.1, OREM received a Preliminary Disposal Authorization Statement (DAS) and will develop remaining documents for an eventual Operational DAS. Second, OREM is working through the CERCLA regulatory process, which includes submitting draft RODs for review and approval by regulators. Third, under DOE Order 413.3B, OREM will develop the final design and complete associated documentation and approvals to support construction.

Since much of the design will be based on EMWMF and related regulations, there are some design elements that are known. There are rules under CERCLA as well as the Resource Conservation and Recovery Act that very strictly define and enforce liner systems, for example, said Henry.

Like EMWMF, water and sediment ponds will allow on-site containment and removal for treatment. The landfill will also be built with multiple cells, or sections, where waste can be placed in the best order to fill the available space. Heavier items, such as foundation material or large equipment, should go in the bottom of a landfill, for example.

Additionally, OREM has completed significant characterization efforts to ensure the suitability of its preferred site in Central Bear Creek Valley. For example, several wells were drilled to estimate groundwater levels. Monitoring wells will also be used at the site following construction to ensure no negative impact to the public or the environment in the future.

## UCOR

*(Continued from page 8)*

Under this contract UCOR will eliminate significant risks by demolishing many of these structures.

“Demolishing these structures is essential to reducing risks, enhancing safety, protecting the environment, and

opening land that can support research and national security missions at these sites,” said OREM acting manager Laura Wilkerson. “This work will be transformative to the region by creating new economic opportunities for the community and enabling ongoing missions for DOE.”

Reinforcing this contract, OREM and UCOR signed a partnering agreement

that details project goals and reinforces a collaborative work arrangement. The agreement focuses on safely delivering beneficial end states—in alignment with stakeholders and with full transparency—with a commitment to sustainability, climate management, environmental justice, and diversity.

## Shields Attends National Chairs Meeting



ORSSAB Chair Leon Shields, left, joined other SSAB officers at the 2022 Spring Chairs meeting

ORSSAB board officers joined other Environmental Management Site-Specific Advisory Board (EM SSAB) leadership, and DOE staff at the annual EM SSAB Spring Chairs Meeting May 3-4 in Paducah, Kentucky and virtually.

Board leadership revisited three recommendations from the fall meeting -- two resulting from requests from EM Headquarters on public outreach and on EM's Strategic Vision document; and a third developed by the boards on the membership approval process.

Some boards had been unable to vote on these measures following the meeting due to membership concerns. The Chairs agreed to finalize and send the recommendations to EM without the other formal votes after board representatives spoke in favor.

Chairs also received several updates from EM Headquarters leadership

**Candice Robertson**, acting deputy assistant secretary for EM, shared ongoing progress across the sites. In host city Paducah, for example, one of EM's plants to convert depleted uranium hexafluoride to more stable compounds returned to operations following a safety pause due to COVID. At the Hanford, Idaho, and Savannah River sites, tank waste is a top priority. At Oak Ridge, Los Alamos, and other sites the focus is in disposing of remaining inventories of legacy transuranic waste. Removing aging facilities like Oak Ridge's Biology Complex are allowing reuse of land for urgent current federal missions.

In the FY 2023 budget currently in appropriations and the plans for FY 2024, in addition to its cleanup duties, EM remains focused on long-term goals including technology development, workforce development,

and strengthening relationships with stakeholders, she said.

Robertson also briefly discussed the department's new Justice-40 Initiative, which launched a pilot program at Los Alamos to foster environmental justice and collaborate with affected communities.

**Kristen Ellis**, acting director of the office of regulatory, intergovernmental and stakeholder engagement, added that EM has incorporated environmental justice efforts into its cleanup mission. Building on that, additional focus will be put on soil and groundwater remediation.

Ellis said other administration priorities include climate action and sustainability; investing in education and development of next generation to maintain a workforce pipeline trained in critical science, technology, engineering and math disciplines; and the DOE Equity Action Plan - priority actions to advance racial equity and support for under served communities, including an effort to enhance diversity and inclusion on federal advisory boards like EM SSAB and its local boards;

Robertson stressed the importance of stakeholder engagement with all of these priorities. The department, she said, is looking at ways to further engage and build on the more than 1,700 recommendations EM SSAB boards have provided -- 85% of which have been fully or partly accepted.

The EM SSAB will meet again in Santa Fe, N.M. in September.

## Outreach

*(Continued from page 4)*

her career at K-25. Additional member profiles are planned.

Working with the public access station was very important to the project, said Williams. Previous recommendations from ORSSAB as well as community and regulator input

emphasize making information on the cleanup mission as easy to access as possible for the biggest group of stakeholders. Utilizing television opens a new and broadly available medium and public access ensures that resource is free.

New episodes of "Energycast" come out on the third Sunday of the month and are posted to OREM's YouTube

channel, [www.youtube.com/user/usdoeakridge](https://www.youtube.com/user/usdoeakridge), the following Monday. Knoxville Community Media also streams its content at [ctvknox.org](http://ctvknox.org) when it airs. The next episode airs July 17. It will feature board chair Leon Shields.

## Recent Recommendation

### Recommendation 249: On FY 2024 OREM Budget Priorities

Each year the DOE-EM Program develops its budget request for the fiscal year two years beyond the current year, including requests from field offices like the one in Oak Ridge.

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

ORSSAB submitted the following recommendation mid-June and expects a response in July.

On March 9, OREM presented on its FY 2024 budget formulation process at ORSSAB's monthly meeting. This presentation provided content and discussions that ORSSAB used to draft its recommendations. A recording of that meeting is available at the board's website. Project-specific objectives provided additional details for discussions that took place at the board's March 23 EM & Stewardship Committee meeting. Other OREM documents and previous recommendations were also taken into consideration.

In creating its recommendations for its FY 2024 OREM budget priorities, ORSSAB focused on general near-term and long-term cleanup priorities identified by OREM including:

- Closure of ETTP
  - Complete remediation of slabs and soils and other activities required to close ETTP and transfer long-term stewardship to Legacy Management
- Demolish excess contaminated facilities at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex (Y-12)

- Progress infrastructure to enable cleanup
  - Mercury Treatment Facility
  - New CERCLA waste disposal facility (EMDF)
  - Continue mercury technology development
- Disposition ORNL uranium-233 and transuranic waste inventories
  - Complete construction of the Sludge Processing Facility
- Maintain and operate facilities at ORNL and Y-12

### Recommendations

ORSSAB supports OREM's Program Plan and recommends fully funding the activities that are currently supported by that Plan for FY 2024. In addition, ORSSAB has identified the following priorities for Oak Ridge Reservation cleanup.

The board recommends that the FY 2024 OREM budget request reflect adequate funding to maintain or accelerate these projects. In addition, when extra funds from suitable plus-ups and savings become available, we recommend that these funds be targeted for the following projects

- The expansion of ORNL's Aquatic Ecology Laboratory provides a vital resource to the EM complex. Future requests should continue funding support for research into mercury and methyl-mercury pollution and prioritize designing and testing new and improved remediation technologies.
- Provide adequate funding to construct and operate the urgently needed new onsite disposition facility to allow uninterrupted cleanup progress at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex (Y-12).
- Increase funding where possible to ensure the Mercury Treatment

Facility meets the operational date of 2025 as presented to the community and ORSSAB. In addition, consider using plus-ups or surplus funds to upgrade equipment and technology that may have improved since the original schedule was developed.

- Provide adequate funds to maintain or upgrade infrastructure
- Complete transfer of all applicable land parcels at ETTP for productive purposes. Continue working with community partners to fully realize the economic development potential of reindustrialization after transfer.



### Join Us for the Board's Annual Planning Meeting

**9 a.m. Saturday, August 13  
at the Tremont Lodge in  
Townsend, Tenn.**

Each year ORSSAB members gather with OREM leadership and representatives of regulators EPA and TDEC to review the year's efforts and develop topics for the coming year's workplan and schedule.

Join us to hear what topics will be prioritized by the three agencies and selected for deeper discussion by the board.

Questions? Contact us at 865-241-4584 or [orssab@orem.doe.gov](mailto:orssab@orem.doe.gov)

## UCOR Transitions to New Cleanup Contract for Oak Ridge Reservation



A new era of cleanup began in May as United Cleanup Oak Ridge LLC (UCOR) undertakes the \$8.3 billion Oak Ridge Reservation Cleanup Contract.

UCOR has been a familiar name in Oak Ridge since 2011. As an Amentum-led partnership with Jacobs, it successfully closed out the East Tennessee Technology Park (ETTP) cleanup contract more than \$100 million under budget. Now, with a new look and an additional partner, Honeywell, the newly configured UCOR is positioned to continue its

successful performance at the Y-12 National Security Complex (Y-12) and Oak Ridge National Laboratory (ORNL).

“When we won the initial contract, we brought some exceptional talent to Oak Ridge that complemented the conscientious and dedicated workforce already here,” said UCOR President and CEO Ken Rueter. “During our 11-plus years of safely cleaning up ETTP and other Reservation sites, we have learned a lot and are bringing that knowledge and experience into the new contract.”

DOE’s Oak Ridge Reservation contains three main sites: Y-12, ORNL, and ETTP (the former Oak Ridge Gaseous Diffusion Plant). The previous UCOR contract focused mainly on

cleanup at ETTP, a former uranium enrichment plant that was closed in 1987. The Oak Ridge Office of Environmental Management (OREM) and UCOR achieved the first ever cleanup of an enrichment complex in 2020 when crews finished all demolition at the site.

The new contract focuses on the removal of unneeded and contaminated buildings at ORNL and Y-12, but it will also continue soil and groundwater remediation efforts at ETTP. Together, ORNL and Y-12 contain DOE’s largest inventory of high-risk excess contaminated facilities.

*(See UCOR on page 5)*



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

UPCOMING MEETINGS
Meetings are held at 6 p.m. virtually until further notice. Email orssab@orem.doe.gov at least 1 week prior to attend or comment.
Board: Annual Planning Meeting August 13
EM & Stewardship Committee: TBD

Oak Ridge Site Specific Advisory Board  
P.O. Box 2001, EM-90  
Oak Ridge, Tennessee 37831  
www.energy.gov/ORSSAB  
orssab@orem.doe.gov

