

# Oak Ridge Site Specific Advisory Board

**FY 2013  
Annual Report**

October 2012 - September 2013

# A Message from the Chair



In FY 2013 it was my privilege to serve as the vice chair of the Oak Ridge Site Specific Advisory Board. The previous year was something of a rebuilding time for the board because we had nine new members join our ranks, 40 percent of our available seats. But by FY 2013 those new members settled in quickly and became active participants in board and committee activities.

Our current makeup of board members may be the most diverse the board has ever had. That diversity is key in our ability to represent the public at large in matters related to the cleanup of the Oak Ridge Reservation.

The board's primary mission is to provide independent advice and recommendations to the Department of Energy on its environmental cleanup program to remedy the reservation of hazardous and radioactive wastes leftover from the Manhattan Project and the Cold War era.

In FY 2013 the board approved and sent five recommendations to the Oak Ridge DOE Environmental Management Office, and it signed off on three recommendations crafted by the leadership of the eight site specific advisory boards nationwide that comprise the Environmental Management Site Specific Advisory Board. The details of the recommendations are in the Key Issues section of this report.

We received monthly briefings on the various projects underway on the reservation, such as progress on work at East Tennessee Technology Park, the status of legacy waste disposition, an overview of the national DOE Environmental Management Program, and a refresher on the importance of long-term stewardship, to name a few.

And after many years of having separate Environmental Management and Stewardship Committees, the two merged in August 2013. After several joint discussions, the membership of the two agreed that their separate interests had common bonds, and it was important for all involved to be aware of cleanup projects and any resulting stewardship requirements.

This and other milestones and important accomplishments from the year are included in this report. A number of things that transpired in FY 2013 laid the foundation for our work in FY 2014.

I'm proud to be a member of this important organization, and it is an even greater privilege to serve as its chair in FY 2014.

*Dave Hemelright*  
David Hemelright, Chair

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## MISSION STATEMENT

The mission of the Oak Ridge Site Specific Advisory Board (ORSSAB) is to provide informed advice and recommendations concerning site specific issues related to the Department of Energy's (DOE's) Environmental Management (EM) Program at the Oak Ridge Reservation. In order to provide unbiased evaluation and recommendations on the cleanup efforts related to the Oak Ridge site, the Board seeks opportunities for input through collaborative dialogue with the communities surrounding the Oak Ridge Reservation, governmental regulators, and other stakeholders.

*On the cover: The P1 Pond at East Tennessee Technology Park after remediation work, which was the focus of the cover of the 2010 ORSSAB annual report.*

# Introduction

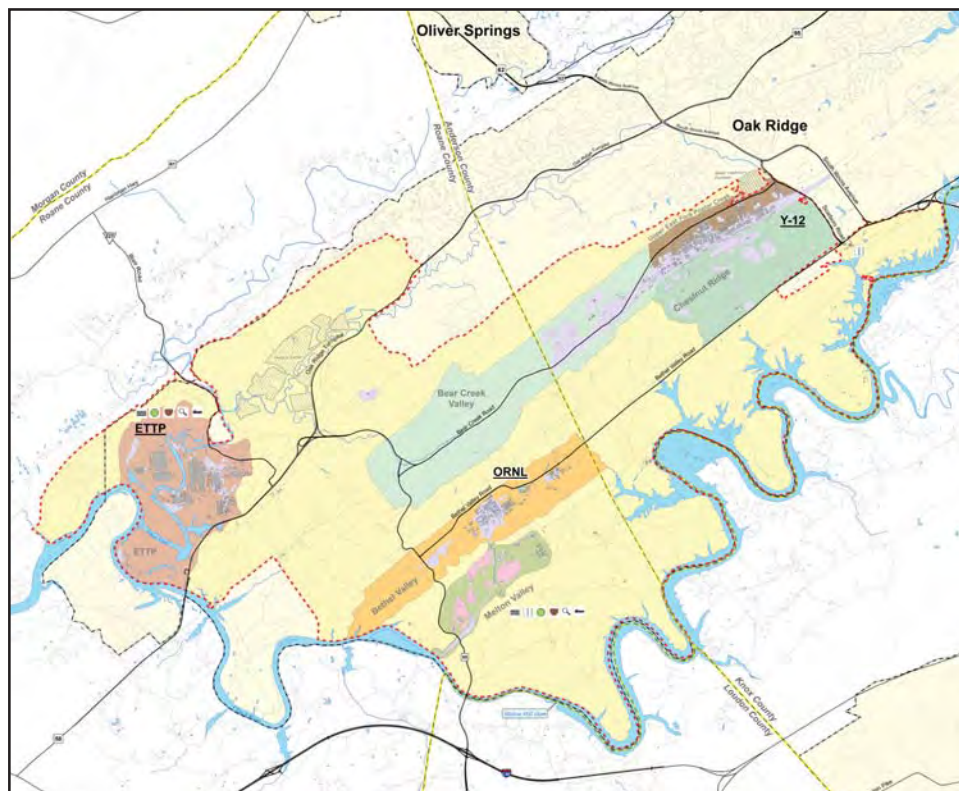
The Oak Ridge Site Specific Advisory Board (ORSSAB) is a federally appointed citizens' panel that provides independent advice and recommendations to the Department of Energy (DOE) on its Oak Ridge Environmental Management (EM) Program. Chartered under the Federal Advisory Committee Act, the board began its work in 1995. ORSSAB is one of eight site specific boards across the nation that comprise the EM SSAB.

The board provides informed recommendations and advice to the DOE EM program regarding environmental restoration and waste management, as well as long-term stewardship, land use, and economic development of contaminated areas.

Recommendations regarding environmental justice, health and safety issues, historical preservation, and other issues may be developed at the request of the DOE Assistant Secretary for EM, Manager of the DOE Oak Ridge Office, or Oak Ridge Manager for EM.

The board is committed to reflecting the concerns of the communities impacted by EM activities on the Oak Ridge Reservation (ORR) and serving as a communications link between the public and relevant government agencies, including local governments.

The board is composed of up to 22 members, chosen to reflect the diversity of gender, race, occupations, views, and interests of persons living near the ORR. Members are



*This map shows the location of the Oak Ridge Reservation in proximity to the populated area of the City of Oak Ridge. The reservation is almost entirely within the city limits of Oak Ridge. It also shows the three main plants of Y-12 National Security Complex, Oak Ridge National Lab, and East Tennessee Technology Park. The colored areas in the yellow portion of the reservation denote watershed cleanup sites.*

appointed by DOE and serve without compensation. Members may serve three two-year terms. At the close of Fiscal Year (FY) 2013, the board consisted of 20 voting members from five counties: Anderson, Blount, Knox, Loudon, and Roane. It also included two non-voting high school students.

Non-voting liaisons include representatives from DOE, the U.S. Environmental Protection Agency Region 4 (EPA), and the Tennessee Department of Environment and Conservation (TDEC). These liaisons advise the board on their agencies' policies and views.

ORSSAB provides a number of avenues for the public to learn about and express views on DOE Oak Ridge EM work. All board and committee meetings are open to the public and are announced in newspaper advertisements and at the DOE Information Center in Oak Ridge (865-241-4780). Board meetings are also advertised in the Federal Register. The first hour of the board meetings is video recorded and broadcast on local cable television stations. It is also available on YouTube at [www.youtube.com/user/ORSSAB](http://www.youtube.com/user/ORSSAB). Copies of the meeting videos are available by calling the ORSSAB support office at 865-241-4583 or 865-241-4584.

The board maintains a web site at [www.oakridge.doe.gov/em/ssab](http://www.oakridge.doe.gov/em/ssab). Information is also available by calling the ORSSAB support office.

### Board Meetings

The board meets each month to hear presentations by personnel working on

relevant EM topics, listen to and discuss input from concerned citizens, consider recommendations to DOE developed by the various ORSSAB committees, and conduct other business. Each August, board members have an annual meeting to evaluate the board's work for the year and plan activities for the next fiscal year.

The board conducts its deliberations under ORSSAB bylaws and Robert's Rules of Order and strives to consider all relevant positions in reaching decisions.

### Committees

The accompanying diagram shows the board's FY 2013 structure. General board business is handled at the monthly Executive Committee meeting. This committee, which is composed of the elected officers of the board and the standing committee chairs, holds general administrative authority to set board agendas,

coordinate the work of committees, and transact business as necessary.

Most ORSSAB committees meet monthly, and all meetings are open to the public. Each ORSSAB committee creates its own work

plan to guide its activities during the year, and these work plans are updated continually as the board year progresses. Information about ORSSAB committees can be found in the "Committees" section of this report.



### FY 2013 Board Officers

ORSSAB officers for the year were David Martin, Chair; Dave Hemelright, Vice Chair; Chuck Jensen, Secretary.

# The Year's Top News

## October 2012

After years of negotiations with various agencies and historic preservation groups, demolition of the North Tower of the K-25



*Demolition of the K-25 North Tower began in October 2012.*

Building at East Tennessee Technology Park (ETTP) began in late October.

At one time the plan was to preserve the North Tower, but it was later deemed too deteriorated to save. To mitigate the loss of the structure, DOE agreed to a number of steps in a memorandum of agreement for historic preservation at ETTP, including construction of a scale replica of gaseous diffusion technology, a history center, and a grant toward purchase and stabilization of the Alexander Inn in Oak Ridge. The inn was known as the Guest House where many VIPs stayed during the Manhattan Project.

## November 2012

Workers removed five sodium fluoride traps, some of the highest-hazard equipment



*Sodium fluoride traps are removed through the roof of the K-25 Building at ETTP.*

in K-25, from the last remaining sections of the building's east wing. When K-25 was operational, the traps removed uranium from the system. Each was about the size of a water heater and weighed 150-800 pounds. A crane removed the traps through holes in the roof.

## December 2012

UCOR, DOE's prime cleanup contractor, announced that the 15,000th load of debris had been hauled away from the demolition site at the K-25 Building since it took over the project in August 2011.

That figure represented about 2 million square feet of the North Tower and East Wing. The debris was disposed at the Environmental Management Waste Management Facility in Bear Creek Valley near Y-12 National Security Complex.

## January 2013

The last remaining portion of the K-25 North Tower came down near the end of January marking a milestone in the decades-long, effort to tear down one of the legacies of the Manhattan Project. With the North Tower gone, all that remained of the building were a few sections of the southern end of the East Wing.

DOE, EPA, and TDEC began a series of Groundwater Strategy Workshops in late January. The goal was to develop an interagency strategic approach to identify, manage, and pursue any potential on-site or off-site groundwater public

health threats and to protect and restore groundwater resources to beneficial use.

Six workshops were conducted between January and August, and a final groundwater strategy document was issued near the end of September. ORSSAB will evaluate the conclusions of the document and issue a recommendation in FY 2014.

The Oak Ridge Industrial Development Board approved an agreement with Family Pride Corp., of Loudon County to lease the Alexander Inn for use as an assisted living facility. As noted previously, DOE contributed \$500,000 to purchase and stabilize the inn as partial compensation for the demolition of the K-25 North Tower.



*DOE provided a grant to purchase and stabilize the Alexander Inn. It was later leased to a developer to be renovated as an assisted living center.*

### February 2013

UCOR completed five mercury projects at the Y-12 National Security Complex.

The projects included planning for a new water treatment system for Outfall 200 at Y-12, sampling and treatability studies for water and soils in the West End Mercury Area of the complex, and disposal of five mercury-contaminated tanks, which were cut up and disposed at the Nevada National Security Site.

The projects mark the start of an effort by DOE to ramp up work to address long-standing mercury contamination issues at the complex.

### March 2013

At ETTP, UCOR completed removal of six sodium fluoride traps from the K-27 Building

using similar techniques as described previously in removing traps from the K-25 Building.

### April 2013

DOE continued to identify areas of the ORR that are not contaminated and do not require cleanup.

In April DOE completed the first Environmental Baseline Survey Report that

confirmed five parcels totalling 4,600 acres around ETTP are not contaminated.

A second survey issued in September indicated about 15,500 acres around Oak Ridge National Lab (ORNL):and Y-12 are not contaminated.

The validation allows those parcels to be removed from the Oak Ridge Federal Facility Agreement's list of areas designated for cleanup.

### May 2013

The DOE Oak Ridge EM Program took a day to celebrate its accomplishments since its inception in 1989. The event featured a number of displays of cleanup successes on the ORR and the premiere of a video created as part of the DOE oral history project.

Dignitaries included U.S. Rep. Chuck Fleischmann; David Huizenga, Senior Advisor for the DOE EM Program in Washington, DC; TDEC Commissioner Robert Martineau; EPA Region 4 Deputy Administrator Stan Meiburg; and three former Oak Ridge Office managers who were instrumental in advancing the cleanup mission in Oak Ridge - Jim Hall, Joe LaGrone, and Gerald Boyd.

UCOR began removing transite panels from the last remaining sections of the K-25 Building. Removal of the panels was one of the last steps before final demolition of the old building began.

## June 2013

Representatives of Nevada began to raise objections over the shipping of uranium-233 from Oak Ridge for disposal at the Nevada National Security Site.

Gov. Brian Sandoval, U.S. Rep. Dina Titus, and U.S. Sen. Harry Reid oppose the project. While DOE considers the material low-level waste, the Nevada leaders argued that it could be used to fabricate a 'dirty-bomb' if it fell into the wrong hands.

The dispute continued through the summer, and Energy Secretary Ernest Moniz and DOE Oak Ridge Manager for EM Mark Whitney worked with Nevada officials to resolve the dispute. While progress on the issue had been made, no agreement had been reached by the end of FY 2013.

## July 2013

DOE announced that ORNL researchers had developed a new contamination detection technology that could replace current expensive and time-consuming survey methods. The process involves spraying phosphur on a surface. If it lights up, it's contaminated.

The DOE Office of Deactivation & Decommissioning and Facilities Engineering challenged researchers to find a better way to determine the extent of levels of low-energy beta-emitting isotopes, such as technetium-99.

Tech-99 was in the last remaining sections of the K-25 Building at ETPP.

The water-based spray is commercially available and can be removed without impeding decontamination.

It can take hours using field survey instruments to assess an area, but the spray technique yields results in minutes.

## August 2013

The red and white checkered water tower that stood watch over ETPP for more than 50 years was taken down in a controlled demolition. The legs of the 382-foot tall structure, reported to be tallest water tower in North America, were blown out from under it in a controlled demolition.



*The water tower at ETPP comes down in a controlled demolition.*

## September 2013

Demolition began on the last remaining sections of the K-25 Building. The six sections had been segregated from the rest of the East Wing because they were contaminated with technetium-99. This marked the final step in

taking down the huge building, which began on the West Wing in December 2008.



To receive future ORSSAB Annual Reports by email call the ORSSAB support office at 1-865-241-4583 or email us at: [osbornepl@oro.doe.gov](mailto:osbornepl@oro.doe.gov).



# Key Issues

In FY 2013, the board sent five locally generated recommendations to DOE on topics related to stewardship, the challenges associated with cleaning up the ORR, and the DOE-Oak Ridge EM budget request. The board also signed off on three recommendations developed by the eight site specific boards that make up the EM SSAB.

Full text of the recommendations and responses is available on the ORSSAB website at [www.oakridge.doe.gov/em/ssab/recc.htm](http://www.oakridge.doe.gov/em/ssab/recc.htm).

## **Recommendation 211: Recommendation on Availability of DOE Environmental Management Documents**

Some members of the board's EM Committee had expressed frustration at trying to find documents online, saying the basic search function often yields many pages of documents not relevant to the search and that the advanced search function is only usable if details of the document are already known.

ORSSAB recommended to DOE that it improve the system of finding documents in the DOE Information Center's online search catalog.

The recommendation specifically suggested the following points:

- Provide an online catalog consisting of an expandable hierarchical matrix of administrative records with links to all documents within each one.
- Use a search function comparable to commonly available Internet search engines.
- Provide detailed instructions on how to use basic and advanced functions at the "search tips" link, including common key words and searchable acronyms.
- Ensure that documents are searchable by key words that are applied consistently to all documents throughout a given Administrative Record.
- Ensure that an overarching Record of Decision that applies to several sites can

be found by searching on the name of any one of those sites.

- Ensure that documents are available at the Information Center and/or online no later than the date when their availability is publicly announced.

DOE responded saying it was working to improve search capabilities and had included a 'search tips' function on the website. DOE also advised researchers to contact directly personnel at the DOE Information Center to assist with document searches.

## *EM SSAB Chairs Recommendation*

### **Recommendation 212: Recommendation on Additional Storage and Disposal Options for Legacy Waste at the Waste Isolation Pilot Plant**

The EM SSAB Chairs recognized the success of the Waste Isolation Pilot Plant (WIPP) in New Mexico as a disposal site for transuranic waste. They recommended that DOE evaluate WIPP as an additional storage and disposal option for legacy waste and suggested a test program that would provide insight on potential issues of an expanded mission for WIPP. ORSSAB concurred with the Chairs' recommendation.

DOE Senior Advisor David Huizenga responded to the Chairs saying DOE was committed to continued dialogue with stakeholders regarding additional legacy waste disposal.

*EM SSAB Chairs Recommendation*

**Recommendation 213: Recommendation on Continued Funding for Technology Research and Development**

In February 2013, ORSSAB concurred with an EM SSAB Chairs' recommendation that encouraged DOE to continue funding technology research and development to find innovative methods for cleanup around the DOE complex.

In April, Mr. Huizenga responded saying steps had been taken to increase funding for technology development.

*EM SSAB Chairs Recommendation*

**Recommendation 214: Recommendation Regarding More Emphasis on Evaluating Recycling Technologies**

The EM SSAB Chairs recommended, and ORSSAB concurred, that DOE place more emphasis and priority on evaluating technologies that could make recycling excess materials cost effective. The recommendation said decontaminating materials for resale can have many positive benefits such as:

- Saving space in on-site disposal cells.
- Adding more dollars for cleanup from the sale of excess material.
- Reducing cumulative environmental impacts.
- Reducing long-term monitoring and stewardship costs.

The Chairs also recommended that contractors be given incentives to recycle items, and DOE should add a recycling and repurposing element to future requests for proposals.

Mr. Huizenga responded saying DOE agreed that decontamination and resale of the material could have many positive impacts. DOE also agreed that adding a recycling and repurposing element to future requests for proposals to incentivize contractors was a good concept to consider.

**Recommendation 215: Recommendation on Remaining Legacy Materials on the Oak Ridge Reservation**

DOE Oak Ridge EM has a collection of legacy materials stored at various locations around the ORR. Some of this material is considered waste and is best suited for permanent disposal, while some is non-waste that has potential for re-use. Most of it is under some type of regulatory requirement and must be dealt with eventually.

This legacy material includes sodium shields stored at ETTP and at ORNL, shielded transfer tanks in Melton Valley, Disposal Area Remedial Action Soils in Bear Creek Valley, and 28 vaults of low-level radioactive waste on a concrete pad at the lab.

While these legacy materials are considered to be in safe storage, they are a cost liability to keep.

After presentations on the legacy materials at both a full ORSSAB meeting and at an ORSSAB EM Committee meeting, a recommendation was developed and submitted to DOE. The recommendation included a number of prioritized suggestions DOE could take in dealing with remaining legacy materials, such as, dispose:

1. to mitigate pressing environmental concerns,
2. to avoid regulatory liabilities,
3. while disposal paths are available,
4. when there is a high cost to maintain in place, and
5. only when reuse options are prohibitive.

DOE's response was that it had developed a comprehensive inventory of all waste materials stored on the reservation and has prioritized the inventory for disposition, with the highest priority to address hazardous and/or radioactive waste that may pose a threat to the environment or could result in a violation of federal or state laws. DOE also said it had established a hierarchy for dispositioning the inventory to minimize costs.

**Recommendation 216: Recommendation on Fiscal Year 2015 DOE Oak Ridge Environmental Management Budget Request**

Each year the DOE EM Program develops its budget request for the fiscal year two years beyond the current fiscal year. DOE also asks for input from the public on its proposed request.

In February 2013, DOE briefed ORSSAB on the current budget picture and described near-term, mid-term, and long-term priorities. In developing the recommendation on DOE's budget request, ORSSAB generally agreed with DOE's current strategy for cleanup and endorsed its 2015 budget request.

ORSSAB's endorsement, however, didn't come without some reservations. It noted that delays in cleanup generally increase life-cycle costs and human risk. When programs are delayed, financial costs and environmental and safety risks escalate.

DOE Oak Ridge EM forwarded ORSSAB's comments with its budget request to DOE Headquarters.

**Recommendation 217: Recommendation on Stewardship Point of Contact for the Oak Ridge Reservation**

While all the standing ORSSAB committees have DOE Oak Ridge liaisons, the Stewardship Committee believed it was important that DOE Oak Ridge EM have a dedicated point of contact for stewardship that the board and the public can go to for stewardship-related issues on the ORR.

Dave Adler, ORSSAB's Alternate Deputy Designated Federal Officer, agreed to be the point of contact, but the committee recognized that changes occur over time, such as reorganizations, personnel changes, and re-assignments. The committee drafted a

recommendation, which the board approved, that there will always be a permanent point of contact for the board on stewardship issues.

DOE accepted the recommendation saying that the DOE liaison to the new EM & Stewardship Committee will be the permanent point of contact for stewardship issues on the ORR.

**Recommendation 218: Recommendation to Develop a Fact Sheet on Site Transition at On-going Mission Sites**

In June 2011, ORSSAB recommended to the DOE Assistant Secretary for EM that DOE develop a fact sheet similar to one used by the Office of Legacy Management (LM) that describes a site transition process upon completion of cleanup at remediated DOE sites.

DOE developed a document called "Site Transition: Cleanup Completion to Long-term Stewardship at DOE On-going Mission Sites" (September 2011).

ORSSAB's Stewardship Committee provided comments on the fact sheet and in February 2012, DOE issued another document that reflected input provided by ORSSAB and other site specific advisory boards.

The Stewardship Committee reviewed the revised document and concluded that, while the revision is useful and provides much good information related to turning remediated areas back to original landlords at an on-going mission site, it still believed that the format used in the LM fact sheet is more user-friendly and better suited for public use.

The recommendation re-stated ORSSAB's request to develop a fact sheet based on the LM fact sheet. In September 2013 DOE provided a revised fact sheet based on ORSSAB's recommendation.

# Milestones & Special Events

## Environmental Management and Stewardship Committees Merge

For many years ORSSAB had an EM Committee and a Stewardship Committee with separate missions. EM is interested in DOE's planning and implementation of environmental restoration projects on the ORR and on the treatment, storage, transportation, and disposal of wastes generated by remediation work.

Stewardship is interested in the long-term monitoring and protection of hazardous or radioactive waste that has been remediated in place to ensure contamination does not escape its confines, which could cause harm to humans or the environment.

But in August 2013 the committee members voted to merge because EM and Stewardship are related when remediation of contaminated areas means leaving waste in place and stewardship is required to protect those areas.

Merging the committees also eliminates duplication of effort and provides more board members a better understanding of how EM and stewardship are linked.

## DOE Oak Ridge EM Celebrates Quarter Century of Successes

The DOE Oak Ridge EM Program took a day to celebrate its accomplishments since its inception in 1989. The event, held May 2 at Pollard Auditorium on the campus of Oak Ridge Associated Universities, featured a number of displays of cleanup successes on the ORR and the premiere of a video created

as part of the DOE oral history project.

Dignitaries included Congressman Chuck Fleischmann; David Huizenga, Senior Advisor for the DOE EM Program in Washington, DC; TDEC Commissioner Robert Martineau; EPA Region 4

Deputy Administrator Stan Meiburg; and three former Oak Ridge Office managers who were instrumental in advancing the cleanup mission in Oak Ridge - Jim Hall, Joe LaGrone, and Gerald Boyd.

## ORSSAB Members Tour Transuranic Waste Processing Center

Several ORSSAB members toured the Transuranic Waste Processing Center (TWPC) in May. Attending were Lisa Hagy, Dave Hemelright, Donald Mei, Belinda Price, Corkie Staley, and Tom Valunas.



*A timeline of cleanup activities in Oak Ridge was part of the EM celebration of successes in May.*

Also attending were newly appointed member Wanda Smith and former member Gloria Mei. They were split into two groups and led by TWPC General Manager Bob McKay and Operations Process Manager Ron Gentry.

The groups were shown how contact-handled (CH) and remote-handled (RH) transuranic (TRU) waste is prepared for shipping. While processing continues at TWPC, no shipments will be made until 2014 when the Central Characterization Project returns to certify waste for shipment.



*Ron Gentry, TWPC Operations Process Manager, explains to ORSSAB members how remote-handled TRU waste is processed in the hot cells.*

Processing of CH waste is scheduled for completion in FY 2014 with shipping completed in FY 2017. Processing and shipment of RH waste is to be finished in FY 2016.

TRU waste is sent to WIPP near Carlsbad, N.M., where it is permanently disposed in salt caverns 2,100 feet below the surface.

## EM SSABs Participate in First Ever Webinar in Semi-Annual Meeting

Twice each year the leadership of the eight boards that comprise the national EM SSAB gathers to hear presentations on topics of common interest and share issues and concerns at the various sites.

In Spring 2013 however, the government sequestration impacted the April meeting, which was to be hosted by the SSAB at the Hanford, Wash., site. So, instead of a face-to-face meeting, the decision was made to

hold a webinar, a first for the Chairs' meetings, except for a videoconference in 2011.

The webinar was facilitated by Cate Alexander, the EM SSAB Designated Federal Officer. The agenda included an EM program update and discussion by David Huizenga, EM Senior Advisor; an EM budget update by Terry Tyborowski, Deputy Assistant Secretary for Program

Planning & Budget; and a waste disposition strategies talk by Frank Marcinowski, Deputy Assistant Secretary for Waste Management.



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# Board Meetings

ORSSAB meetings are held the second Wednesday of each month at 6 p.m., at the DOE Information Center, Office of Science and Technical Information, 1 Science.gov Way, Oak Ridge, Tenn. Each meeting features a presentation like the ones described below. Board meetings also include regular business items, such as approval of recommendations and status reports from DOE, EPA, TDEC, and the various ORSSAB committees. The public is always welcome to attend.

## October

In FY 2012 ORSSAB recommended to DOE that it find a way to automate the gathering of stewardship information to ensure adequate protection of areas with waste remediated in place and to document that information in the annual Remediation Effectiveness Report (RER) and the Five-year Reviews.

DOE soon after employed a Land Use Manager (LUM) computer system that tracks land use and engineering controls quickly and efficiently. At the October meeting Jason Darby, DOE, and Lynn Sims and David Watson of DOE contractor Restoration Services, Inc., explained how the LUM is used to track stewardship requirements.

The LUM is a system that runs on a sturdy portable computer that can be taken in the field. The information is recorded on the spot and uploaded to a central database. It eliminates paper checklists and keeps track of when inspections should be made.



*The LUM runs on a portable computer taken in the field to record stewardship information.*

## November

Joy Sager, DOE, discussed the status of legacy waste and material disposition activity on the ORR. Ms. Sager said there is a diverse collection of legacy, or leftover, materials from earlier operations on the ORR. Some of it is waste and will be disposed and some of it may have potential for re-use.

A large amount of legacy waste was disposed between 1994 and 2005, but some remains.



*Joy Sager explained the status of remaining legacy waste on the ORR at the November board meeting.*

Remaining non-waste material includes several tons of nickel that may have re-use potential.

Ms. Sager said legacy waste and material disposition represents a significant scope of work, but for now it is safely stored and monitored.

## December

The board did not meet in December.

## January

Jim Kopotic, DOE, updated the board on the status of cleanup at ETTP, particularly on the remaining portion of the K-25 Building. Demolition on the North Tower began in October 2012 and was completed near the end of January.

All that remained at the time were a few sections of the south end of the East Wing, which were contaminated with technetium-99. Mr. Kopotic said one of the higher risk jobs in those sections was the removal of five sodium fluoride traps.

He said some pre-demolition work had begun on the nearby K-27 Building.

## February

Alan Stokes, DOE, discussed the process for submitting budget requests for the DOE Oak



*Barbara Jackson explained DOE's procurement and contracting process in March.*



*Jim Kopotic talked about the last remaining sections of the K-25 Building and the status of other cleanup projects at ETTP in January.*

Ridge EM Program to DOE Headquarters. He explained that requests are developed two years ahead of time, so DOE Oak Ridge was working on the FY 2015 budget request.

In developing budget requests, projects that need funding are prioritized under a set of guiding principles:

- Protect human health and the environment.
- Comply with regulatory requirements.
- Support ongoing missions on the ORR.
- Support local and state economies by sequencing work to minimize impacts on the workforce.

Mr. Stokes also provided a list of near-term, mid-term, and long-term activities for the Oak Ridge EM Program.

## March

The Board heard two presenters. Brian Henry, DOE, talked about reindustrialization at ETTP and the transfer process of properties to private entities. Barbara Jackson, DOE, talked about the DOE procurement process.

Mr. Henry said reindustrialization efforts at ETTP have been underway for about 15 years, and Oak Ridge is recognized as a leader in the process around the DOE complex. As EM completes work at ETTP, land is made available for private development. Mr. Henry said most transfers use a covenant deferral request, primarily where an area has suspected contaminated groundwater. In those areas land can be transferred without waiting for groundwater remediation.

Ms. Jackson said contracting officers in Oak Ridge are responsible for awarding, administering, and closing contracts for amounts up to \$25 million. Contracts more than that are awarded at the Headquarters level.

She said it would not be possible for missions in Oak Ridge to be accomplished without the participation of small businesses. DOE's policy is to provide opportunities to small businesses to the greatest extent possible.



View the first hour of board meetings on YouTube at:  
[www.youtube.com/user/ORSSAB](http://www.youtube.com/user/ORSSAB)

## April

The federal project directors (FPDs) for ETTP, Y-12, and ORNL provided updates on activities at the three sites.



*At the June meeting Dave Adler explained the 'big picture' of cleanup across the DOE complex nationwide at all eight sites that have SSABs like Oak Ridge.*

Jim Kopotic, the FPD for ETTP, said the purpose of cleanup is to make most of the area available for private commercial industrial use. The scope of the work includes building demolition, and soil, buried waste, and groundwater remediation.

Laura Wilkerson, the FPD for Y-12, discussed cleanup objectives for the plant, including reducing mercury leaving the site and entering public waters, stabilizing mercury sources, removing excess facilities, and making land available for future missions.

Bill McMillan, the FPD for ORNL, said the cleanup strategy for the lab is sequenced according to the priorities to finish work at ETTP first, then focus on mercury at Y-12. He said significant demolition at ORNL will not begin until the mid-2020s. Near-term actions are focused on removal of transuranic waste and uranium-233 stored in the central campus of the lab.



## May

Jason Darby, DOE, and Dick Ketelle, UCOR, reviewed the 2013 RER. The purpose of the RER is to determine the effectiveness of remedial actions in achieving a stated goal and compliance with long-term stewardship requirements. If actions are not performing as expected additional actions could be taken. The 2013 RER did not find any new issues or make recommendations.

## June

Dave Adler, the board's Alternate Deputy Designated Federal Officer, provided an overview of the national DOE EM Program that includes work being done at Hanford, Wash., Nevada National Security Site, Los Alamos National Lab, Idaho National Lab, Paducah and Portsmouth Gaseous Diffusion Plants, Savannah River Site, and Oak Ridge.

About \$5.6 billion is divided among the sites for cleanup. Mr. Adler said it could take 30-40 years to finish all the work.

## July

The board did not meet in July.

## August

ORSSAB held its annual meeting at the Holiday Inn in Pigeon Forge, Tenn., to review activities and accomplishments for the year and begin planning for the next year.

Mr. Adler reminded the board that DOE looks for advice and recommendations on basic questions regarding cleanup on the

reservation, what areas should be reserved for waste disposal, and how those areas should be protected.

The board also reviewed topics that DOE, EPA, and TDEC suggested the board focus on in FY 2014. The topics suggested by the agencies included:

- Comprehensive groundwater strategy.
- Strategy to address mercury contamination at Y-12.
- Sufficient waste disposal capacity on the ORR.
- Completion of ETTP Zone 1 Soils Record of Decision.
- Input on DOE FY 2016 budget request.

## September

One of the original members of ORSSAB, Lorene Sigal, gave the board a refresher on the importance of stewardship on the ORR where waste is remediated in place.

The basis of stewardship in Oak Ridge is the result of work done in the mid-1990s by the End Use Working Group, which realized that waste remediated in place must have long-term stewardship protections. She said it was important for board members to make sure stewardship requirements are in decision documents where waste will remain in place.

The board elected officers for FY 2014. They are: Dave Hemelright, Chair; Bruce Hicks, Vice Chair; and Lisa Hagy, Secretary.



*During the final meeting of FY 2013, former board member Lorene Sigal explained the importance of stewardship on the ORR.*

# Committees

## Executive

General board business is handled by the Executive Committee, which is composed of the elected officers of the board and the standing committee chairs. The committee holds authority to set board agendas, coordinate the work of the committees, and transact business as necessary between regular board meetings.

## Finance & Process

This committee has overall responsibility for budget prioritization for the board, including setting budget targets for each type of expenditure, proposing general budget guidance, and reviewing monthly costs. The committee also serves as the board's forum for initial discussion on issues involving the ORSSAB Bylaws and Operating Procedures, annual meeting planning, and preparation of the board's annual work plan.

Each year ORSSAB is asked to provide input to DOE Oak Ridge EM regarding the development of its annual budget request to headquarters for operations two years beyond the current fiscal year. The Finance & Process Committee is responsible for a recommendation for the full board to consider on EM's budget request.

In FY 2013 members of the committee met with DOE personnel to learn about projects DOE wanted to focus on in 2015 based on the amount it expected to receive.

Based on that input the committee drafted its recommendation for the board to consider (Recommendation 216: Recommendation on Fiscal Year 2015 DOE Oak Ridge Environmental Management Budget Request, see Key Issues).

## Environmental Management

This committee evaluated and drafted recommendations on DOE's planning and implementation of ORR environmental restoration projects. In August the committee merged with the Stewardship Committee. See Milestones and Special Events.

Prior to the merger the EM Committee studied a number of topics in FY 2013.

### Siting of a second waste disposal facility

Most of the waste from cleanup operations on the ORR goes to the waste disposal facility in Bear Creek Valley, known as the Environmental Management Waste Management Facility.

Because more work has been added to the DOE Oak Ridge EM program scope, the current facility is forecast to be full by 2020, so a second disposal facility is needed.

The committee received a briefing on a remedial investigation/feasibility study (RIFS) that considered alternatives for handling the additional waste. The RIFS offered three alternatives:

- No action, in which case waste disposal would be determined on an individual project basis.
- On-site disposal.
- Off-site disposal.

The RIFS determined that no action was impractical and off-site disposal was too expensive. The preferred alternative was on-site disposal, and 13 potential locations were evaluated. The preferred site is 60-70 acres just east of the current facility. It would be known as the Environmental Management Disposal Facility. EPA and TDEC will offer comments on the study then a proposed plan suggesting a site is scheduled to be submitted for public comment. A final Record of Decision

documenting the location is scheduled for 2015.

### **Groundwater workshops**

Beginning in January, representatives of DOE, EPA, and TDEC participated in a series of workshops to build consensus on a path forward for managing groundwater challenges on the ORR.

Some areas of groundwater on the ORR are contaminated as a result of activities at Y-12, ORNL, and the former gaseous diffusion plant at ETTP. There is also concern that contaminated groundwater may be migrating off-site under public and private lands.

In FY 2012, ORSSAB identified Dan Goode, U.S. Geological Survey, an expert on groundwater flow characteristics, to act as a liaison to the board on the workshops and make periodic reports.

In May, Dr. Goode provided an overview of the purpose and status of the workshops. The project had a number of objectives to guide the path forward for groundwater remediation on the ORR:

- Identify and address potential threats to off-site public health from exposure to groundwater contaminated by ORR sources.
- Pursue selected remedial actions, as necessary, to prevent unacceptable risk and groundwater degradation and to restore groundwater to beneficial use where practicable.
- Achieve final ORR cleanup, including final groundwater decisions.

The first three workshops focused on groundwater flow basins and contaminant boundaries near Y-12, ORNL, and ETTP. The group worked to identify data gaps and uncertainties and potential projects to undertake.

The fourth workshop identified groundwater plumes and prioritized them. An early

groundwater action project was discussed at the fifth workshop, and groundwater use and restrictions were discussed at the sixth workshop.

With the conclusion of the workshops, a groundwater strategy document was issued in September. The EM & Stewardship Committee will study the document for a possible recommendation in FY 2014.

### **Remaining legacy materials**

In November, Joy Sager, DOE, made a presentation to the board about remaining legacy materials on the ORR (see Meetings). At the January EM Committee meeting Dave Adler, DOE, provided additional information, which the committee could use to draft a recommendation on the material.

He talked specifically about sodium shields stored at ETTP, shielded transfer tanks in Melton Valley near ORNL, 28 vaults of low-level waste on a concrete pad near ORNL, and a large amount of contaminated soil stored in Bear Creek Valley.

After hearing Ms. Sager's presentation and Mr. Adler's additional information, the committee drafted a recommendation, which the board approved as Recommendation 215: Recommendation on Remaining Legacy Materials on the Oak Ridge Reservation (see Key Issues).

### **Remediation strategy for Molten Salt Reactor Experiment**

In March, Ms. Sager briefed the committee on a remediation strategy plan for radioactive salts in the Molten Salt Reactor Experiment near ORNL. Ms. Sager said the salt appears to be eligible for disposal at WIPP in New Mexico. The plan calls for safe storage of the salt at the reactor site until 12 years prior to the closure of WIPP, which is projected to be in 2032.

## Uranium-233

Building 3019 at ORNL holds an inventory of uranium-233 (U233) that requires disposal. At the April meeting, Bill McMillan, DOE, briefed the committee on the status of the project.

He said Building 3019 is the oldest nuclear facility in the world, and there are concerns about storing a controlled nuclear material in such an old building. He said the presence of U233 at ORNL determines the level of security at the lab.

The project is to be accomplished in two phases. Phase I involves direct disposition and co-processing. Some of the U233 can be disposed directly at the Nevada National Security Site. Some of it can be co-processed with other waste at ORNL. Mr. McMillan said Phase II is still in the design stage to find additional methods for co-processing and direct disposition.

In June Nevada officials raised objections to shipping U233 to their state (see The Year's Top News). At the time this report was published DOE was working with Nevada to resolve the issue.

## Public Outreach

The goals of the Public Outreach Committee are to:

- Provide meaningful opportunities for dialogue between the surrounding communities and EM.
- Ensure ongoing community access to information and dialogue that improves the quality of EM's decision-making.
- Serve as the vehicle through which the public should communicate with EM.

To do this, the committee invites public participation in board activities and reaches out to the community in a variety of ways. News releases, publications, and many of the other materials listed below can be accessed on the board's website at [www.oakridge.doe.gov/em/ssab](http://www.oakridge.doe.gov/em/ssab).

Newspaper ads about the board's monthly meetings are placed in the *Oak Ridger* and *Oak Ridge Observer* newspapers, and notices are placed in the Federal Register.

Videos of the presentation portion of the monthly board meetings are posted on YouTube and broadcast on local public access cable stations in Oak Ridge, Knoxville, and Lenoir City.

The ORSSAB annual report is distributed to elected officials, government agencies, local media, organizations, and interested individuals to promote awareness of the board's mission.

The board's *Advocate* newsletter is distributed quarterly to inform area citizens about recent board activities and EM cleanup issues.

Guest editorials and news releases are published regularly on a variety of topics.

The board's Facebook page offers updated information on board activities.

Presentations are made by board members to local civic, educational, and government organizations to inform the public about the board and DOE cleanup activities.

Members represent the board at special events such as the Oak Ridge Earth Day and Secret City Festival, where information is distributed to interested individuals.

The annual Public Environmental Survey provides the public with an avenue to express their concerns about various activities associated with the EM program.

The board sponsors public meetings on key topics, such as historic preservation and the Oak Ridge EM budget request.

A permanent exhibit is maintained at the American Museum of Science & Energy in Oak

Ridge, using touch-screen kiosks, posters, and displays to tell the Oak Ridge cleanup story.

## **Stewardship**

Areas where contamination has been left in place after remediation must be monitored and protected to make sure the contamination does not escape its confines or that humans do not disturb the area that could lead to harmful personal or environmental exposure. Stewardship is the means and methods of protecting human health and the environment from contaminated material remediated in place.

The Stewardship Committee kept track of all things related to stewardship of remediated lands and water on the ORR.

In August the committee merged with the EM Committee. Following are the key issues the committee worked on in FY 2013 prior to the merger.

### **Site transition**

In FY 2011 ORSSAB recommended that DOE develop a site transition summary, explaining how remediated properties would be ceded to landlords who would be responsible for ongoing stewardship. In FY 2012 DOE provided such a document.

The committee reviewed the summary but noted that it didn't follow the format of a similar document produced by the Office of Legacy Management, which the committee suggested that DOE should use as a model.

The committee re-submitted its original recommendation asking that DOE follow the Legacy Management site transition summary. DOE provided a revised document late in FY 2013.

### **Land Use Manager**

In FY 2012 ORSSAB recommended that DOE automate the process for tracking stewardship requirements on the ORR. DOE instituted a system called the LUM (see Meetings). The LUM features centralized data storage, standardized content and reports, and accountable records of inspections. Inspectors take sturdy laptop computers into the field to record stewardship information and upload it to the central data storage.

The committee received a briefing and a demonstration of the LUM computer.

### **Annual Remediation Effectiveness Report**

Each year the committee receives a briefing on the annual Remediation Effectiveness Report. The report assesses progress of remedial actions on the ORR and some off-site locations toward stated goals and compliance with long-term stewardship requirements.

### **Permanent stewardship point of contact**

The committee drafted a recommendation, which the board approved (Recommendation 217: Recommendation on Stewardship Point of Contact for the ORR; see Key Issues), that DOE should always have a person in Oak Ridge responsible for stewardship issues. While the committee has always had a DOE liaison, committee members recognized that job assignments change periodically, and they felt it was important to have a position that had stewardship as part of the responsibilities.

DOE agreed to designate the liaison to the new EM & Stewardship Committee as the permanent stewardship point of contact.

# Members & Liaisons

*The following members and student representatives served during all or part of FY 2013.*



**Jimmy Bell** worked as a chemist at ORNL from 1963 to 1995. Most recently he provided consulting services to Egan, Fitzpatrick, Malsch & Lawrence, PLLC, a legal firm involved in environmental issues. He received

his Bachelor of Science (B.S.) degree in chemistry from Berry College and his doctorate in physical chemistry from the University of Mississippi. Jimmy lives in Kingston.



**Noel Berry** is a resident of Knoxville and is a retired project management professional, with extensive experience in computers and related quality assurance issues. He received his Associates Degree (A.S.) in electrical

engineering technology from Chattanooga State Technical Institute in Chattanooga, and his B.S. in computer science from St. Edwards University in Austin, Texas.



**Alfreda Cook** is retired from UCOR after serving as the Waste Performance Integration Manager until January 2012. She was instrumental in compiling and reporting corporate waste disposition data for several DOE Oak Ridge

environmental management contractors. She received her B.S. in organizational management from Tusculum College. Alfreda resides in Oak Ridge.



**Robert Craig** The late Mr. Craig retired from MSE Technology Applications, where he served as regional vice president until March 2012. He was involved in investigating, evaluating, and managing

environmental issues on the Oak Ridge Reservation for more than 35 years. He resigned from the board in May 2013.



**Carmen DeLong** has worked in the nuclear industry since 1991 at several DOE sites such as Fernald, ORNL, Portsmouth, and Rocky Flats. She later worked on the decontamination and decommissioning of

Buildings K-29, K-31, and K-33 at ETTP in Oak Ridge, which was the single largest nuclear project of its kind in the history of the U.S. at the time. Her experience includes system designs and modifications for utility and waste management projects.



**Lisa Hagy** is a financial services representative with First Tennessee Bank. She participates in a variety of United Way activities, has been a member of the Chamber of Commerce and served on the board of a domestic abuse shelter. She

attended the University of South Carolina. Lisa lives in Alcoa.



**Gracie Hall** is a student representative to the board for FY 2013-14. She is a senior at Oak Ridge High School, where she is a member of the National Honor Society, the Oak Ridge High School marching and concert band,

and the International Relations Club. After high school, Gracie hopes to obtain a degree in Spanish, perform service work in other countries, and pursue a career that allows her to work with animals.



**Mary Hatcher** is a student at Pellissippi State Community College in Knoxville concentrating on business and law. Until 2006 she was the owner of a metal finishing and detailing business in Marshfield, Mo. She was a

911 operator for the Webster County, Missouri Sheriff's Department and served on the board of directors of Southwest Missouri Legal Aid representing Webster County. Mary now lives in Louisville.



**Janet Hart** is an environmental engineer with the Knox County Fire Prevention Bureau. She received B.S. degrees in civil engineering and education and a master of science (M.S.) in environmental engineering from the

University of Tennessee-Knoxville. She is a member of the American Society of Civil Engineers. A resident of Andersonville, she completed one term of service in June 2013.



**Dave Hemelright** 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 and has served on the Loudon County Planning Commission. He received his Bachelor of Arts (B.A.) in American history from Hobart College. Dave lives in Lenoir City.



**Bob Hatcher** is a research scientist in the Department of Earth and Planetary Sciences at the University of Tennessee-Knoxville and holds the position of Distinguished Scientist and Professor. He worked 14 years under a

joint appointment between the university and ORNL as part of the UT/ORNL Distinguished Scientist Program. He received his B.S. in geology and chemistry and his M.S. in geology at Vanderbilt University. He earned his doctorate in structural geology from the University of Tennessee-Knoxville. He was the senior author of the early 1990s ORNL effort to produce a new geologic map and report on the geology of the ORR. Bob lives in Oak Ridge.



**Bruce Hicks** is the sole proprietor of MetCorps, which provides consulting services to several agencies. He retired in 2006 from the U.S. National Oceanic and Atmospheric Administration. From 1980 to 1990, he served as the

director of the NOAA Atmospheric Turbulence and Diffusion Division in Oak Ridge. Earlier, he worked for Argonne National Laboratory in Chicago and the Commonwealth Scientific and Industrial Research Organization in Melbourne, Australia. Bruce received his B.Sc. in physics and mathematics from the University of Tasmania and his M.Sc. in meteorology from the University of Melbourne.



**Howard Holmes** is a physician with Mercy Primary Care of Lenoir City. Howard earned his B.S. in microbiology and M.S. in natural sciences from the University of Arkansas. He attended medical school at St. George's University and

trained in internal medicine at East Tennessee State University. He resides in Lenoir City.



**Charles Jensen** is the owner and manager of Diversified Technologies, which manufactures, designs, and services wastewater treatment systems for nuclear power plants. He has authored several technical papers

regarding waste processing in the commercial nuclear industry. He completed six years of service and rotated off the board in June 2013. Charles lives in Knoxville.



**Jennifer Kasten** is a retired nuclear/environmental engineer. She was most recently employed from 2000 to 2005 at the Tennessee Valley Authority Watts Bar Nuclear Power Plant. From 1997 to 2000 she worked

in the Nuclear Engineering Department at the University of Tennessee. Jennifer received a B.S. in biology from Valparaiso University, a B.S. in civil/environmental engineering, and an M.S. in nuclear/radiological engineering from the University of Tennessee. Jennifer lives in Knoxville.



**Ross Landenberger** was a student representative to the board for FY 2012-13. He graduated from Oak Ridge High School, where he was a member of the

International Relations Club and the National Honor Society.



**Jan Lyons** is a former adjunct professor of risk management at Southern Methodist University in Dallas, Texas, where she worked in the Engineering Management, Information, and Systems Department.

Jan received her B.A. in economics from the College of William and Mary, her M.S. in systems engineering from Clemson University, and her doctorate in industrial and systems engineering and engineering management from the University of Alabama. She lives in Oak Ridge.



**David Martin** of Harriman is a self-employed engineer who has worked on a wide range of power engineering assignments worldwide. He served three terms on the board, completing his service as chair of the board in June 2013.



**Fay Martin** retired in 1996 from ORNL, where she worked as an environmental toxicologist. She received her B.S. in chemistry/botany/zoology from the University College of the West Indies, an M.S. in biology from McMaster

University, and her doctorate in environmental toxicology from the University of Tennessee. Fay resides in Oak Ridge.



**Scott McKinney** is the vice president of Petroleum Services with Groundwater & Environmental Services, Inc., which provides environmental assessment and remediation services. Scott received his associate of



engineering technology degree from the State Technical Institute in Knoxville and his B.S. in civil engineering from the University of Tennessee. Scott lives in Knoxville.



**Donald Mei** is a retired engineer who was employed from 1986 to 2007 by Duke Energy in Charlotte, N.C. During that time, he was the supervising engineer and technical manager in the Radiation Dosimetry and

Records Department and the senior engineer/nuclear production engineer in the Radiation Protection Section. Donald received his B.S. in physics from Cheng-Kung University in Taiwan, his M.S. in health physics from the University of Tennessee, and his doctorate in nuclear engineering from Kansas State University. Donald lives in Oak Ridge.



**Greg Paulus** retired as the president/owner of Metalite Industries, Inc., which produces and modifies products for persons with mobility disabilities. He retired as a lieutenant colonel from the U.S. Air Force. Greg

received his B.S. in mechanical engineering from Marquette University and his Master of Business Administration from Central Michigan University. Greg is a resident of Rockwood.



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

Certified Professional Geologist in the states of Alabama, California, Florida, Georgia, Kentucky, and Tennessee, and is a member of

the Geological Society of America and the East Tennessee Geological Society. Belinda received her B.Sc. in geology from the University of Bristol, U.K., and her M.Sc. in hydrogeology from University College London U.K. She lives in Knoxville.



**Julia Riley** is a student representative to the board for FY 2013-14. She is a senior at Hardin Valley Academy, where she participates in the National Honor Society, Leo Club, a Lions Club organization, and Venture Crew, a co-ed

branch of the Boy Scouts. Julia plans to pursue a wildlife and fisheries biology degree at Clemson University.



**Wanda Smith** lives near Rockwood and is the owner of a convenience store in Pine Orchard. She is a former member of Head Start, the Morgan County Industrial Board, and the Morgan County Civil Service Board. She was

a co-chair of the Morgan County Airport Planning Commission.



**Corkie Staley**, of Oak Ridge, retired as a teacher from the Oak Ridge City Schools in 2011. She is a past president of the Oak Ridge Education Association and a past member of the Tennessee Education Association Board of

Directors. Corkie serves on the Center of Oak Ridge Oral History. She received her B.A. in education from West Virginia State College and her M.S. degree in curriculum and instruction from the University of Tennessee. Corkie served on the board for one term from 2000 to 2002.



**Robert Stansfield** retired as a division geologist from the U.S. Army Corps of Engineers. He received his B.A. in geology from the University of Connecticut. Robert resigned from the board in April 2013.



**Scott Stout** is the acting director of the Office of Emergency Services for Roane County, Tennessee. He received his B.A. in liberal arts from Tennessee Wesleyan College and his Hazmat Specialist Certification from the

Tennessee Emergency Management Agency. Scott lives in Rockwood.



**Tom Valunas** retired in 2009 from Mid-America Renewable Fuels, Inc., where he served as chief financial officer. He received his B.S. in economics and his MBA from Wharton School at the University of

Pennsylvania. Tom is a resident of Oak Ridge. He completed one term of service in June 2013.



**Sam Yahr**, was a student representative to the board for FY 2012-13. He graduated from Hardin Valley Academy in Knoxville where he was a member of both the National Honor Society and the National Society

of High School Scholars.

## AGENCY LIAISONS



Susan Cange  
ORSSAB Deputy  
Designated  
Federal Officer



Dave Adler  
Alternate Deputy  
Designated  
Federal Officer



Melyssa Noe  
ORSSAB Federal  
Coordinator

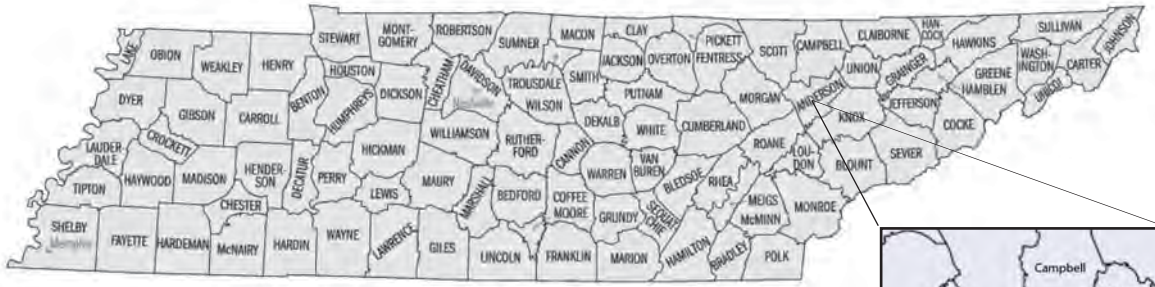


Connie Jones  
EPA Liaison



John Owsley  
TDEC Liaison

# SERVING NINE COUNTIES IN EAST TENNESSEE



Current number of board members from each county:  
 Anderson - 9  
 Blount - 2  
 Knox - 5  
 Loudon - 2  
 Roane - 4

## Join the Board

Applications for membership are accepted at any time and are actively solicited through a variety of media during specific recruitment periods. Technical expertise is not required for board membership, as a broad spectrum of backgrounds and viewpoints is desired. Residents from the counties affected by DOE operations are encouraged to apply. These counties include Anderson, Blount, Campbell, Knox, Loudon, Meigs, Morgan, Roane, and Union. Applications may be obtained by calling the ORSSAB support offices at (865) 241-4583 or 241-4584 or visiting our web page at <http://www.oakridge.doe.gov/em/ssab/join.html>

## ABBREVIATIONS

DOE	U.S. Department of Energy
EM	environmental management
EPA	Environmental Protection Agency
ETTP	East Tennessee Technology Park
FY	fiscal year
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
ORSSAB	Oak Ridge Site Specific Advisory Board
TDEC	Tennessee Department of Environment and Conservation
UCOR	URS CH2M Hill
WIPP	Waste Isolation Pilot Plant
Y-12	Y-12 National Security Complex



Oak Ridge Site Specific Advisory Board  
P.O. Box 2001, EM-91, Oak Ridge, TN 37831