

Oak Ridge Site Specific Advisory Board



**FY 2010
Annual Report**

October 2009 - September 2010

A Message from the Chair



Ron Murphree, Chair

It was another busy year for the Oak Ridge Site Specific Advisory Board (ORSSAB) as it hosted the Spring Environmental Management (EM) SSAB Chairs' meeting, sent 14 recommendations to DOE to consider, updated its museum exhibit, and continued monitoring and providing input on a number of topics and issues.

Twice a year representatives from the individual SSABs across the country gather to share concerns, work on common issues, and receive recent information from top DOE EM officials on various topics. It was ORSSAB's turn to host the Spring 2010 meeting in April in Oak Ridge. We were pleased to have a number of DOE officials, including Assistant Secretary for EM Inés Triay.

Finished just in time for the Chairs' meeting was our new museum exhibit at the American Museum of Science and Energy. The new addition is a three-sided kiosk featuring touch-screen monitors that lead visitors through key aspects of the DOE EM program: site cleanup activities, history, and long-term stewardship. Each monitor allows museum visitors to explore these three aspects in depth with detailed programs and videos.

During FY 2010 ORSSAB sent 14 recommendations to DOE to consider. Of particular note were recommendations to endorse and support a stewardship workshop, a recommendation on a phased approach for addressing potential off-site contamination in Melton Valley, recommendations and comments on the Long-Term Stewardship Implementation Plan, and a recommendation on the FY 2012 DOE-Oak Ridge EM program budget request.

The board also developed a procedure to play a more active role when special instances arise related to the DOE-Oak Ridge EM program. While DOE has the primary responsibility of notifying the public of topics of particular interest, the board's procedure is intended as a supplemental process to provide an additional avenue for the public to learn about issues of concern, ask questions of appropriate DOE personnel, and express views and opinions.

During FY 2010 ORSSAB was actively involved in providing a public forum for major projects that had significant impact on the Oak Ridge EM program. Through presentations at board and committee meetings, the public was able to receive detailed briefings on a variety of topics such as:

- Groundwater treatability study underway at East Tennessee Technology Park
- Engineering study to remove fuel salt from the Molten Salt Reactor
- Transuranic Waste Processing Center
- Corehole 8/Tank W-1A Removal Project
- Recovery Act projects

I think you'll agree after reading this annual report that ORSSAB members work diligently to represent Oak Ridge and surrounding communities in matters related to environmental cleanup of the Oak Ridge Reservation. We hope you'll take an active part in our work by attending our board and committee meetings. For information, visit our website at www.oakridge.doe.gov/em/ssab.

Ron Murphree, Chair

Contents

Introduction	2
Key Issues	4
The Year's Top News	8
Milestones & Special Events	10
Community Outreach	13
Board Meetings	14
Members	16
Service Hours	18
Committees	20
Abbreviations	21

MISSION STATEMENT

The mission of the Environmental Management (EM) Site Specific Advisory Board at Oak Ridge, Tennessee, is to provide meaningful opportunities for collaborative dialogue among the diverse multicultural communities surrounding the Oak Ridge Reservation, EM, and the U.S. Department of Energy Oak Ridge Office (ORO). The Board is chartered under the EM Site Specific Advisory Board Charter. At the request of the Assistant Secretary, the ORO Manager, or the ORO Assistant Manager for EM, the Board may provide informed advice and recommendations concerning the following EM site-specific issues: cleanup standards and environmental restoration, waste management and disposition, stabilization and disposition of non-stockpile nuclear materials, excess facilities, future land use and long-term stewardship, risk assessment and management, and cleanup science and technology activities. The Board may also be asked to provide advice and recommendations on any other EM project or issue. The Board ensures early, ongoing community access to information (and its interpretation and implications) and dialogue that improves the quality of the decision-making process of EM and ORO.



ON THE COVER: Workers revegetate an area near an East Tennessee Technology Park holding pond that was remediated.

Introduction

The Oak Ridge Site Specific Advisory Board (ORSSAB) is an independent, federally appointed citizens' panel that provides advice and recommendations to the U.S. Department of Energy (DOE) on its Oak Ridge Environmental Management (EM) program. The group was formed in 1995.

The board is dedicated to providing informed recommendations and advice to the DOE EM program regarding cleanup standards and environmental restoration, waste management and disposition, stabilization and disposition of non-stockpile nuclear materials, excess facilities, future land use and long-term stewardship, risk assessment and management, and cleanup science and technology activities. The board

is committed to reflecting the concerns of the communities impacted by EM activities at the Oak Ridge Reservation (ORR) and to serving as a communications link between the public and relevant government agencies, including local governments. A map of the ORR is shown in Figure 1.

The board is composed of up to 20 members, chosen to reflect the diversity of gender, race, occupations, views, and interests of persons living near the ORR. Members are appointed by DOE and serve on a voluntary basis, without compensation. At the close of Fiscal Year (FY) 2010, the board consisted of 18 voting members from five counties: Anderson, Blount, Knox, Loudon, and Roane.

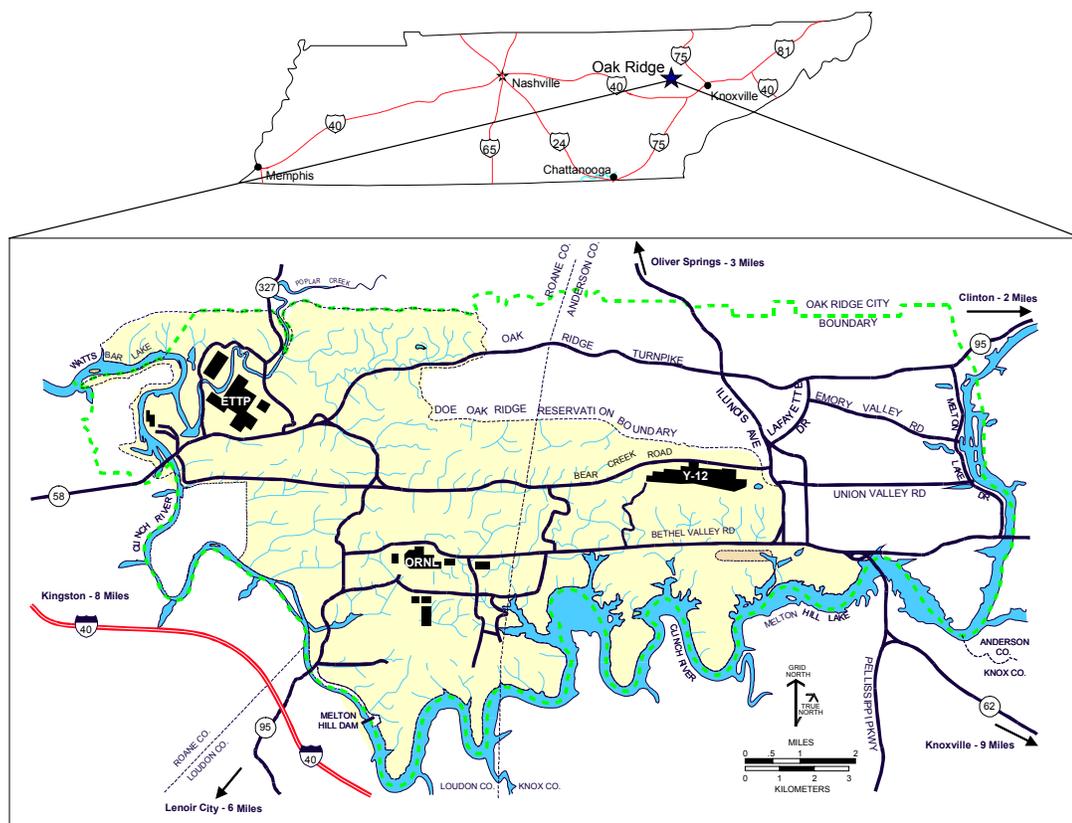


Figure 1. Map of the Oak Ridge Reservation showing East Tennessee Technology Park (ETTP), Oak Ridge National Laboratory (ORNL), and Oak Ridge Y-12 National Security Complex (Y-12).

Non-voting liaisons include representatives from DOE-Oak Ridge, the U.S. Environmental Protection Agency (EPA) Region 4, and the Tennessee Department of Environment and Conservation (TDEC). These liaisons advise the board on their agencies' policies and views. Non-voting student participants also serve on the board to represent the viewpoints and concerns of area youth.

ORSSAB provides a number of avenues for the public to learn about and express their views on DOE-Oak Ridge EM work. All board and committee meetings are open to the public and are posted in newspaper advertisements and at the DOE Information Center in Oak Ridge. Board meetings are also advertised in the *Federal Register* and are video recorded and broadcast on local cable television stations. Copies of the meeting videos are available for public review at the Information Center.

The board maintains a web site at www.oakridge.doe.gov/em/ssab, where information can be found. Information is also available by calling the ORSSAB support offices at (865) 241-4583 or 241-4584.

Board Meetings

The board meets monthly 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.

The board conducts its deliberations under its bylaws and Robert's Rules of Order and strives for consensus in reaching decisions.

Committees

A diagram of the board's FY 2010 structure is shown in Figure 2. 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.

ORSSAB committees usually meet monthly, and all meetings are open to the public. Each

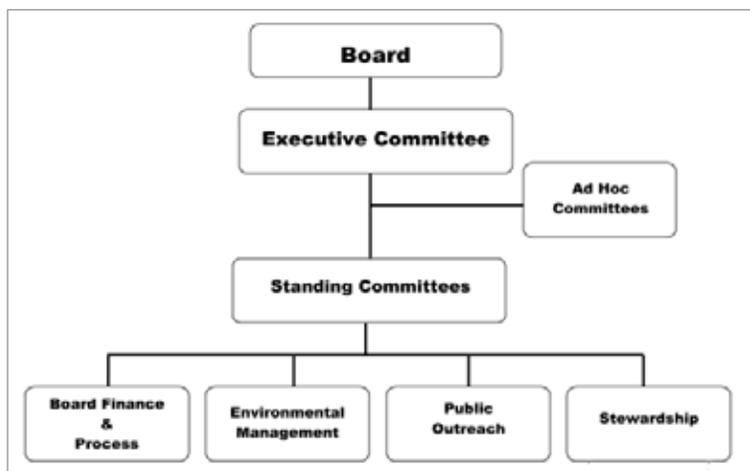


Figure 2. FY 2010 ORSSAB committee structure.

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 2010 Board Officers

Officers for the year were: Chair—Ron Murphree; Vice Chair—Kevin Westervelt; Secretary—Ed Juarez.

Key Issues

Following are key issues that resulted in board recommendations in FY 2010. Complete text of all recommendations is available at www.oakridge.doe.gov/em/ssab/recc.htm.

ETTP

The board made three recommendations in FY 2010 related to ETTP that reflected the diversity of issues in the scope of cleanup activities there this year: transfer of land and facility to the private sector, historic preservation, and management of the cleanup program.

Recommendation 185: Environmental Assessment for the Transfer of Land and Facilities at ETTP—In a February 2010 recommendation, ORSSAB agreed with the proposed transfer, with the notable exception of ED-3, which the board felt should remain undeveloped. The board said a ‘bounding’ analysis, a mechanism to predict environmental effects on an area based on possible development, should include consideration of the failure of the implementation of land use controls. It also suggested independent verification of clean status of the proposed parcels to be transferred. Finally, the board said DOE should file notices of contamination in land records and should include land use restrictions in covenant deferral requests.

Recommendation 190: Bridge Memorandum of Agreement for Site Interpretation of ETTP—In April 2010 DOE issued a revised memorandum of agreement for historical site interpretation at ETTP. The agreement created a stir among some consulting parties to the original 2005 agreement because it was issued without involving the parties. In response, DOE issued a “bridge” agreement in May to keep the agency in compliance with the National Historic Preservation Act while allowing time to develop a revised agreement with input from consulting parties.

The new agreement will be developed, in part, based on the results of a feasibility study that

was commissioned by DOE to provide recommendations for historic preservation at ETTP.

At its June 2010 meeting, ORSSAB offered some specific comments on the bridge agreement and recommended a public meeting be held to discuss the results of the feasibility study when it is complete.

Recommendation 191: Request for Proposals for ETTP—In May 2010 DOE-Oak Ridge issued a draft request for proposals (RFP) for a cleanup contract for ETTP. The scope of the contract is to decontaminate and decommission the major facilities at ETTP, including the remainder of the K-25 building, the K-27 building, and K-1037. It also includes remediation of associated media and continuation of EM activities underway at ORNL and Y-12.

ORSSAB developed a number of recommendations for the RFP that referred to sections that the board felt needed clarity. The board was also concerned that there was no mention of technetium contamination in the K-25 building.

Stewardship

Long-term stewardship of contamination on the ORR has been an ORSSAB priority almost since the inception of the board. In FY 2010, the board continued its initiatives to institutionalize stewardship requirements locally and motivate DOE-Headquarters into taking more interest in stewardship at sites with ongoing missions.

Recommendation 182: Endorsement and Support of a Stewardship Workshop—In 1999 ORSSAB hosted a national stewardship workshop that was attended by more than 100 stakeholders from across the country. Participants identified public involvement in long-term stewardship and development of site-specific plans as points of primary concern. The need to institutionalize stewardship with the establishment of a DOE policy and the pursuit of legally binding agreements were concerns as well.

Long-term stewardship responsibility for closure sites is now in the hands of the DOE Office of Legacy Management. Responsibility for stewardship at sites with ongoing missions when cleanup is finished is not completely clear, and the issues from the 1999 workshop remain unresolved. As a result, ORSSAB submitted a recommendation urging DOE sponsor another national workshop.

In response to the recommendation, DOE noted that the Office of Legacy Management was already planning a conference on stewardship at closed sites in November. With ORSSAB's recommendation, the conference was expanded to include a discussion of stewardship at ongoing mission sites, and a stakeholder panel on the topic was added to the agenda.

Recommendation 193: Agenda Topics for the Long-term Surveillance and Maintenance Conference—As a follow-on to Recommendation 182, ORSSAB drafted some suggested topics for the conference agenda:

- Roles and responsibilities of stewards
- Transition of remediated areas from EM to other landlords
- Funding for long-term stewardship
- Community involvement in stewardship
- Information on remediated sites
- Commitment of DOE-Headquarters to stewardship

The topics were sent to DOE-Headquarters, which forwarded them to Legacy Management as suggested conference agenda items.

Recommendation 188: Long-Term Stewardship Implementation Plan—As far back as 1998, the End Use Working Group, which was organized by ORSSAB, recommended that DOE develop a stewardship implementation plan for the ORR. In 2003 ORSSAB submitted a draft strategic plan for long-term stewardship to DOE and in 2004 provided DOE with an annotated outline for a stewardship implementation plan that would carry out the strategic plan.

In October 2009 Bechtel Jacobs provided a draft plan for the board to review. Over the next few months the board provided comments on the plan, which describes the elements of long-term stewardship to protect human health and the environment after cleanup of the reservation is complete. It spells out specific stewardship operations and who is responsible for ensuring those steps are funded and implemented. The board subsequently endorsed the plan and recommended that DOE accept and employ it.

Remediation and Waste Management

In addition to the main concern in FY 2010 (completing Recovery Act projects) the board dealt with other issues related to remediation and waste management that resulted in the following recommendations.

Recommendation 181: Fact Sheet for the ESD for the Record of Decision of CERCLA Waste—In October 2009 ORSSAB sent DOE a recommendation saying the EM low-level waste landfill in Bear Creek Valley should have a proper name. DOE had issued a fact sheet on an explanation of significant differences (ESD) explaining why the record of decision (ROD) that established the landfill should be modified to allow expansion of the facility.

DOE wants to expand the landfill known as the EM Waste Management Facility. However, an expansion requires modifying the ROD that authorized its construction. That change is documented through an ESD, which states the case for expansion and by how much. The ESD is explained through a fact sheet.

The board made some minor comments on the fact sheet, but its recommendation was to use the ESD as a way of formally naming the landfill the EMWFM. It has been pointed out that the name is not used in the ROD and could hinder document searches. DOE states that this

is not the case and is working to make sure all databases and other sources relate EMWMF to the landfill and the ROD. A stewardship map that notes waste left in place will also provide information concerning decision documents and site names.

Recommendation 183: Preferred Alternative for the Removal of Hexavalent Chromium in Mitchell Branch at ETTP—At its January 2010 meeting the board endorsed a plan by DOE to reduce the concentration of chromium contamination in Mitchell Branch, a stream that runs through the northern portion of ETTP. The stream has been impacted by hexavalent chromium, the source of which is unknown.

According to the evaluation of the endorsed alternative, it is effective for the long term and easy to implement, with a capital cost of approximately \$80,000 and annual operating and maintenance costs of approximately \$250,000. The total unescalated cost for 30 years is approximately \$7.7 million.

Recommendation 187: Phased Approach for Addressing Potential Off-Site Contamination in Melton Valley—Since the late 1940s, operational waste from ORNL and other sites had been disposed in trenches and in deep geologic strata in Melton Valley near ORNL. And though steps have been taken to contain the waste, low levels of strontium and high pH readings have been observed in wells on the western end of Melton Valley. High pH levels have also been noted in wells on private property across the Clinch River from the ORR.

ORSSAB recommended in April 2010 a phased approach for addressing off-site contamination. The first step would be to develop a data set for groundwater chemistry. The second step would be an analysis to better understand groundwater transport systems in Melton Valley. The third step would be to determine the need for additional wells, how many might be needed, and how much it would cost.

DOE's response indicated plans to follow closely ORSSAB's recommendation for the phased approach.

SSAB Chairs Recommendations

As one of the eight SSABs comprising the national EM SSAB, ORSSAB sends members to semiannual meetings to discuss common issues. In FY 2010 the following two recommendations were crafted by attendees, ratified by the site boards, and sent to DOE Headquarters.

Recommendation 186: Inclusion of Option Periods in All Future DOE Requests for Proposals for Prime Contracts—DOE has awarded numerous contracts in recent years to manage projects and perform work at EM sites across the DOE complex. Currently DOE awards prime contracts for a Base Period of Performance, which is typically five years, some with option periods, some without. If an option period is not included, DOE must go through the formal process of bidding each contract when the Base Period of Performance is nearing expiration.

In the event that a prime contract is awarded to a contractor other than the current contractor, DOE, the local community, and the workforce endure the transition to another contractor. The rebid process and transition are costly and time consuming, they create significant retraining requirements, can cause delays in cleanup schedules, distract the workforce which can result in safety issues, and cause economic uncertainty within the local community.

In order to maintain continuity of service and minimize future impacts on footprint reduction, the EM SSAB recommended in January 2010 the inclusion of option periods in the language of all future DOE RFPs for prime contracts when appropriate.

Recommendation 194: 2012 Baseline Budget—In September 2010 the EM SSAB chairs were concerned that as DOE moved beyond 2011, when Recovery Act money for additional scopes of cleanup will essentially cease, that DOE EM should ensure that the momentum of cleanup through activities funded by Recovery Act dollars does not stop.

The chairs urged EM to request base program budgets for 2012 and beyond that are compliant with meeting negotiated cleanup levels and timelines and that take advantage of the skilled workforce now in place at each DOE site. The chairs urged EM to apply lessons learned under the Recovery Act program to implement productivity improvements to ensure that no momentum is lost with planned projects.

Other Issues

In addition to recommendations on remediation and stewardship, the board made the following recommendations in FY 2010 on several other related topics.

Recommendation 184: Establishment of a Procedure for Specially Called Public Meetings—A concern was raised at ORSSAB's 2009 retreat that the board should play a more active role when special instances arise related to the DOE-Oak Ridge EM program. These instances include operational emergencies, such as the strontium-90 spill on Highway 95 in May 2004.

To address this concern, the board formulated a plan for calling special meetings of the board, when appropriate, to provide a forum for public information and input when such instances arise. The procedure was approved by the board in February 2010. DOE subsequently concurred with the recommendation, and it was incorporated into the ORSSAB Operating Instructions in September 2010.

Recommendation 189: FY 2012 DOE-Oak Ridge EM Program Budget Request—In February 2010 the board received a briefing on how budgets are developed for DOE's EM program at the national and site levels. It was pointed out that the DOE-Oak Ridge priority is demolition and cleanup at ETTP. Both EPA and the state have questioned DOE on placing so much emphasis on demolition and not as much on cleanup of environmental media.

The ORSSAB EM committee discussed that issue and generated a draft recommendation on the DOE-Oak Ridge budget request for FY 2012. The board approved the recommendation from the EM Committee and urged DOE to re-evaluate its priorities of building demolition on the reservation to allow more funds for environmental remediation.

Recommendation 192: Draft 2010 Remediation Effectiveness Report—This report is published annually by the DOE-Oak Ridge EM program to assess the effectiveness of each completed remedy on and around the ORR. ORSSAB developed a number of recommendations on the document in June 2010. The recommendations suggested a number of editorial comments and noted that mercury in fish tissue is still an issue. The board asked that a description of possible offsite mercury sources that may contribute to the problem be included in the report.

The board asked that the release of uranium from Bear Creek Burial Grounds be recognized as a high priority for annual budget allocations. Another high priority for budget allocation was the completion of equipment removal from the Alpha 5 and Beta 4 buildings at Y-12.

The report noted that a lack of groundwater monitoring wells in Zone 2 at ETTP makes it impossible to precisely track contaminated groundwater. The board recommended that DOE develop a plan to place additional monitoring wells in Zone 2.

The Year's Top News

Recovery Act Project Savings Allow for Additional Cleanup Work

In FY 2010 Oak Ridge cleanup projects funded by \$755 million in American Recovery and Reinvestment Act funds were well underway, several had been finished, and contracts were awarded for the rest. In fact, things were going so well that additional projects, called 'buy backs,' were selected to be done using savings realized from current projects.



The original batch of Recovery Act projects was divided among ETPP, ORNL, and Y-12. A total of 49 buildings across the ORR were scheduled for demolition, and a variety of non-demolition projects were also undertaken, from tank and soil remediation, to capping of old burial grounds, and expansion of the EM waste disposal facility in Bear Creek Valley.

DOE received some very favorable bids for that work. Plus, the estimates used for the original Recovery Act apportionments were based on a 50 percent confidence level. More detailed planning and bids that were considerably lower than what had been allotted resulted in resources to expand cleanup scope.

In all, about \$115 million was available to address the buy backs. The new work had to be obligated by the end of September 2010 and be completed by 2012.

DOE Commissions Two Studies on Historic Preservation Issues

In 2010 DOE commissioned two studies that it hopes will help resolve stalled efforts to de-

termine how best to preserve the important history of the K-25 building, as well as other key sites across the ORR.

The first is a study being conducted by Mac West on general mitigation measures for historic preservation at ETPP and general mitigation measures for the reservation.

The second is an engineering study being done by Lorig Wyllie of San Francisco to provide an independent assessment of the viability for preservation of various portions of the K-25 building. Wyllie is a highly regarded structural engineer who has been associated with a number of organizations across the country that are interested in the preservation of historically significant buildings.

The West and Wyllie reports will be evaluated together by DOE to determine the ultimate fate of the remaining portions of K-25.

Well Drilling Initiated Across the River from Melton Valley Waste Areas

M&W Drilling completed work in 2010 on a series of 16 wells on the west side of the Clinch River. Several of the monitoring wells are new,



and others were retrofits of private wells. The wells were installed to monitor for possible contamination coming from Melton Valley under the Clinch River and into groundwater on private property on the west side of the Clinch. Elevated pH

levels in some of the old existing wells across the river had led the state to question whether contamination was migrating underneath the

Clinch, prompting DOE to install new monitoring wells and retrofit some of the old ones. Sampling in the wells is being conducted, and results should be forthcoming in early 2011.

Incinerator Shuts Down

The Toxic Substances Control Act Incinerator at ETTP permanently ceased operations December 2 at 9:43 a.m. From the beginning of operations in 1991 to its closure, the incinerator burned more than 34 million pounds of solid and liquid waste. During FY 2009 it burned almost 1.7 million pounds of liquid waste and 142,000 pounds of solid waste.



The incinerator had been targeted for closure several times in the last few years, but operations were extended to handle additional wastes that continued to come in.

DOE Issues Request for Proposals for New Cleanup Contract

DOE issued a Request for Proposals for a new cleanup contractor for ETTP. While the title indicates work is to be done at ETTP, it contains options for other work at ORNL and Y-12. The new contract is estimated to be worth \$1.8–2.6 billion. Sixty percent is to be subcontracted, and half of that is to go to small business. A new contractor is expected to be in place in 2012.

Major Dispute Resolved Between DOE and Regulators, but Others Linger

With the rush to get Recovery Act projects underway behind them, DOE, EPA, and the state battled in 2010 over out-year budgets and priorities in a way not seen for some time.

DOE went into formal dispute with the state and EPA this year over its inability to meet its Federal Facility Agreement deadlines on several projects, and the state denied multiple requests to modify the milestones.

Two disputes were resolved in October 2010, resulting in an agreement in which DOE will pay more than \$800,000 in fines for not meeting several milestones. Under the agreement, DOE will pay TDEC \$500,000 and over \$300,000 to EPA. And while the two formal-level disputes were resolved, eleven others are still in the informal-dispute stage.

Draft National Park Study Favors Los Alamos Site Over Oak Ridge

The National Park Service released its long-awaited “Draft Special Resource Study and Environmental Assessment on Manhattan Project Sites” to the public in late November 2009. The purpose of the assessment is to



conduct a study on the preservation and interpretation of historic sites of the Manhattan Project for potential inclusion in the National Park System.

After studying several alternatives, the Park Service’s preference is apparently to create a new Manhattan Project National Historical Park at Los Alamos. The three other Manhattan Project sites—resources and historic districts located in Hanford, Wash.; Oak Ridge; and Dayton, Ohio—would be considered associated with, but not operationally part of, the Los Alamos-based National Historical Park. The public comment period ended March 1, and the Park Service is now considering comments.

Milestones & Special Events

EM Celebrates 20th Anniversary

DOE-Oak Ridge observed the 20th anniversary of the establishment of the EM program at a celebration on November 19, 2009.



ORSSAB Chair Ron Murphree speaking at the EM 20th anniversary celebration November 19, 2009.

On hand were a number of guests and speakers, including ORSSAB Chair Ron Murphree and Gerald Boyd, Manager of the DOE Oak Ridge Office.

In his remarks, Boyd touched on the role the public has played in the cleanup process. “The public has been involved in all aspects of DOE’s reservation cleanup work, and many cleanup decisions have been shaped by public input,” he said. “One of the key avenues that DOE relies on to reach out to the public is through the Oak Ridge Site Specific Advisory Board. This board has been indispensable to the Oak Ridge EM Program.”

Ron Murphree complemented DOE in turn. “EM has shown an exemplary regard for the public’s input into the cleanup decision-making process,” he said. “Since ORSSAB was established over 14 years ago, the board has issued more than 180 recommendations to EM on various topics. EM has not always agreed with our recommendations, but in every case they have made a good faith effort to incorporate the concerns of the citizens of this area. I believe it is this attitude of inclusiveness and openness that has helped EM establish the solid record of progress and performance we celebrate today.”

ORSSAB Annual Retreat Kicks Off a New Fiscal Year and Fresh Direction

Each year ORSSAB holds its annual planning retreat to achieve two main goals: to start the process for work plan development and to review the operations of the board. This year the retreat was held on Saturday, August 21, in Townsend, Tenn., and was facilitated by Lori Isenberg of Northwest Dynamics. Isenberg is the regular facilitator for the Idaho SSAB.

John Eschenberg, who has served as the board’s Deputy Designated Federal Officer since arriving in Oak Ridge this time last year,



The annual retreat allowed board members and liaisons to examine the previous year’s work and plan for the coming fiscal year in a relaxed environment.

kicked off the retreat. DOE, EPA, and TDEC liaisons to the board discussed issues provided by their respective agencies for the members to consider incorporating into the board's FY 2011 work plan. Issues were also provided this year by the Local Oversight Committee's Citizens Advisory Panel. These issues and others suggested at the retreat were voted on by the members and were forwarded to the ORSSAB standing committees for discussion at their September meetings.

Ms. Isenberg led off the 'review of board operations' portion of the retreat by discussing the results of the member survey she performed prior to the retreat. She said the survey results show that the board is doing great. And while the board should celebrate what is working well, there are still opportunities for improvements illustrated in the survey results: participation on committees, measurable goals and objectives, follow-up and accountability, and public outreach.

The retreat concluded with a clear path forward for the committees to follow in generating their individual work plans for FY 2011. Follow up on overall board issues and other retreat-related items will be done by the board's Executive Committee.

ORSSAB Hosts the Spring 2010 National SSAB Chairs Meeting

On April 28–29, 2010, ORSSAB hosted the SSAB chairs meeting at the DoubleTree Hotel in Oak Ridge. The chairs of the SSABs from across the DOE complex meet twice a year to hear presentations and discuss EM projects and policy, share ideas and

concerns among sites, and identify and work on common issues.

The day before the meeting began, many of the participants went on a day-long tour of the ORR. They were treated to two talks by ORSSAB member Steve Stow—one on the history of the Graphite Reactor and the other on the role of Oak Ridge during the Manhattan Project. That evening they gathered at the American Museum of Science and Energy for a reception and tour of the museum.

On the first day of the meeting, DOE Assistant Secretary for EM Inés Triay provided an update on the EM program. Next on the agenda was a round robin presentation from the chairs outlining issues specific to their sites. The afternoon session began with a detailed presentation on how EM develops its budget and prioritizes projects. That discussion was led by Joann Luczak, Deputy Assistant Secretary for Program Planning and Budget, Connie Flohr, Acting Director, Office of Budget, and Mark Janaskie, Office of Strategic and Planning Analysis. Frank Marcinowski, DOE Deputy Assistant Secretary for Technical and Regulatory



More than 70 people from across the country came to Oak Ridge in April 2010 to participate in the spring EM SSAB chairs meeting.

Support, and Larry Camper with the Nuclear Regulatory Commission concluded the day's meeting with a detailed discussion of waste disposition issues.

The chairs met for a half day Thursday, but it was a busy morning dedicated to stewardship issues, including a background overview, review of stewardship at closed and ongoing mission sites, and next steps for stewardship. The discussion provided important background for an upcoming three-day long-term surveillance and maintenance workshop planned for November in Grand Junction, Colo.

ORSSAB Adds New Interactive Kiosk to Its Museum Exhibit

In April 2010 ORSSAB debuted a colorful new three-sided kiosk for its exhibit at the American Museum of Science and Energy in Oak Ridge. The kiosk features three touch-screen monitors that lead visitors through key aspects of the DOE EM program: site cleanup activities, history, and long-term stewardship. The monitors allow museum visitors to explore these three aspects in depth with detailed programs and videos.

Located on the second floor of the museum, the ORSSAB exhibit was first installed in February 2005. The exhibit features a variety of displays and posters that tell the story of the Oak Ridge EM program.

Featured is a scale model of the EM Waste Management

Facility in Bear Creek Valley, which provides visitors an idea of the magnitude of the cleanup effort on the ORR. A smaller touch-screen kiosk takes visitors on an interactive journey through the cleanup process at the Gunitite Tanks, one of the highly successful remediation projects at ORNL. Suspended over the exhibit is one of the remotely controlled planes that used infrared photography to survey waste disposal sites on the reservation.

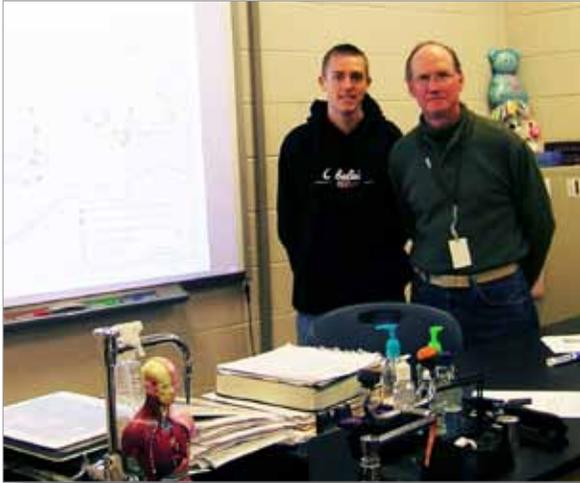
A variety of colorful posters inform visitors about cleanup program topics, including an overview of the EM program, the challenges the program faces in Oak Ridge, and reindustrialization of ETTP. A poster explaining what ORSSAB is and what it does is featured prominently, and another explains how the remotely controlled airplane overhead was used by the cleanup program.

The museum is located at 300 South Tulane Ave., Oak Ridge, and is open daily Monday–Saturday, 9 a.m.–5 p.m., and Sunday, 1–5 p.m.



Community Outreach

The goal of ORSSAB outreach is to achieve the board's mission as it relates to community involvement. To do this, ORSSAB invites public participation in a variety of board activities.



ORSSAB student representative Josh Pratt joined board member Tim Myrick for presentations to Hardin Valley Academy science classes in February 2010. Tim presented five real-life cleanup scenarios to students, who then had to figure out what cleanup strategy to select for the projects, weighing cost, risk, and other factors.

Meetings/Presentations

- Notices are placed in the *Federal Register*, *Oak Ridger*, and *Oak Ridge Observer* to inform the public of board and committee meetings.
- Monthly board meetings begin with a relevant EM-related presentation. This portion of the meeting is subsequently broadcast on local public access cable stations.

Publications/Reports/Presentations

- The ORSSAB annual report is distributed to state legislators, government agencies, and local media and organizations to promote awareness of the board's mission.
- The board's *Advocate* newsletter is distributed quarterly to inform stakeholders about recent board activities and EM cleanup issues.

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

Special Events/Exhibits/Internet

- Members represent the board at events such as festivals and expos, where informational brochures and ORSSAB logo items are distributed to interested individuals.
- Educational materials, including teacher resources, are prepared to aid public understanding of cleanup and post-cleanup issues.
- Board members participate in high-profile awareness events, such as the teacher's workshop on the ORSSAB Stewardship Education Resource Kit, and plan new ways to reach out to the community.
- A toll free number (1-800-382-6938) and Web site (www.oakridge.doe.gov/em/ssab) provide avenues for information.
- ORSSAB maintains a permanent exhibit at the American Museum of Science & Energy in Oak Ridge, using touch-screen kiosks, posters, and displays to tell the Oak Ridge cleanup story.



ORSSAB members Sondra Sarten, Betty Jones, and Kevin Westervelt were among the seven members who staffed the board's booth at the Oak Ridge Secret City Festival in June.

Board Meetings

ORSSAB meetings are held the second Wednesday of each month at 6 p.m. at the DOE Information Center, 475 Oak Ridge Turnpike, Oak Ridge. 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 and participate.

October 2009

DOE's Laura Wilkerson and Dave Adler briefed the board on the various cleanup activities funded by the American Recovery and Reinvestment Act at Y-12 and ORNL.



ORSSAB Chair Ron Murphree talks with three visitors from the Paducah Citizens Advisory Board who attended the October 2009 ORSSAB meeting.

November 2009

The November presentation was a brief history of the White Oak Dam and Sediment Control Structure on the western boundary of the ORR. Jim Kopotic, DOE-Oak Ridge Federal Project Director for ORNL EM Projects, discussed activities to maintain the structural integrity of the dam.

December 2009

Sid Garland of Bechtel Jacobs Company discussed efforts to reduce hexavalent chromium contamination in Mitchell Branch at ETTP. The board later made a recommendation for a phased approach to reduce hexavalent chromium in the stream (see Recommendations).

January 2010

Five units of the lower east wing of the K-25 building at ETTP are contaminated with technetium-99, a high yield fission product. Jim Thiesing of Bechtel Jacobs Company said the waste acceptance criteria do not allow technetium contaminated material to be disposed in the on-site waste disposal facility. Contaminated sections will be isolated from the remaining portions of K-25 and disposed at the Nevada National Security Site.

February 2010

Art Haugh, DOE-Oak Ridge Director of Project Controls and Administration, explained how EM budgets are developed and allocated. He also talked about EM priorities nationwide and locally, the first priority always being worker safety. In Oak Ridge the next priority is demolition of unneeded buildings.

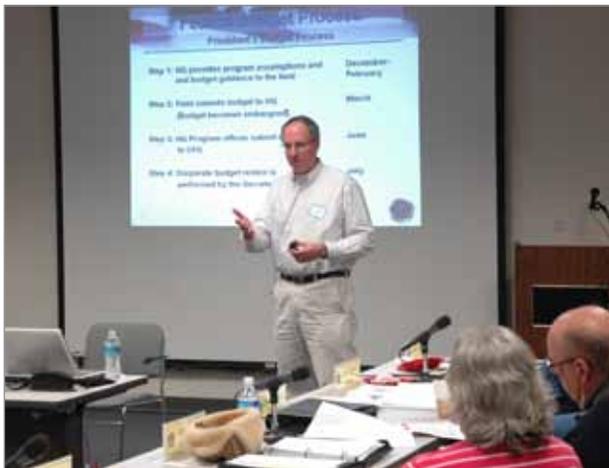
March 2010

Wendy Cain, who is the Deputy Federal Project Director for the Uranium-233 Project, provided an update on the downblending of uranium-233 at Building 3019 at ORNL. She said the mission of the project is to provide a cost-effective, safe,



Lorene Sigal at the July 2010 ORSSAB meeting.

compliant processing and disposal of all the U-233 in Oak Ridge.



DOE's Art Haugh discussed the federal budget process at the February 2010 board meeting.

April 2010

The board received a briefing on the 2010 Remediation Effectiveness Report from Jason Darby, DOE-Oak Ridge. This annual report, a collection of data gathered from all environmental cleanup projects on the ORR, evaluates progress toward remediation goals.

May 2010

EPA representatives Ezequiel Velez and Douglas Chatham gave a presentation on the cumulative effects of waste processors in the area and discussed the Toxics Release Inventory—a publicly available database that contains information on toxic chemical releases and other waste management activities.

June 2010

Jay Mullis, DOE-Oak Ridge, provided a briefing on the Draft Request for Proposals for the ETTP cleanup contract. The RFP is a solicitation for a new prime cleanup contractor for the ORR, which includes

facility surveillance and maintenance and waste management operations at Y-12 and ORNL.

July 2010

Lorene Sigal, a former member of the board and a public member of the board's Stewardship Committee, discussed the history of stewardship activities by the board since 1996 and talked about current concerns related to stewardship locally and across the DOE complex, particularly at ongoing mission sites.

August 2010 Annual Retreat

The board met for its annual retreat at Dancing Bear Lodge in Townsend, Tenn., on August 21. John Eschenberg, the board's Deputy Designated Federal Officer, suggested the board should focus on EM budget, out-year prioritization, historic preservation, and long-term stewardship and future land use. DOE, EPA, and TDEC liaisons to the board also provided suggestions for the board to consider as part of its FY 2011 work plan.

September 2010

In response to concerns about stewardship that were raised at the July meeting, DOE's Dave Adler discussed the types of stewardship activities DOE performs on the ORR.



Sid Garland of Bechtel Jacobs Company discussed chromium contamination in Mitchell Branch at ETTP during the December 2009 meeting.

Members



Darrell Akins is the co-owner of AkinsCrisp Public Strategies, an Oak Ridge strategic communications firm. He is the former CEO of the Knoxville Chamber of Commerce and served in the cabinet of former Governor Lamar Alexander. Darrell resigned from the board in July 2010.



Brianna Goodlin is one of two student representatives to the board for FY 2010-11. She is a senior at Hardin Valley Academy, where she participates on the Dance Team and is active in more than 10 clubs, including the Earth Club, Debate Club, and Scholar's Bowl.



Darryl Bonner is employed by Bechtel Jacobs, Co., as the emergency management task lead. He is an engineer with 13 years experience in facility management, pollution prevention, environmental compliance, and industrial hygiene. He holds a B.S. in chemical engineering and an M.S. in public health from the University of Alabama. Darryl resides in Oak Ridge.



Bob Hatcher is a research scientist in the Department of Earth and Planetary Sciences at the University of Tennessee and holds the position of Distinguished Scientist and Professor. He worked 14 years under a joint appointment between UT and ORNL as part of the UT/ORNL Distinguished Scientist Program. Bob lives in Oak Ridge.



John Coffman is the President of DeNuke Services in Oak Ridge, which provides technical support to DOE contractors and subcontractors on DOE sites. He is a Certified Health Physicist and has worked in radioactive waste management and remediation activities for more than 25 years. John lives in Clinton and is a member of the Oak Ridge Chamber of Commerce.



Charles Jensen is the owner and manager of Diversified Technologies, which manufactures, designs, and services wastewater treatment systems for nuclear power plants. He has founded three technology companies and is operating a third. He has authored several technical papers regarding waste processing in the commercial nuclear industry. Charles is a Knoxville resident.



Steve Dixon is the owner of Spectra Environmental Group and has worked as the director of management for the Metro Knoxville Airport Authority and as the finance director for the Knoxville Community Development Corp. Steve lives in Louisville, where he serves as a City Alderman.



Betty Jones lives in Oak Ridge and is employed by B&W Technical Services Y-12 as an Operations Support Specialist. She holds an associate's degree in Applied Science in Environmental Health Technology from Roane State and a bachelor of science in Organizational Management from Tusculum College.



Edward Juarez lives in Loudon and is a retired utility worker who was employed at the commercial Fermi 2 nuclear reactor site in Michigan for 15 years as a trainer, outage management expeditor, and senior maintenance planner. He has supervised nuclear simulator training and holds degrees in applied science, sociology, and criminal justice.



Gloria Mei is a Senior Technical Staff at ORNL, where she manages and conducts program activities in radiological control and design. She is a diplomate of the American Board of Health Physics and is an adjunct associate professor of the Nuclear Engineering Department at the University of Tennessee. Gloria lives in Oak Ridge.



Ted Lundy taught in the University of Tennessee College of Engineering and then joined the ORNL Metallurgy Division in 1957, where he worked for over 31 years. Upon retirement from the lab, he joined Tennessee Tech's Center for Manufacturing Research and became its director in 1989, retiring from that position in 2000. Ted is a resident of Knoxville.



Lance Mezga lives in Knoxville and is employed by UT-Battelle as the project manager for environmental integration for new facilities development at ORNL. He has more than 30 years experience in environmental and waste management issues and has served as a technical expert to national and international agencies.



David Martin is a self-employed engineer who has worked on a wide range of power engineering assignments worldwide. He is a member of the Institute of Electrical and Electronic Engineers. He resides in Harriman, where he operates his family's farm, which is registered with the Tennessee Century Farms Program.



Josh Monroe is one of the student representatives to the board for FY 2010-11. He is a senior at Oak Ridge High School, where he participates in the Engineering Club and Tennessee's annual Envirothon competition. He also works with the Clinch River Environmental Studies Organization during the summer.



Steve Mead is a Senior Staff Technical Advisor at Y-12. He has extensive experience with nuclear criticality safety, hazardous material storage and transfer, and emergency management. Steve is on the Anderson County Commission, serves as a Lieutenant Colonel in the Tennessee State Guard, and lives in Oak Ridge.



Ron Murphree is a professional engineer and certified professional estimator with 25 years of construction-related experience. Since 1996 he has been the chief estimator for Denark Construction Co., in Knoxville, where he lives.



Tim Myrick is retired from UT-Battelle and is the former director of facilities strategic planning at ORNL. He has also worked in the environmental restoration and waste management fields in several senior management positions. Tim fulfilled his six-year term limit on the board in July 2010.



Sondra Sarten is the owner of RS Construction and Fabrication in Lenoir City, which provides metal products and construction services to a variety of organizations, including DOE, NOAA, and U.T.-Battelle. Sondra is a Lenoir City resident and is active in church and civic groups, including Girl Scouts.



Bob Olson is a retired nuclear engineer who lives in Oak Ridge. He worked at the Savannah River Laboratory as an experimental physicist and probabilistic risk analyst, and as a nuclear licensing engineer for Sargent and Lundy. He has a B.S. degree in nuclear engineering, an M.S. degree in physics, and a Ph.D. in nuclear engineering.



Steve Stow is retired from UT-Battelle, where he worked as director of the American Museum of Science and Energy in Oak Ridge. He is the author or coauthor of more than 70 publications and reports and has been involved with remediation and land use issues on the ORR for 25 years. Steve lives in Knoxville.



Maggie Owen lives in Oak Ridge and is employed by SEC RADCON Alliance, LLC, as a Field Radiological Engineer for the K-25/K-27 Project at ETTP. She has a B.S. degree from Francis Marion University and is certified by the National Registry of Radiation Protection Technologists.



Kevin Westervelt is the civil/structural engineering department manager at Mesa Associates in Knoxville. He has more than 25 years of experience in civil/structural engineering as well as experience relating to site environmental compliance. Kevin lives in Knoxville.

Service Hours Contributed to DOE by ORSSAB Members



This graphic shows that ORSSAB members spent over 1200 hours in FY 2010 achieving the board's mission of providing informed advice and recommendations to DOE. This figure does not include time spent away from meetings writing recommendations and studying DOE-related materials. All board members and student representatives serve on a volunteer basis, without compensation.



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.

FY 2010 members: Ron Murphree (Chair), Kevin Westervelt (Vice Chair), Darryl Bonner, Steve Dixon, Ed Juarez, Bob Olson, Maggie Owen.

Board 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, retreat planning, and preparation of the board's annual work plan. Lastly, the committee reviews and provides input to the board on the EM program's FY +2 budget and prioritization.

FY 2010 members: Steve Dixon (Chair), Ed Juarez.

Environmental Management

The mission of this committee is to evaluate and draft recommendations on DOE's planning and implementation of ORR environmental restoration projects and on the treatment, storage, disposal, and transportation of wastes and materials for which the DOE Oak Ridge EM program is responsible.

FY 2010 members: Bob Olson (Chair), Tim Myrick (Vice Chair), Darryl Bonner, John Coffman, Bob Hatcher, Chuck Jensen, Gloria Mei, Lance Mezga, Ron Murphree, Maggie Owen, Sidney Sherrill.

Public Outreach

The Public Outreach Committee is responsible for finding ways to educate and inform the public about the EM program and ORSSAB's mission and accomplishments. It does this through publications, presentations, briefings, displays, and exhibits.

FY 2010 members: Maggie Owen (Chair), Betty Jones (Vice Chair), Darrell Akins, Ted Lundy, Steve Mead, Steve Stow, Kevin Westervelt.

Stewardship

This committee serves as a forum for discussion of topics relevant to the long-term stewardship of the ORR and as a liaison between DOE and the community. This latter aspect is becoming increasingly important as the committee also acts as a *pro tem* Citizen's Board for Stewardship until DOE appoints a formal board.

FY 2010 members: Darryl Bonner (Chair), Sondra Sarten (Vice Chair), Ted Lundy, David Martin, Josh Pratt.



ORSSAB committees welcome members of the public, who may participate actively in committee work, including voting. Above, Stewardship Committee members David Martin and Ted Lundy (far left and far right) flank public members of the committee Norman Mulvenon and Roger Macklin.

Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	U.S. Department of Energy
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
ESD	Explanation of significant differences
ETTP	East Tennessee Technology Park
FY	Fiscal year
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
ORSSAB	Oak Ridge Site Specific Advisory Board
RFP	Request for proposals
ROD	Record of decision
TDEC	Tennessee Department of Environment and Conservation
Y-12	Y-12 National Security Complex

