



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

ORSSAB Members, DOE, EPA, and TDEC Representatives Gather for Annual Meeting

Members of the Oak Ridge Site Specific Advisory Board (ORSSAB) gathered in Townsend, Tenn., on August 22 for the board’s annual meeting. The purpose of the meeting was to review what was accomplished in FY 2015 and discuss topics for consideration in FY 2016.

Accomplishments

The manager of the Environmental Management Program (EM) for the Department of Energy (DOE) in Oak Ridge, Susan Cange, was the first presenter of the day. Cange, who is also ORSSAB’s Deputy Designated Federal Officer, talked about a number of EM accomplishments in Oak Ridge this past year.

Those accomplishments included final demolition of the K-31 Building at East Tennessee Technology Park (ETTP); continued progress on the

processing of transuranic (TRU) sludge waste for disposal; issuing a proposed plan for a mercury treatment facility at Y-12 National Security Complex; and resolution of comments made on the feasibility study for a new waste disposal facility.

DOE Oak Ridge EM also completed roof repairs on some buildings at Y-12 and Oak Ridge National Lab (ORNL) and removed some irradiated components from a reactor pool at ORNL. EM conducted maintenance work on the Liquid Gaseous Operations facility at ORNL to help keep that facility operating.

Cange updated the board on the status of some other important projects. Deactivation of the K-27 Building at ETTP is almost complete and demolition will begin soon. Shipments of uranium-233 from ORNL for

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disposal in Nevada are underway. Processing of contact-handled and remote-handled TRU debris is 98 and 86 percent complete, respectively. The design of the test facility for TRU sludge processing is underway.

ORSSAB Chair Dave Hemelright opened his comments by saying that “last year’s annual meeting was very dynamic and many good ideas came out of that meeting. I hope this year’s meeting will be just as productive.”

He said many of the board’s FY 2015 accomplishments resulted from ideas that came out of the 2014 annual meeting – ideas that included having meetings at different locations and taking tours of sites where cleanup decisions need to be made.

In 2015 the board held two off-site meetings – one at a restaurant in Knoxville and another at an Oak Ridge restaurant that included a discussion with Oak Ridge City Manager Mark Watson about the city’s perspective on DOE’s cleanup work.



Susan Cange, DOE Oak Ridge Manager for EM, makes opening comments to the board at the ORSSAB annual meeting in August in Townsend, Tenn.

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ORSSAB Members Assemble for Annual Meeting

(Continued from page 1)

Tours were taken of the site of the proposed new waste disposal facility and of areas around ETTP known as Zone 1 where a decision on soils cleanup will be made. In September a tour was conducted at Y-12 at the site of the proposed mercury treatment facility.

Board Operations

A number of ideas came from board members during the open discussion to improve board operations. For FY 2016 board meetings will still be held the second Wednesday of the month. When the presentation topic is about a specific site requiring ORSSAB input, a tour for board members to see the site will be arranged after the board meeting. That requires moving the EM & Stewardship Committee meetings to the last Wednesday of the month for follow on discussions leading up to the drafting of recommendations.

It was suggested that board meeting presentations and the question and answer sessions be general in nature and more detailed discussion and questions be handled at the EM & Stewardship Committee.

DOE will make an effort to get board meeting presentations to members prior to the board meetings so they can formulate questions for presenters ahead of time.

Development of a flow chart was suggested that would illustrate the new process of meetings and tours.

Topics to Consider in FY 2016

One of the primary reasons for the annual meeting is for ORSSAB to receive input from DOE, the Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC) on topics to consider in the coming year.

All three agencies suggested three topics:

- The location and construction of a proposed additional waste disposal facility;
- Continued study and input on possible migration of contaminated groundwater from the Oak Ridge Reservation (ORR);
- Mercury mitigation in Upper East Fork Poplar Creek at Y-12 and the proposed Mercury Treatment Facility.


Dave Adler, the board's DOE liaison and Alternate Deputy Designated Federal Officer, provided DOE's other suggestions for the board to consider in FY 2016. That included input on reindustrialization and historic preservation at ETTP and continued monitoring of key material disposition, such as uranium-233.

DOE always requests ORSSAB's opinion on the Oak Ridge EM budget request to DOE Headquarters.

Jeff Crane and Connie Jones offered EPA's suggestions. Crane said EPA believes the board should monitor DOE's activities to ensure there is a balance between demolition work and environmental media cleanup. Jones said EPA was interested in seeing the board engage the public more, particularly communities near the ORR that could be affected by EM work.

TDEC's offerings were presented by Kristof Czartoryski who said ORSSAB should encourage stable funding for the design and construction of the TRU sludge treatment facility. He said TDEC believes TRU waste in Trench 13 at ORNL should be excavated and processed at the TRU Waste Treatment Center.

All of the topics presented by the agencies will be considered in developing the board's work plan for FY 2016.

"I want to thank all of you for taking a Saturday to attend this meeting," said Cange at the close of the meeting. "It is important for DOE to have an advisory board to provide recommendations to DOE on cleanup work on the ORR. We look forward to working with you again in FY 2016." 

EM SSAB Representatives Travel to Santa Fe for Semiannual Meeting

The semiannual SSAB chairs' meetings provide representatives from the eight local SSABs across the DOE complex an opportunity to get updates from DOE Headquarters on cleanup-related topics, share common issues of concern, and develop joint recommendations about those concerns.

The meetings rotate among the eight SSAB sites, and the fall meeting was hosted by the Northern New Mexico Citizens' Advisory Board and the EM Los Alamos Field Office September 1-3 in Santa Fe, N. M. (Some boards prefer to use Citizens' Advisory Board instead of SSAB.)

Oak Ridge attendees included ORSSAB Chair Dave Hemelright and Dave Adler, ORSSAB's Alternate Deputy Designated Federal Officer.

Copies of all meeting presentations are available on the EM SSAB chairs' website at <http://www.energy.gov/em/downloads/chairs-meeting-september-2015>.

The first day of the meeting featured:

- An EM update by Frank Marcinowski, Deputy Assistant Secretary for Waste Management;
- A round robin presentation of the eight SSABs' topics, activities, or accomplishments;

- A discussion of DOE contracting strategies by Jack Surash, Deputy Assistant Secretary for Acquisition and Project Management;
 - A preliminary discussion of a chairs' recommendation on supplemental environmental projects and a white paper on best practices for informed budget recommendations; and
 - A site restoration update by Tania Smith, Associate Deputy Assistant Secretary for Site Restoration.
- Day two featured:
- Comments by David Borak, EM SSAB Designated Federal Officer;

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Board Member Attends Community Involvement Training Conference

by ORSSAB member *Alfreda Cook*

There is a difference between “community outreach” and “community engagement.” I learned this first-hand during the 2015 Community Involvement Training Conference sponsored by the EPA in Atlanta, Ga., August 4-6.

While community “outreach” primarily is one-way communication, “engagement” focuses on building relationships and gaining consensus for a path forward. This conference was an opportunity to bring together people from EPA and its partners and stakeholders who plan and implement environmental education programs that promote community involvement, partnership, stewardship, and outreach.

With more than 500 people from regional and national levels in attendance, it lived up to the billing.

The three-day event featured daily plenary sessions with enthusiastic guest speakers, selections of 90-minute information sessions for attendees to choose that highlighted ways in which communities have taken the forefront in environmental cleanup and revitalization efforts, and ways to develop partnerships across local organizations to bring about change.

In addition, selections of 3-, 4-, and 7-hour sessions offered interactive training on many topics with titles such as “Saving Lives and Transforming Communities Through Green Jobs,” “Building Cultural Competence: Tools to Foster More Productive Community Relations,” and “Health Impact Assessment: Engaging Communities in Local Decisions.”

Afternoon field trips offered excursions into environmentally or socially impacted areas in Atlanta that have benefited from community-led initiatives and/or partnerships between EPA and the community. Trips included

I went on the Proctor Creek trip, which culminated in a picnic organized by the community to highlight the impact of their involvement in the success of the project.

Prior to the conference, ORSSAB submitted an application that was accepted for participation in the conference’s Eco Café where attendees shared information pertinent to the event. The Eco Café was the focal point of the opening reception and provided attendees with a hands-on opportunity to learn about tools and resources from a variety of community involvement practitioners.

ORSSAB

Administrator Pete Osborne and I staffed the exhibit entitled “Citizens Advisory Board Takes Active Role in Cleanup of Department of Energy Site in Oak Ridge, Tennessee.” The exhibit displayed methods that the board uses to engage the community, which includes print media, social media, TV broadcasts, museum exhibits, and meetings that are open for public comment and participation. 🌿



Board member Alfreda Cook and ORSSAB Administrator Pete Osborne show off the board’s exhibit at the EPA Community Involvement Training Conference in Atlanta.

the Atlanta BeltLine – a 22-mile loop of abandoned railroads now converted into a corridor of trees, trails, and transit options; the Atlantic Station – a model sustainable development that offers housing, employment, shopping, and entertainment in mid-downtown; and Proctor Creek – a 16-square mile contaminated watershed that currently is undergoing cleanup.



Join Us for an Update on Progress Made on Cleanup and Reindustrialization at ETTP

Since cleanup of the Oak Ridge Reservation began in the 1990s, a great deal of work and progress has been made to demolish old buildings and free up land at East Tennessee Technology Park for private industrial development.

Join us for an update on all that has been done and what remains at the next ORSSAB meeting on Wednesday, October 14 at 6 p.m. at the DOE Information Center, 1 Science.gov Way in Oak Ridge.

Reservation Update

DOE Issues Proposed Plan for Mercury Treatment Facility

DOE has issued a proposed plan to construct a Mercury Treatment Facility at Y-12 to remove mercury from Upper East Fork Poplar Creek at its headwaters inside the plant.

About 24 million pounds of mercury were brought to Y-12 for use in nuclear weapons production, but more than 2 million pounds were lost to the environment. Much of the lost element makes its way into the creek, which becomes East Fork Poplar Creek and runs through the city of Oak Ridge.

To alleviate the problem DOE proposes to build a water treatment facility that is designed to reduce mercury concentrations in the creek to 51 parts per trillion, about an 84 percent reduction in mercury flux at Outfall 200 where the creek originates.

ORSSAB will comment on the plan.

Preparations to Demolish K-27 Gain Momentum

Now that K-31 has been completely demolished and more workers are available for dedicated work on K-27 at ETTP, preparations to demolish the last remaining gaseous diffusion building in Oak Ridge have picked up speed.

UCOR, DOE's prime cleanup contractor in Oak Ridge, is predicting a January 2016 start for demolition.

Preparatory work includes removing residual deposits of enriched uranium and foaming of process piping to prevent contamination spread.

New Waste Disposal Facility Is a Priority for DOE EM

Since the current Environmental Management Waste Management Facility was built, more cleanup scope has been added to EM's mission, and the facility is not large enough to handle the additional waste.

A new waste cell, the EM Disposal

Snapshot in History

Winter 1944-45

Performance improved at each of the Oak Ridge production facilities resulting in substantial progress towards bomb development.

Introduction of a complicated feed schedule improved the output of enriched uranium by utilizing the electromagnetic, thermal diffusion, and gaseous diffusion processes in tandem.

While still not producing up to design potential, the nine Alpha and three Beta racetracks were becoming significantly more reliable.

The S-50 thermal diffusion plant was almost complete and the K-25 gaseous diffusion plant was undergoing final leak tests in anticipation of providing sufficient enriched uranium-235 to Los Alamos in the spring.



Oak Ridge Site Specific Advisory Board
NEW MEMBER RECRUITMENT

Interested in Becoming a Board Member?
Call the board offices at (865) 241-4583 or email Pete.Osborne@orem.doe.gov.
Or visit our website at www.energy.gov/orssab.

What is the Oak Ridge Site Specific Advisory Board (ORSSAB)?
ORSSAB is a volunteer citizens' advisory board to the Department of Energy's Environmental Management Program in Oak Ridge. It provides DOE with advice and recommendations concerning environmental remediation, waste management, monitoring and surveillance of legacy waste, and other issues.

The board meets monthly to hear from DOE personnel about the status of the cleanup program, discuss recommendations on cleanup issues, and conduct board business.

The board meets on the second Wednesday of the month from 6:00 to 8:00 p.m.

Who Serves on ORSSAB?
The board is composed of 22 members chosen to reflect the diversity of gender, race, occupation, and interests of persons living near the Oak Ridge Reservation. Technical expertise is not required for membership, as a broad range of backgrounds and viewpoints is preferred.

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Facility, is proposed to be built nearby.

TDEC and EPA have provided comments on DOE's remedial investigation/feasibility study for the project. DOE expects to issue a proposed plan for the new facility in January.

Work Underway on a Master Plan for Airstrip at ETTP

Work is underway on a master plan to build a general aviation airport fronting ETTP along Highway 58.

The plan is expected to be finished in about a year and construction could begin in 2018. Cost estimates are \$30-\$40 million.

DOE is evaluating the potential transfer of 170 acres at ETTP to the Metropolitan Knoxville Airport Authority. The environmental assessment for the property transfer is expected to be complete later this year.

ORSSAB Members Become More Proactive in FY 2015

At ORSSAB's 2014 annual meeting the board set some objectives to be more proactive and try to make meetings more interesting.

Two of those objectives were to take tours of areas where DOE Oak Ridge EM has requested recommendations from the board and have board meetings at different locations.

The tours would help members have a better understanding of the areas in question. The idea for occasional changes in venue is to add a bit of variety for members and make the meetings more accessible to the public.

The effort got underway soon after the August annual meeting when in November board members Alfreda Cook, Bob Hatcher, Greg

Paulus, Dennis Wilson, and student representative Claire Rowcliffe went on a tour of ETTP. Led by Dave Adler, the board's Alternate Deputy Designated Federal Officer, they saw the area known as Zone 1, which is considered for a record of decision for remediation of contaminated soils.

Also in November, the entire board met off-site at a Knoxville restaurant. The purpose was an extension of the annual meeting where the board had a facilitated discussion about different ways to conduct board meetings, how to improve member participation, and how to recruit more members.

In December, DOE Oak Ridge EM held a 'meet and greet' event at the DOE Information Center so board

members could chat informally with portfolio and project managers.

In February 2015 board members Bob Hatcher, Fay Martin, Corkie Staley, and Greg Paulus braved a cold winter afternoon to see the site of the proposed new waste disposal facility near Y-12.

In May the board went off-site again for a meeting at an Oak Ridge restaurant. The board invited Oak Ridge City Manager Mark Watson to talk about the city's perspectives on DOE's cleanup operations.

This was the year for the Five-year Review site visits to document if stewardship controls that have been implemented at remediated sites are still working as planned and if they are

still applicable under current conditions. Alfreda Cook, Bob Hatcher, and Ed Trujillo went on several of the visits.

Dave Hemelright and Belinda Price attended the final demolition of the K-31 Building in June.

In September Martha Deaderick went on a tour of Y-12 to see the area where a mercury treatment facility is proposed to remove mercury from Upper East Fork Poplar Creek, and Dennis Wilson attended the public meeting on the facility at the DOE Information Center.

At the 2015 annual meeting the board decided to continue the momentum and is planning to take even more tours of the ORR. 🌱



During FY 2015 ORSSAB members made a concerted effort to become more involved with the people and operations underway on the ORR. Top left, Dennis Wilson, right, at the public meeting on the proposed Mercury Treatment Facility; top right, Ed Trujillo, center, and Alfreda Cook, with Jason Darby, DOE, on one of the Five-year Review site visits; lower right, Dave Hemelright, left, and Belinda Price at the K-31 final demolition; lower left, Howard Holmes, right, with Ed Worth, DOE, at the December 'meet and greet'; and center, Dennis Wilson, left, Alfreda Cook, center, Greg Paulus, looking left, Dave Adler, DOE, and Bob Hatcher, with others on a site tour of Zone 1 at ETTP.

Lack of FY 2016 Funding May Slow Historic Preservation at ETPP

by ORSSAB member Dave Hemelright



In the summer of 2012 a Final Memorandum of Agreement (MOA) for Historical Properties at ETPP was signed by a number of signatory and

consulting parties. The purpose of the MOA was to describe measures to preserve the historic significance of the K-25 Gaseous Diffusion Plant, which played a significant role in the Manhattan Project, which helped end World War II and the subsequent Cold War.

Signatories include DOE, the Advisory Council on Historic Preservation, the Tennessee Historical Commission, and the City of Oak Ridge. There are a number of concurring or consulting parties, including ORSSAB.

Although there are plans for a Manhattan Project National Park encompassing parts of Oak Ridge, Los Alamos, N.M., and Hanford, Wash., the K-25 Historical Project is a stand-alone project, ancillary to the National Park Project that was established by Congress in December 2014. The National Park Project will include the Graphite Reactor at ORNL and the Calutron 'racetracks' at Y-12.

Final demolition of the huge K-25 Building was completed December 19, 2013. But even as the building was being demolished a design team was assembled to consider how to preserve the memory of the building and surrounding area as outlined in the MOA.

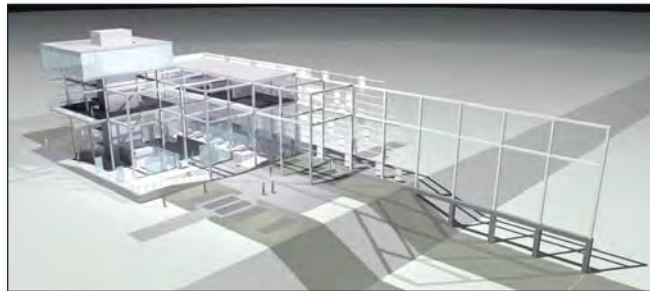
Conceptual design documents, which outline plans for the preservation of K-25, were submitted to DOE by the Professional Site Design Team/Museum Professionals in December 2014. The

design team consists of Smee + Busby Architects (lead architect), McCarty Holsaple McCarty Architects (project management), Hilferty and Associates (museum professionals), and Hedstrom Design (landscape architects).

The conceptual design was presented to the MOA parties in January 2015. The preliminary design resulting from comments at the January meeting should be unveiled in October 2015.

The conceptual design includes retention of the K-25 slab, which will show the enormity of the original structure that was built in about 18 months.

A scaled reproduction of the K-25 Building will be built to house a representative cross section of the gaseous diffusion technology. This "open



An artist's drawing illustrates the 'open air' Equipment Building to partially replicate the K-25 Building at ETPP.

air" Equipment Building includes a viewing tower that will allow visitors a 360-degree view of the building's footprint and surrounding area.

Ninety percent of the artifacts removed from the gaseous diffusion process facilities and put in storage can be decontaminated and displayed in either the Equipment Building or the History Center, which will be housed on the second floor of the nearby ETPP fire station.

Process equipment that cannot be decontaminated will be replaced with replicas. Some items related to the gaseous diffusion process are still restricted and the National Nuclear Security Administration must approve any plans to exhibit such items publicly.

DOE is working to have about 50 currently restricted items displayed.


To complement the K-25 Historical Project, a virtual museum, being developed by Westside Media, LLC, will allow a tour of the K-25 Historical Project from a home or laptop computer. This will be an exciting addition to the physical project, enhancing the total experience.

Preliminary review of the virtual museum was presented to the MOA parties in May, and comments were incorporated in the design. The K-25 Virtual Museum is scheduled to be available to the public in the fall of 2015.

The virtual museum will incorporate many of the Center for Oak Ridge Oral History recordings of principal personnel having firsthand experience in the construction and operation of the gaseous diffusion plant. The virtual museum will include a timeline of events leading up to the construction of K-25.

There will also be historical photos and recollections of folks living and working in Oak Ridge in the early 1940s.

Wayside historical markers are planned to be placed in numerous locations and rest points around the slab area of the K-25 Building. These markers will have information on the building, people, and site as visitors walk the path around the entire slab.

Funding could be an issue, though. In FY 2015 \$2.1 million was allocated for the development of the preliminary design of the project. The work is being conducted under a new non-defense appropriation. But in the FY 2016 budget no funding was allocated to the K-25 Historical Project. Additional funding is required to complete the final design and other requirements of the MOA establishing the K-25 Historical Project. 

DOE Appoints Three New Members to ORSSAB

DOE has appointed three new members to ORSSAB.

Susan Cange, the board's Deputy Designated Federal Officer and the DOE Oak Ridge Manager for EM, introduced the trio at the September board meeting. They have been appointed to two-year terms and can serve three terms.

Martha Deaderick is a retired educator from Kingston who worked for the city school system in Oak Ridge from 1975 until 2004, where she specialized in English, social studies, Tennessee history, and special education.

She is a member of Tennessee Citizens for Wilderness Planning and



DOE has appointed three new members to ORSSAB. From left they are Dennis Wilson, Martha Deaderick, and Mike Ford.

Oak Ridge Schools Retired Teachers.

Mike Ford lives in Knoxville and is a technical sales representative for the Garland Company, which is a manufacturer of high-performance roofing and building envelope materials.

He is the current president of the Building Owners and Manager's Association, a previous house chair of the Construction Specifications Institute, and a member of the International Facility Management Association, and the Tennessee School Plant Management Association.

Dennis Wilson lives in Rockwood and is a retired technology manager, who most recently was employed by Johnson-Diversey Products as the director of technology and intellectual property.

While much of his 39-year career was focused on technology and intellectual property management, his early career included work as a resin and polymer chemist, for which he was awarded seven global patents. 🌱

ORSSAB Elects Officers for FY 2016

ORSSAB elected officers for FY 2016 at its September meeting.

Elected chair is Belinda Price. The vice chair is Alfreda Cook, and Dave Hemelright will be the secretary.

Dave has been chair the last two years and was the vice chair prior to that.

Belinda was appointed to the board

in February 2013. She is a senior hydrogeologist with Alliant Corporation with more than 25 years experience in environmental investigation and environmental remediation as a geologist, hydrogeologist, and task/project manager.

Alfreda retired as a data and systems analyst in 2012. As an employee of successive contractors to the DOE Oak Ridge EM Program since the early 1990s, she was instrumental in compiling and reporting corporate waste disposition data and developing various electronic systems that enhanced the accuracy of information reported to DOE.

Alfreda joined the board in July 2012.

Dave, a board member since 2011, is the K-12 Facilities Specialist for Kaatz, Binkley, Jones & Morris Architects, Inc., specializing in Tennessee public school planning, design, and

construction. He currently serves on the board of the Tennessee School Plant Management Association. 🌱



Belinda Price



Alfreda Cook



Dave Hemelright



Susan Cange, left, ORSSAB's Deputy Designated Federal Officer, presents a plaque of appreciation to retiring board member Jan Lyons for her service to the board. Jan most recently was the board's vice chair. She also served on the Public Outreach Committee and has provided the 'Snapshot in History' features for the Advocate.

EM SSAB Chairs Have Semiannual Meeting

(Continued from page 2)

- Frank Marcinowski discussing waste disposition and Waste Isolation Pilot Plant recovery;
- DOE communication strategies by Kristen Ellis, Director, Office of Intergovernmental & Community Activities; and
- Concluding discussion on the chairs' recommendation on supplemental environmental projects and the white paper on best practices for informed budget recommendations.

Marcinowski reminded the group that Dr. Monica Regalbuto had been confirmed as DOE Assistant Secretary for EM, and Mark Whitney, who had been acting in that office, is now able to function fully as the Deputy Assistant Secretary for EM. Marcinowski added

that Regalbuto is eager to work with the EM SSAB, and she plans to visit all of the DOE sites soon.


During the round robin on the SSABs' topics, activities, or accomplishments, Dave Hemelright talked about ORSSAB's participation in the DOE EM community workshop on the FY 2017 DOE Oak Ridge EM budget, which was held this year in April at Pollard Auditorium.

Day two resulted in the approval of both the chairs' recommendation on supplemental environmental projects and the white paper on best practices for informed budget recommendations.

The recommendation will now be sent to the eight SSABs for approval by their members. Each board will vote on the recommendation, and those boards

that approve it will have their chair's name added to the final recommendation that's transmitted to Headquarters. The recommendation could be tabled, however, if an insufficient number of boards approve it.

ORSSAB member Alfreda Cook received many positive comments for her work on the white paper, which she and Steve Hudson, the Hanford board chair, had worked on prior to the meeting.

The next chairs' meeting will be hosted by ORSSAB and DOE Oak Ridge EM in April. A tour of the ORR will take place on April 19, followed by the day-and-a-half meeting on April 20–21 at the DoubleTree Hotel in Oak Ridge. 



Oak Ridge Site Specific Advisory Board

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www.energy.gov/ORSSAB

UPCOMING MEETINGS

All meetings are held at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn.

ORSSAB Board meeting

Wednesday, October 14, 6 p.m.

Update on Progress Made at ETTP

EM & Stewardship Committee Meeting

Wednesday, October 28, 6 p.m.

ABBREVIATIONS

DOE — Department of Energy

EM — Environmental Management

EPA — Environmental Protection Agency

ETTP — East Tennessee Technology Park

ORR — Oak Ridge Reservation

ORSSAB — Oak Ridge Site Specific Advisory Board

TDEC — Tennessee Dept. of Environment and Conservation

Y-12 — Y-12 National Security Complex

