



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

Deputy Secretary Sees Partnerships’ Impacts During Visit



OREM Acting Manager Laura Wilkerson, far right, and UCOR President and CEO Ken Rueter, center, walk with Deputy Energy Secretary David Turk, third from right, and his staff through the Bulk Shielding Reactor at ORNL. Crews began demolition on the former research reactor in September.

Deputy Energy Secretary David Turk saw firsthand the impact and progress of EM’s strong partnerships at Oak Ridge during his recent visit to the site.

Turk learned about the latest developments in scientific research, national security and environmental

cleanup missions when he visited the Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex (Y-12) in August.

At ORNL, Turk was joined by Deputy Defense Secretary Kathleen Hicks. They celebrated the dedication of Frontier — a supercomputer that is the world’s fastest and the first to break into an unprecedented level of computing performance known as exascale, a threshold of a quintillion calculations per second. Turk also learned how researchers are developing more efficient, safe and compact batteries.

Next, Turk traveled to Y-12 and met with National Nuclear Security Administration Principal Deputy Administrator Frank Rose. Together, they toured production facilities helping

keep the nation safe and secure.

At ORNL and Y-12, Turk had the opportunity to see important environmental cleanup projects helping protect the investments at those sites. Oak Ridge Office of EM Acting Manager Laura Wilkerson and UCOR President and CEO Ken Rueter accompanied Turk during the visit. UCOR is EM’s cleanup contractor at Oak Ridge.

In addition to eliminating risks and enhancing safety, EM’s cleanup projects at ORNL and Y-12 are clearing land to enable modernization and mission

growth. That was on display during Turk’s Oak Ridge tour.

“We’re grateful for the opportunity to highlight how DOE’s major programs in Oak Ridge are working together and showcase the very tangible benefits from those collaborations,” said Wilkerson.

At ORNL, Turk got an up-close perspective of former research reactors, one of which was only weeks away from being torn down. Demolition began in September on the Bulk Shielding Reactor, known as Building 3010. Next is the knockdown of the Low Intensity Test Reactor, known as Building 3005, which is estimated to be completed by the end of the year.

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Reservation Update



Ken Rueter, president and CEO of Oak Ridge cleanup contractor UCOR, speaks during the McCracken Bridge dedication ceremony about the lasting impact of Steve McCracken's leadership on the Oak Ridge environmental cleanup program.

McCracken Bridge Dedication Honors Historic Career

Friends, family and former co-workers gathered recently to celebrate with retired Oak Ridge cleanup manager Steve McCracken and dedicate the bridge he helped build.

The Haul Road in Oak Ridge was closed for about an hour over the summer during a ceremony dedicating the Haul Road bridge.

McCracken began working in environmental programs with DOE in 1980 until he retired in 2010. Over that span he led major EM cleanup efforts at Oak Ridge as well as sites in Missouri and Ohio. After retiring from DOE, he continued adding to his resume by leading the Tennessee Valley Authority's cleanup of a major coal ash spill.

During his tenure as Oak Ridge's manager, one of his many influential decisions was constructing the private eight-mile Haul Road. That road gives drivers carrying debris from cleanup projects a direct path to disposal facilities without using commercial roads through

town. That decision has allowed the OREM to safely move more than 100,000 truckloads of waste for disposal to date.

McCracken's decision to build the road was instrumental in Oak Ridge completing demolition at the East Tennessee Technology Park (ETTP) four years ahead of schedule and avoiding \$500 million in costs to taxpayers. It keeps the community safer and helped the site become the first in the world to remove a former enrichment complex.

DOE installed a plaque on the newly named McCracken Bridge to tell the story of the bridge and honor Steve McCracken.

Public Bus Tours Restart, Highlight New EM Attractions

After a two-year pause due to the COVID pandemic, DOE's public bus tour at Oak Ridge officially kicked off a new tour season this summer. Tours began running again on July 11, and they are scheduled to continue through November. The program is a longtime

staple in the community, helping educate residents and visitors about the site's rich history and current missions. Since it began in 1996, the tour program has attracted tens of thousands of visitors with representation from all 50 states.

The three-and-a-half-hour tour allows visitors to see all three DOE sites on the Oak Ridge Reservation, including Oak Ridge National Laboratory (ORNL), Y-12 National Security Complex (Y-12), and ETTP.

This year's tour is the first to feature the newly constructed K-25 History Center. The facility, an OREM project with considerable ORSSAB input, opened only weeks before the COVID pandemic began. It offers 250 original artifacts on display. Nearly 1,000 oral histories were collected from former Manhattan Project and Cold War-era workers that museum professionals used to develop the exhibits and interactive galleries inside.

OREM is currently advancing plans to complete its historic preservation commitments, which include constructing the K-25 viewing platform and wayside exhibits around the K-25 Building.

Among the other stops, visitors on the bus tour go inside the Graphite Reactor at ORNL. The national historic landmark is a key component of the Manhattan Project National Historical Park. It houses the world's oldest reactor and served as the pilot plant that led to the first production of plutonium.

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Excellence Award Goes to EM-NNSA Partnership Y-12

An EM partnership at Oak Ridge was among several teams recently recognized for excellence by the National Nuclear Security Administration (NNSA) Office of Safety, Infrastructure, and Operations.

The EM-NNSA team was honored for its exceptional integration at the Y-12 National Security Complex (Y-12) at Oak Ridge as part of 2021 Excellence Awards given by the NNSA Office of Safety, Infrastructure, and Operations. The team included EM Oak Ridge cleanup contractor UCOR and NNSA Y-12 management-and-operations contractor Consolidated Nuclear Security.

The annual awards program was established to recognize teams and individuals for accomplishments supporting the NNSA Office of Safety, Infrastructure, and Operations efforts to achieve the NNSA mission. Five teams at Y-12 were honored for their innovation, teamwork and collaboration.

EM was part of two projects at Y-12 that received awards. The first team safely removed three buildings without damaging or impacting an adjacent occupied facility. The second team demolished and disposed of the Biology Complex and cleared the area for future use.

EM completed the Biology Complex demolition project in 2021. In total, that cleanup removed 11 structures covering an 18-acre footprint. The final building to come down was the largest.

Last year EM demolished the massive six-story, 255,000-square-foot Building 9207 and the three-story, 65,000-square-foot Building 9210. These projects marked the largest skyline changes to date at Y-12.

The cleared 18-acre footprint for the former Biology Complex is the planned location for the future Lithium Processing Facility at Y-12. Next month, EM expects to finish all soil work, including the removal of building slabs and soil backfilling, and transfer the land

back to NNSA by the end of the year.

With demolition complete on the Biology Complex, EM is now advancing cleanup on numerous other facilities that will continue Y-12's transformation. Crews are now deactivating Alpha-2, Beta-1, and the Old Steam Plant, and early preparation activities are also underway at Alpha-4.

Former Reactor Demolition Marks First at Oak Ridge

For the first time in Oak Ridge history, EM crews have begun demolishing a former reactor facility, reaching another important milestone for cleanup at the site.

EM Oak Ridge cleanup contractor UCOR began tearing down the Bulk Shielding Reactor, also known as Building 3010, at ORNL in September.

The Bulk Shielding Reactor complex was built in the 1950s for radiation shielding studies as part of the federal Aircraft Nuclear Propulsion Program. It included a 27-foot-deep reactor pool filled with water to shield the radioactive components contained in the pool. Its mission changed to a general-purpose

research reactor in 1963 and was shut down permanently in 1991.

One of the most important pre-demolition activities was removing and disposing of irradiated components from the reactor pool. Once those components were removed, workers drained the 130,000 gallons of the water from the pool and sent it to an onsite treatment facility. Then the pool area was decontaminated and filled with a concrete mixture.

In addition to stabilizing the reactor pool, workers removed various wastes as well as asbestos from the facility.

The reactor was one of more than a dozen research reactors constructed at ORNL over multiple decades. Each contributed to ORNL's reputation as a world leader in cutting-edge nuclear research and development. The facility is one of 16 inactive research reactors and isotope facilities EM is addressing at ORNL.

Crews will complete demolition on the facility this year before transitioning to the teardown of the nearby Low Intensity Test Reactor, known as Building 3005.



Demolition began in September on the Bulk Shielding Reactor at the Oak Ridge National Laboratory. It marks the first teardown of a former reactor at the site. The project is slated for completion this year.

\$42M Agreement on Restoration Drafted by DOE, TN



Rachel DelVecchio, part of the team working with the Oak Ridge Reservation Natural Resource Trustees, presents the draft plan and answers questions at a public meeting on August 31.

This summer DOE and the State of Tennessee reached an agreement related to natural resource damages on the DOE's Oak Ridge Reservation that establishes a \$42 million account to fund projects that will restore and protect natural resources and enhance the local environment. DOE, the State, and other partners that form a trustee council for the project released details of the agreement in the *Oak Ridge Reservation Natural Resource Damage Assessment: Restoration and Compensation Determination Plan/Environmental Assessment*.

The partners held a public meeting on August 31 and are reviewing comments received from the public comment period that ended October 12. A recording of the meeting is available on the OREM YouTube channel (<https://youtu.be/GRve2FL03cw>), and the link to the document is in the details below the video.

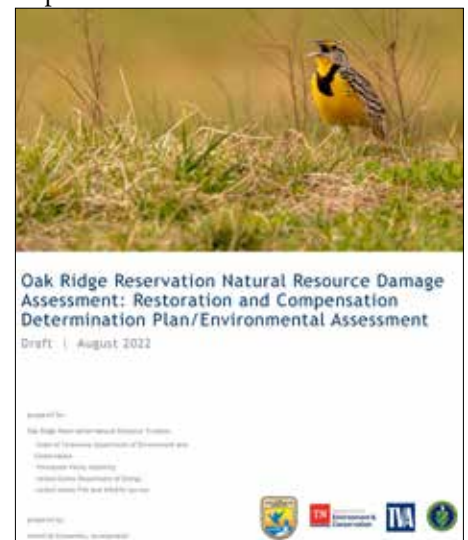
While previous agreements have addressed specific impact areas, the new agreement aims to address all remaining historical damages related to DOE's past operations on the reservation. During the assessment, trustees determined those operations had affected ecological,

groundwater, and recreational opportunities. Remedies proposed were aimed at replacing those losses with similar resources.

Approximately half of the total \$42 million settlement would be funded through repurposing a perpetual care fund for the Environmental Management Waste Management Facility (EMWMF). The fund was originally established to provide funds for any needed repairs or maintenance on EMWMF after closure. However, DOE will remain responsible for those actions, allowing that fund to be repurposed. DOE will also fund the remaining half of the settlement over a period of seven years or less.

The trustees envision using the funds to create many different restoration actions, all targeted towards benefiting a particular type of resources (i.e., surface water, sediment, aquatic invertebrates, fish, birds, reptiles, amphibians, mammals), and encouraging public use of the area. Projects are focused on generating ecological, groundwater, and recreational benefits, such as habitat creation/restoration/enhancement, groundwater infrastructure improvements, and improvements to

recreational opportunities and access. Trustees will respond to public comment prior to finalizing the agreement and then begin identifying potential projects. The trustees will continue sharing project plans and progress, as well as soliciting additional input and public participation on projects to be implemented.



Copies of the Oak Ridge Reservation Natural Resource Damage Assessment: Restoration and Compensation Determination Plan/Environmental Assessment are available at <https://doeic.science.energy.gov/uploads/A.0106.037.0027.pdf>

DOE Selects New Division Director



Erin Sutton

Erin Sutton has joined OREM as director of the Quality and Mission Support Division. Sutton will oversee teams ensuring quality assurance for the cleanup program and regulatory

and environmental compliance, reindustrialization, and community outreach, which includes ORSSAB activities. She fills the role following the retirement of career federal employee and ORSSAB contributor David Adler earlier this year.

Sutton joined the board at its Annual Meeting in October to share an overview of the OREM program and provide the latest updates on current cleanup projects at ETTP, ORNL, and Y-12.

Sutton has more than two decades of experience working with regulatory agencies, including direct experience with Oak Ridge cleanup priorities. Most recently, she worked with cleanup contractors UCOR and RSI EnTech. Prior to that she was the East Tennessee regional brownfield coordinator for TDEC. She has a master's degree in environmental and engineering geology from Radford University.

Members

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cleanup underway, interact with project managers, and to make your opinions known to DOE," said Laura Wilkerson, OREM acting manager.

"The recommendations from this board and the perspective of its members are incredibly valuable to our program, and they help influence and guide our decision-making."

That's no small thing when the cleanup program is one of the largest employers in the region and makes contributions to the local and state economy worth billions of dollars.

Each year the board works with OREM to develop a work plan on the topics it will consider. Presentations take place at the main board meeting on the second Wednesday of most months. If appropriate, a site tour may follow. Next, the board's EM & Stewardship Committee meets to ask additional questions and begin drafting a recommendation if the board wants to offer one or if OREM requests it.

Recommendations from the board shaped the final form of projects like recreational green spaces and trails at the Heritage Center and East Tennessee Technology Park, among others. Both the American Museum of Science and Energy and its new counterpart, the K-25 History Center, had board input. The board historically weighed in on the land transfer program that now helps bring employers like Coqui Pharmaceuticals and Ultra Safe Nuclear Corp. to Oak Ridge.

Whether you were born and raised in the area or recently decided to call East Tennessee home, we invite you to join us as we continue to contribute.

Want even more information? A detailed guide and much of the new member training packet are available to the public at www.energy.gov/orem/articles/orssab-membership-application-information and staff can answer questions at orssab@orem.doe.gov or 865-241-4584.

FY 2023 ORSSAB Workplan Topics

Board recommendations are based on topics presented by DOE at the board's monthly meetings.

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

October

Annual Planning Meeting in lieu of regular board discussion.

November

Briefing/update on processing of U-233 material at ORNL.

December

No meeting. Welcome new board members.

January

No meeting.

February

Discussion of ongoing efforts to assure sufficient waste disposal capacity/EMDF

March

FY 2025 budget request development/prioritization input

April

No meeting. Board officers will attend the National EM SSAB Chairs Meeting, location TBD.

May

ETTP Main Plant groundwater remedy selections.

June

Excess facilities oversight, maintenance and risk reduction activities at ORNL and Y-12.

July

No meeting. Annual member tour of sites and continuing education.

August

ORSSAB Annual Planning Meeting

September

Oak Ridge hosts National EM SSAB Chairs meeting

EM SSAB Chairs Meet for In-Person/Virtual Hybrid Fall Chairs Meeting



ORSSAB FY 2022 Board Chair Leon Shields (center, back) joined other EM SSAB chairs members and staff during a tour of the Los Alamos National Laboratory as part of the Fall 2022 EM SSAB Chairs Meeting held in September.

ORSSAB officers joined other Environmental Management Site-Specific Advisory Board (EM SSAB) officers recently for the EM SSAB 2022 Fall Chairs Meeting.

Each spring and fall, officers from SSABs across the country join to meet with DOE officials to discuss the latest happenings around the EM complex. The meeting, held September 7 in Santa Fe, N.M., and virtually via WebEx and YouTube, marked the first Chairs meeting held in person since October 2019.

The day before the meeting, Chair members and staff toured the Los Alamos National Laboratory.

Candice Robertson, DOE Acting Principal Deputy Assistant Secretary, started off the meeting with an overview on the latest highlights from the EM program.

Next, representatives from each of the sites participated in a Round Robin,

providing updates from their respective sites.

Justice40 Initiative

Next, Nicole Nelson-Jean, Associate Principal Deputy Assistant Secretary for Field Operations discussed EM's efforts under the Justice40 Initiative.

The Justice40 Initiative, a component of Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, "establishes a goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities."

Nelson-Jean told members that Federal agencies will be conducting extensive stakeholder engagement and Tribal consultation as they implement the Justice40 Initiative, and EM has already been interacting with stakeholders on the Justice40 Initiative through presentations, listening sessions,

conference calls, in-person and virtual meetings, and workshops.

She said the focus of EM's environmental cleanup work under the Justice40 Initiative is soil and groundwater remediation.

Michael Mikolanis, EM Los Alamos Site Manager, gave members an overview of EM-Los Alamos' (EM-LA's) role as one of five U.S. Department of Energy Justice40 Initiative Pilot Programs.

He said the Justice40 Initiative aligns very closely with EM-LA's mission to clean up legacy contamination and waste resulting from decades of nuclear defense research at Los Alamos National Laboratory (LANL) and EM-LA's commitment to investing in the disadvantaged communities that have been affected. He added that EM-LA's legacy cleanup at LANL fits under the Federal Covered Program of "remediation and reduction of legacy pollution."

Mikolanis next described EM-LA's current efforts under the initiative, and he said listening sessions have been key to regular engagement and meaningful discussion.

"Real engagement in this process is going to be listening; not talking," he said.

Legacy Management Overview

For the next portion of the agenda, DOE Office of Legacy Management's (LM's) Jay Glascock, Director for Site Operations, gave members an overview of LM's history, mission, and strategic goals and discussed how LM's mission fits in with EM's mission.

He told members that LM was created in 2003 and it "spun off" from EM to take over post-closure responsibilities for World War II (WWII)- and Cold War-era sites.

"After environmental remediation is completed at a site, responsibility for the site is transferred to [LM] for post-

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Chairs

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closure management," said Glascock. "For sites where residual hazards remain, like disposal cells or groundwater contamination, we have active long-term surveillance and maintenance that is required to ensure the continued protection of that remedy."

He said LM's strategic goals include: protect human health and the environment; preserve, protect, and share records and information; safeguard former contractor workers' retirement benefits; sustainably manage and optimize the use of land and assets; sustain management excellence; and engage the public, governments, and interested parties.

According to Glascock, LM is the permanent custodian of more than 100 sites and will receive an additional 20 sites over the next five years. He noted that LM receives sites from not just EM, but also from agencies such as the Nuclear Regulatory Commission, the Army Corp of Engineers, the EPA, and others.

Contracting Update

Angela Watmore, Special Advisor for Acquisition, was also on-hand to give

Visit

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Those structures are located in the heart of ORNL, and their demolition will eliminate risks, clear land for research missions and enhance access to the Oak Ridge portion of the Manhattan Project National Historical Park. The park also has locations at the Hanford Site in Washington state and Los Alamos, New Mexico.

While at Y-12, EM leaders discussed large cleanup projects underway and several more on the horizon that will significantly transform the site.

The tour at Y-12 included a stop at the award-winning Biology Complex

members information about DOE's contracting process, particularly the end-state contracting model, which was first awarded in 2019.

She said that at its core, end-state contracting is an indefinite delivery, indefinite quantity (IDIQ) contract.

"[IDIQ] contracts have been around for decades," she said. "I think the part that's different in it is what we're doing as a team to work together in partnering, not only internally within EM, but with our external stakeholders, and that's with our regulators, and our contractors that are doing the cleanup, and with the community."

She said IDIQ contracting is about breaking the work down into definable, more transparent pieces of work. The key part to the end-state component of this model is that each task order within the contract has an attached risk and fiscal environmental liability.

Office of Packaging and Transportation Overview

Julia Shenk, Officer Director for the Office of Packaging and Transportation (OPT), next provided members with an overview of the OPT, its key activities, and its role in EM's cleanup mission.

She told members that OPT provides shipment services to multiple programs within DOE, including EM, National

demolition project. In 2021, EM finished taking down that complex's 11 structures covering an 18-acre footprint. The cleanup program will transfer the former complex site to NNSA this year for future reuse. It's the planned location for the Lithium Processing Facility.

"An exciting aspect to our cleanup mission in Oak Ridge is that our progress always has a direct benefit to the community, DOE's missions or both," said Wilkerson. "Our accomplishments pave the way for additional successes."

Nuclear Security Administration (NNSA), the Office of Science (SC), and the Office of Nuclear Energy (NE), with EM's shipments comprising about 35 percent of OPT's total DOE offsite hazardous materials shipments in FY 2021.

In addition to shipment services, OPT also conducts a variety of in-person, virtual, and virtual hybrid trainings and evaluations, including its Transportation Emergency Preparedness Program (TEPP), Motor Carrier Evaluation Program (MCEP), Packaging Certification Program (PCP), and Transportation Compliance Assurance Program (TCAP).

Shenk said EM-OPT also chairs the National Transportation Stakeholders Forum (NTSF), DOE's primary mechanism for communicating with states and tribes about shipments of legacy waste materials.



Join Us for a Briefing on U-233 Materials Processing

**6 p.m. Wednesday, November 9
Virtually via Zoom**

Learn more about EM's project to safely process and dispose of the remaining inventory of the nuclear material stored at DOE's Oak Ridge National Laboratory (ORNL).

Join the Oak Ridge Site Specific Advisory Board on November 9 as DOE's Nathan Felosi discusses EM's uranium-233 processing campaign.

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

Board Member Recruitment Kicks off Soon: Why You Should Apply

ORSSAB is seeking new board members to take open seats in 2023. The DOE Oak Ridge Office of Environmental Management appreciates advice from a broad spectrum of those who live or work in the area. All adult residents of the multi-county area surrounding Oak Ridge are encouraged to apply.

The board generally draws from Anderson, Blount, Campbell, Knox, Loudon, Meigs, Morgan, Roane and Union counties, but may also consider other locations. Applications are available on the board's website, www.energy.gov/orssab, and can be requested by phone or email.

Board membership will take some time — two or three hours in months the board meets, and there are



Board members tour the Graphite Reactor at Oak Ridge National Laboratory as part of their orientation training each summer.

opportunities for exclusive site tours or educational travel occasionally, which can vary in their time commitments. But if you're looking to participate in your community or learn more about

where you live, here's why we think it's a pretty good deal.

“Membership is the best, most direct way to understand the environmental

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| 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 |
| EFTP – 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: U-233 Materials Processing Update, November 9 |
| EM & Stewardship Committee: TBD |

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