

OAK RIDGE SITE SPECIFIC ADVISORY BOARD



FY 2003

ANNUAL REPORT

SEPTEMBER 2002–AUGUST 2003

WELCOME TO THE ORSSAB 2003 ANNUAL REPORT



This was a significant year for the Oak Ridge Site Specific Advisory Board (ORSSAB) and for the U.S. Department of Energy (DOE) Environmental Management (EM) program. Central to DOE EM and the work of the Board was the awarding of a 5-year contract to Bechtel Jacobs in September to manage the Accelerated Closure Program effort. As the pace of cleanup activity quickened, ORSSAB was challenged to speed up its work as well and tackle a host of new issues associated with closure. Despite the changes and challenges, the Board posted solid accomplishments in its mission to provide advice and recommendations to the DOE EM program. Following are a few of the highlights.

- A rising groundwater problem was identified beneath DOE's new EM Waste Management Facility in Spring 2003. Several alternatives to the facility design were proposed by DOE to remedy the problem. Because building the facility had wide public support, EPA and the state insisted on getting the public's input before making a decision. ORSSAB provided this forum on two occasions, where public attendance was excellent. In July ORSSAB endorsed DOE's preferred method for placement of an underdrain to address the high groundwater. Without a quick decision on the issue, delay in the scheduled buildout of additional waste cells would have impacted waste disposition in 2005, forcing off-site disposition, cost increases, and/or slowed remediation activities.
- The Oak Ridge Reservation (ORR) is home to the largest quantity of remote-handled transuranic (TRU) waste in the DOE complex. This year ORSSAB worked on several fronts to help break the logjam that has prevented the movement of this waste stream to more secure storage. In October 2002, ORSSAB wrote to the State of New Mexico to endorse DOE's remote-handled TRU waste permit modification request to allow shipment of this waste to the Waste Isolation Pilot Plant (WIPP). In January 2003, ORSSAB members attended the national SSAB workshop on TRU waste management at WIPP and subsequently endorsed the workshop recommendations. ORSSAB followed up with a set of site-specific recommendations.
- In FY 2003 ORSSAB provided six recommendations to DOE on various aspects of long-term stewardship, and the ORSSAB Stewardship Committee sponsored an Education Subcommittee, which prepared the *ORR Educational Resource Guide*, which was written to provide information on radiological and chemical contamination, environmental management, and stewardship to middle and high school students. As in past years, these efforts reflected ORSSAB's commitment to providing DOE with informed stakeholder involvement on long-term stewardship issues at the local and national levels.
- In July 2003 ORSSAB launched its video lending library, providing the community with a valuable educational resource regarding EM issues. The library contains over 30 EM and commercial titles on a range of topics as well as ORSSAB monthly meetings video tapes from January 1999 through the present.
- On October 9, 2002, the Board approved a change to ORSSAB bylaws to allow members of the public participating in ORSSAB standing committees to vote on committee business.

This was also an eventful year in ORSSAB membership and staffing. Steve Kopp and Charles Washington retired after six years—the maximum allowed by ORSSAB bylaws. Our two student members, Jenna Carignan and David Johnson, fulfilled their year on the Board and were replaced by Barbara Kosny and Atur Sheth. Long-time staff member Sheree Black left the Board and was replaced by Jeannie Brandstetter. And David Bidwell of The Perspectives Group took on the role of facilitator for the Board's Environmental Restoration, Stewardship, and Waste Management committees.

The Board and I hope you'll take a few moments to look through this annual report and consider how far we've come on the road toward cleanup of the ORR. Many challenges lie ahead, but we think you'll agree that many significant accomplishments were made this year.

A handwritten signature in black ink, appearing to read "D. Mosby". The signature is stylized and fluid, with a large, sweeping flourish at the end.

David N. Mosby, Chair

CONTENTS

GENERAL INFORMATION	2
FY 2003 RECOMMENDATIONS & COMMENTS	4
SPECIAL EVENTS	5
COMMITTEES	7
MEMBERSHIP	10
PUBLIC OUTREACH	13
APPENDIX A. FY 2003 BOARD MEETINGS	14
APPENDIX B. FY 2003 RECOMMENDATIONS & COMMENTS	16
APPENDIX C. ABBREVIATIONS	33

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Oak Ridge Site Specific Advisory Board
P.O. Box 2001, EM-91, Oak Ridge, TN 37831
www.oakridge.doe.gov/em/ssab

On the cover: FY 2003 ORSSAB members, ex officios, and student representatives. Standing, left to right: Jake Alexander, Connie Jones (EPA ex officio), John Kennerly, Christopher Smith, Luis Revilla, Ben Adams, John Million, Luther Gibson, Amy DeMint, Donna Campbell, Kerry Trammell, George Rimel, John Omsley (TDEC ex officio), Dave Adler (DOE ex officio), Steve McCracken (Deputy Designated Federal Official). Seated, left to right: Pat Halsey (Federal Coordinator), Dave Mosby, Rhonda Bogard, Barbara Kosny (student representative), Pat Hill, Norman Mulvenon, Heather Cotbron, Linda Murawski.

GENERAL INFORMATION

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 environmental restoration and waste management, as well as land use and economic development of contaminated areas. Recommendations regarding environmental justice, health and safety issues, and other subjects may be developed at the Board's discretion. 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 the 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, occupation, 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) 2003, the Board consisted of 19 voting members from five counties: Anderson, Knox, Loudon, Meigs, and Roane. Non-voting members include representatives from the DOE-Oak Ridge Operations (DOE-ORO), the U.S. Environmental Protection Agency (EPA) Region 4, and the Tennessee Department of Environment and Conservation (TDEC). These members advise the Board on their respective agency's policies and views. Two nonvoting 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 views on DOE-ORO EM work. All Board and committee meetings are open to the

public and are announced in newspaper advertisements, at the DOE Information Center in Oak Ridge, and through the Board's 24-hour information line: 865-576-4750. Board meetings are also advertised in the *Federal Register* and are video recorded and broadcast on local cable television stations. Copies of the tapes are available for public review. 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 office at 865-576-1590.

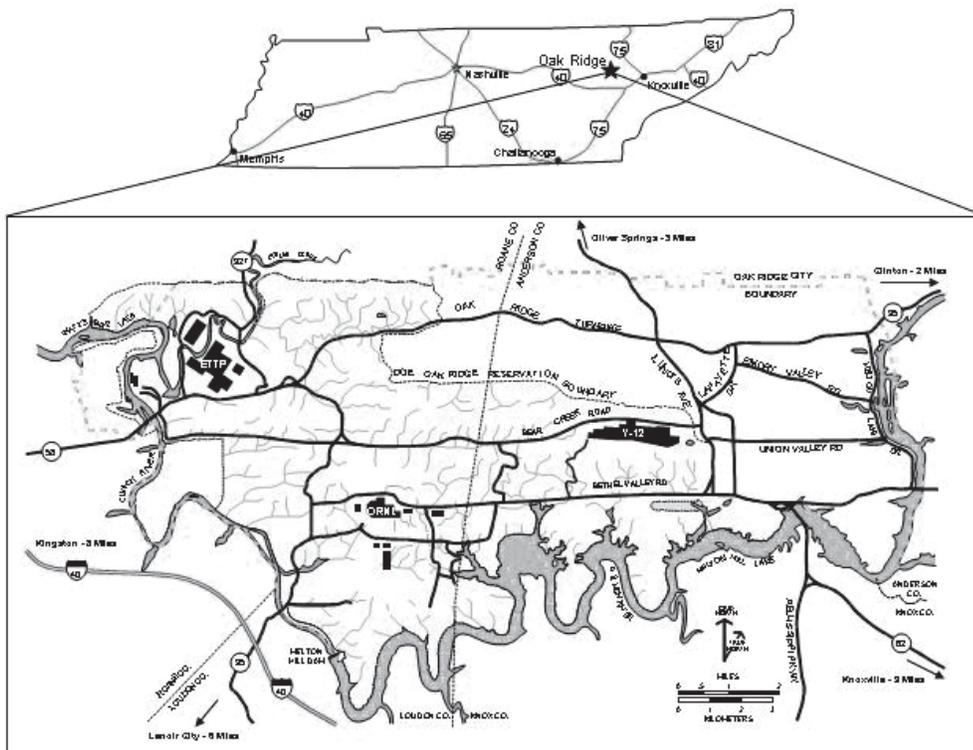


Figure 1. Map of the Oak Ridge Reservation showing East Tennessee Technology Park [ETTP (formerly the K-25 Site)], Oak Ridge National Laboratory (ORNL), and the Oak Ridge Y-12 National Security Complex (Y-12).

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 ORSSAB Bylaws and Roberts Rules of Order and strives for consensus in reaching decisions. See Appendix A for a listing of FY 2003 Board meetings.

COMMITTEES

At the start of FY 2003, the Board established standing committees to review issues concerning three broad topic areas: Environmental Restoration, Stewardship, and Waste Management. 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 between regular meetings. ORSSAB committees usually meet monthly, and all meetings are open to the public. An ad hoc Board Process Committee meets as needed to address parliamentary matters and other process concerns related to operation of the Board. A diagram of the Board's FY 2003 structure is shown in Figure 2.



Figure 2. ORSSAB organization. Additional ad hoc committees may be formed to address mission-related topics on a short-term basis.



ORSSAB MISSION STATEMENT

The Oak Ridge Site Specific Advisory Board is an independent, nonpartisan, broadly representative group of citizens with interests and concerns related to the environment at the Oak Ridge Reservation and surrounding areas. The Board is dedicated to providing informed recommendations and advice to the Department of Energy Environmental Management Program regarding environmental restoration and waste management, as well as land use and economic development of contaminated areas. Recommendations regarding environmental justice, health and safety issues, and other subjects may be developed at the Board's discretion. The Board is committed to reflecting the concerns of the communities impacted by environmental management of the Oak Ridge Reservation and to serving as a communications link between the public and the relevant government agencies including local governments.

Each ORSSAB committee creates its own work plan to guide its activities during the year. Suggestions for committee work plan topics were provided at the beginning of the year by DOE, TDEC, EPA, ORSSAB members, and stakeholders (via the Board's "Stakeholder Survey"). Topics were evaluated at the Board's Annual Planning Retreat on four criteria: (1) importance to ORSSAB and the public, (2) opportunity for impact, (3) what information will be needed for Board action, and (4) when is action likely. Selection of final work plan topics was made at the retreat by the Board membership. These topics were then formed into committee work plans, which were "living documents" to be updated continually as the Board year progressed.

FY 2003 BOARD OFFICERS

Officers for the year were Dave Mosby, Chair; Norman Mulvenon, Vice Chair; Donna Campbell, Secretary.

FY 2003 RECOMMENDATIONS & COMMENTS

In FY 2003 the Board studied a variety of issues related to DOE EM activities. Review of an issue usually begins in the standing committees, which prepare draft recommendations and comments for Board review and approval. The review process often includes detailed briefings in Board and committee meetings where members of the Board and the public may ask questions and discuss their views. Each monthly Board meeting includes time for public input and response, and citizens

attending the meetings are invited to ask questions and express views following technical briefings.

Following is a list of the recommendations and comments submitted during FY 2003. Abridged text is available in Appendix B. A brief history of each recommendation or set of comments and DOE's response (where applicable) are also included. Complete text is available on the Board's Web site at www.oakridge.doe.gov/em/ssab.

Number	Recommendations & Comments	Date Approved
R09/12/02.1	Comments on the DOE-Headquarters Long-Term Stewardship Strategic Plan, Predecisional Draft Version 2.0, dated June 21, 2002	9/12/02
R09/12/02.2	Recommendation on Reorganization of the DOE-Oak Ridge Site Office	9/12/02
R10/9/02.3	Endorsement of Remote Handled Transuranic Waste Permit Modification Request	10/9/02
R10/9/02.4	Comments on the <i>Preface to the Site Transition Framework for Long-Term Stewardship</i>	10/9/02
R11/13/02.5	Recommendations on Fact Sheets for Explanations of Significant Difference for CERCLA Records of Decision at the U.S. DOE Oak Ridge Reservation	11/13/02
C11/13/02.6	Comments on the Land Use Control Implementation Plans for Melton Valley, Bethel Valley, and Upper East Fork Poplar Creek	11/13/02
R11/13/02.7	Recommendation Concerning DOE Oak Ridge Toxic Substances Control Act Incinerator Resource Conservation and Recovery Act Part B Permit Renewal	11/13/02
C11/13/02.8	Comments on the Environmental Assessment for Proposed Changes to the Sanitary Biosolids Land Application Program on the Oak Ridge Reservation, DOE/EA-1356	11/13/02
C2/12/03.9	Comments on the Draft Departmental Policy "Cleanup Driven by Risk-Based End States" and Draft Guidance "Development of Risk-Based End States"	2/12/03
R3/12/03.10	Endorsement of EM SSAB Recommendations on Transuranic Waste	3/12/03
R6/11/03.11	Endorsement of the City of Oak Ridge's Application for Renewed Annual Assistance Payments Pursuant to the Atomic Energy Act of 1954	6/11/03
R6/11/03.12	Recommendation Concerning the DOE Action Memorandum for the Corehole 8 Plume Source (Tank W-1A) Removal Action at Oak Ridge National Laboratory	6/11/03
R7/9/03.13	Recommendation Concerning the Depleted Uranium Hexafluoride Disposition Program at the DOE East Tennessee Technology Park, Oak Ridge, Tennessee	7/9/03
R7/9/03.14	Recommendation to Accelerate Removal of Remote-Handled Transuranic Waste from the Oak Ridge Reservation	7/9/03
R7/9/03.15	Endorsement of Preferred Alternative for Under-drain at the Environmental Management Waste Management Facility	7/9/03
R8/2/03.16	Request for Response to ORSSAB Recommendations on Long-Term Stewardship	8/2/03
C8/2/03.17	Comments on <i>Long-Term Stewardship of DOE Legacy Waste Sites – A Status Report</i>	8/2/03

SPECIAL EVENTS

SEMIANNUAL CHAIRS MEETING

On October 17-19, 2002, ORSSAB hosted the fall EM SSAB Chairs Meeting at the Hilton Hotel in Knoxville. Fifty participants from across the DOE complex met to discuss EM projects and policy, share ideas and concerns among sites, identify and work on common issues, and gain understanding of relevant technical issues. A pre-meeting reception sponsored by WESKEM was held at the Riverside Tavern on October 17. Bechtel Jacobs sponsored the entertainment. A tour of the ORR was held earlier that day. Assistant Secretary for EM, Jessie Roberson, spoke at the luncheon on October 18.

MEETING WITH U.K. DELEGATION

On May 23, 2003, ORSSAB officers met with two members of the United Kingdom's House of Commons and three representatives from Nirex—a U.K. group set up by industry and government to examine safety, environmental, and economic aspects of deep geological disposal of radioactive waste. The meeting took place as part of an all-day visit to the ORR by the British group to learn more about EM and how public involvement figures into decision-making. The visitors also toured various reservation sites and met with elected officials and representatives of DOE-ORO.

EM SSAB TRU WASTE WORKSHOP

One hundred and five attendees from across the nation met January 27-February 1, 2003, at the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico, to discuss transuranic (TRU) waste issues at the national level and at the individual DOE sites. The event, which was hosted by the Northern New Mexico Citizens Advisory Board, included SSAB members from all nine boards, DOE

officials, stakeholders, and others. Nine recommendations regarding TRU issues were developed by the SSAB members. These were later ratified by the individual SSABs and transmitted to the Assistant Secretary for EM on March 29, 2003. Several ORSSAB members also toured WIPP, the Nevada Test Site, Yucca Mountain, and Envirocare of Utah in conjunction with the workshop.

ANNUAL PLANNING RETREAT

ORSSAB generally works to achieve its mission through its committee structure. Each year the Board holds a planning retreat to determine how best to address its mission and what its committee structure should be. This year's retreat was held August 2, 2003, in Oak Ridge. Because ORSSAB committees create their own work plans, a prime objective of the retreat was to discuss committee plans for the coming year. Working with ex officios from DOE, TDEC, and EPA, ORSSAB members developed lists of work plan topics for each of the standing committees. These work plans were finalized at subsequent meetings to become living documents that were updated continually as the Board year progressed.

MEETING WITH JESSIE ROBERSON

On February 12, 2003, ORSSAB officers Dave Mosby, Norman Mulvenon, and Donna Campbell met with Assistant Secretary of Energy for EM, Jessie Roberson, while she was in Oak Ridge for a press conference to announce that DOE was planning to transform its contract with Bechtel Jacobs into a closure contract. During Roberson's

meeting with the ORSSAB officers, she provided information concerning the FY 2004 budget and the Bechtel Jacobs cleanup contract modifications.



ORSSAB officers (seated from left) are Donna Campbell, Dave Mosby, and Norman Mulvenon. Standing, from left, are John Mathieson, Nirex; Mark Tami, U.K. House of Commons; David Wild, Nirex; Thomas Watson, U.K. House of Commons; Benjamin Russell, Nirex.

ORNL TOUR

On August 27, 2003, several ORSSAB members and guests participated in a tour of the Spallation Neutron Source (SNS) and new facilities being constructed at Oak Ridge National Laboratory (ORNL). The tour, which was sponsored by ORNL, gave the members the opportunity to see firsthand the progress being made at the lab. The group was also able to see several ongoing and completed EM projects.



On site at SNS are (from left) Jeannie Brandstetter, tour guide Frank Kornegay, Lynn Sichelstiel, Heather Cothron, Nita Ganguly, Norman Mulvenon, Leslie Trammell, Atur Sheth, and Donna Campbell. Not pictured: Amy DeMint, John Million, Kerry Trammell.

EMWMF TOUR

On April 16, 2003, the ORSSAB Waste Management Committee hosted a tour of the EM Waste Management Facility (EMWMF) to review progress and talk with project personnel about recent concerns related to rainwater drainage. The 18 attendees included ORSSAB members, press, and members of the public. Discussion focused on facility operation procedures, plans for future growth, storm water management, risk issues, and waste acceptance criteria, as well as how rain affected the site and how overflow was being managed.

IT3 PROGRAM ADVISORY COMMITTEE MEETING

The purpose of the meeting was to prepare for the May 2002 International Conference on Incineration and Thermal Treatment Technologies (IT3) by reviewing and selecting abstracts, organizing papers, and advising on issues associated with conduct of the conference. The meeting allowed ORSSAB member Luther Gibson to provide input to the IT3 technical program in May. The meeting was held October 24-26, 2002, in College Park, Maryland.

WASTE MANAGEMENT 2003

Over 2500 representatives from government, industry, and academia attended this annual conference to discuss and evaluate current and evolving technologies in waste management. The conference featured workshops, panel discussions, and presentations on various topics related to the storage, treatment, transportation, and disposal of hazardous and mixed waste. ORSSAB members Heather Cothron, John Kennerly, and Charles Washington participated in the conference, which was held February 23-27, 2003, in Tucson, Arizona.

SEMIANNUAL SSAB CHAIRS MEETING

Hosted by the Rocky Flats Citizens Advisory Board, the meeting provided SSAB members from around the country with the opportunity to discuss EM projects and policy, gain understanding of relevant technical issues, and develop personal contacts with their counterparts at other sites. The meeting included a tour of the Rocky Flats site. ORSSAB members Dave Mosby and Norman Mulvenon participated in the meeting, which was held March 27-29, 2003, in Denver, Colorado.

IT3

This conference is held annually to offer the perspectives of regulators, designers, operators, program managers, and research scientists on a variety of incineration and thermal treatment technologies. The conference included numerous speakers, field trips, and optional courses. ORSSAB member Luther Gibson chaired the session on alternatives to thermal treatment. The meeting was held May 10-16, 2003, in Orlando, Florida.

COMMITTEES

ENVIRONMENTAL RESTORATION



Committee members, clockwise from top left: Kerry Trammell (Chair), Amy DeMint (Co-Chair), Jake Alexander, Norman Mulvenon, Heather Cothron, Dave Mosby. Not pictured: Colin Loring, Bob McLeod, Charles Washington.

The mission of the committee is to:

- Develop a comprehensive understanding of DOE's project decisions by monitoring specific projects
- Facilitate public participation by providing a forum for project discussion and providing written feedback to DOE relative to individual projects
- Monitor ongoing EM projects for significant changes and provide feedback where appropriate
- Monitor the EM budget and provide feedback
- Monitor activities related to Accelerated Cleanup

HIGHLIGHTS & ACCOMPLISHMENTS

- On February 20, 2003, the committee and DOE cosponsored a public meeting on EM budget priorities for FY 2005. Approximately 25 persons attended the meeting.
- On March 26 and 27, 2003, committee members Pat Hill and Dick Berry attended an Atomic Heritage Foundation workshop held at the American Museum of Science and Energy. The purpose of the meeting was to start discussions on historic preservation issues related to the East Tennessee Technology Park (ETTP).
- The committee authored the "Recommendation on Reorganization of the DOE-ORO Site Office;" "Recommendation on Fact Sheets for Explanations of Significant Difference for CERCLA Records of

Decision (RODs) at the ORR;" "Recommendation on Endorsement of the City of Oak Ridge's Application for Renewed Annual Assistance Payments Per the Atomic Energy Act;" and "Recommendation on the DOE Action Memorandum for the Corehole 8 Plume Source (Tank W-1A) Removal Action at ORNL."

EXECUTIVE



Committee members, clockwise from top left: Dave Mosby (Chair), John Million, Kerry Trammell, Norman Mulvenon (Vice Chair), Luther Gibson, Donna Campbell (Secretary).

General Board business is handled by the Executive Committee, which is composed of the elected officers of the Board and the committee Chairs. The committee holds general administrative authority to set Board agendas, coordinate the work of committees, and transact business as may be necessary between regular meetings. The Executive Committee presents all recommendations other than administrative ones to the Board for action.

HIGHLIGHTS & ACCOMPLISHMENTS

- In Fall 2002, the committee led an effort to develop suggestions for improving communication between stakeholders and the EM organization. The suggestions were discussed with the DOE-ORO Assistant Manager, Gerald Boyd, on November 7.
- In Fall 2002, the committee led planning for the Fall 2002 EM SSAB Chairs meeting in Knoxville. The committee also led development of materials for the Spring 2004 Chairs meeting, March 27-29 in Denver.

STEWARDSHIP



Committee members, clockwise from top left: John Million (Chair), Norman Mulvenon (Co-Chair), Ben Adams, Donna Campbell.

The goal of the Stewardship Committee is to serve as a forum for discussion of topics relevant to the long-term stewardship of the ORR and to act as a liaison between DOE and the community at large. This latter aspect is becoming increasingly important as the committee also acts as a protem Citizens' Board for Stewardship until such time as DOE appoints a formal one.

HIGHLIGHTS & ACCOMPLISHMENTS

- In 2002 the committee sponsored an Education Subcommittee to steer the committee's educational outreach goals. The subcommittee's charter included presentations to area schools and development of educational materials regarding long-term stewardship for areas of the ORR where residual contamination will remain in place following remediation activities.
- In Fall 2002, the committee led an effort to change ORSSAB bylaws to allow members of the public to participate in ORSSAB standing committee business on a voting basis. The proposal was approved at the October 9, 2002, ORSSAB meeting.
- In June 2003, the committee issued the *ORR Educational Resource Guide* to introduce the concepts of radiological and chemical contamination, EM, and stewardship to middle and high school students. The guide was first distributed to area educators but is also being provided to the community at large through the ORSSAB web site, the DOE Information Center, and various ORSSAB public outreach events.

- In July 2003, the committee launched the ORSSAB video lending library at the DOE Information Center, providing a valuable educational resource regarding EM program issues.
- The committee authored the "Comments on the *DOE-HQ Long-Term Stewardship Strategic Plan, Predecisional Draft*;" "Comments on the *Preface to the Site Transition Framework for Long-Term Stewardship*;" "Comments on the Land Use Control Implementation Plans for Melton Valley, Bethel Valley, and Upper East Fork Poplar Creek;" "Comments on the Draft Departmental Policy 'Cleanup Driven by Risk-Based End States' and Draft Guidance 'Development of Risk-Based End States';" "Request for Response to ORSSAB Recommendations on Long-Term Stewardship;" and "Comments on *Long-Term Stewardship of DOE Legacy Waste Sites – A Status Report*."

BOARD PROCESS



Committee members, clockwise from top left: Dave Mosby, Luther Gibson, Luis Revilla (Chair), George Rimel, Norman Mulvenon, Ben Adams, John Million. Not pictured: Charles Washington (Co-Chair).

The purpose of this committee is to serve as the Board's forum for initial debate on issues involving Board process. The committee's scope includes review of ORSSAB Bylaws, Standing Rules, and Special Rules of Order; Board meeting structure; standards and formats for submitting recommendations and comments to DOE; new member training; retreat planning; and process for preparation of the Board's work plan.

WASTE MANAGEMENT



Committee members, clockwise from top left: John Kennerly, John Million, Amy DeMint, George Rimel, Luis Revilla, Norman Mulvenon, Luther Gibson (Chair), Pat Hill. Not pictured: Dick Berry, Jeanne Bonner, Steve Kopp, Charles Washington (Co-Chair).

The committee's mission is to study and make recommendations on policy and technical issues regarding waste disposal options, transportation issues, operations at waste management facilities, and application of technology to waste management issues. The committee's FY 2003 work plan topics included the Toxic Substances Control Act Incinerator (TSCAI), TRU waste issues, EMWMF, and other topics.

HIGHLIGHTS & ACCOMPLISHMENTS

- In September 2002, committee members Luther Gibson and Norman Mulvenon attended a permit modification meeting for M&EC Corporation, held in anticipation of the company's receiving increased waste volumes from accelerated cleanup activities.
- On October 16, 2002, committee members toured TSCAI to gain a better understanding of the facility's waste streams, waste handling operations, and regulatory requirements.
- In 2002 the committee led ORSSAB participation in the EM SSAB TRU waste workshop held January 31 through February 1, 2003, in Carlsbad, New Mexico.
- On May 14, 2003, committee members Dick Berry and Norman Mulvenon attended a meeting on the ORR Ecological Decision and Monitoring Strategy. The meeting addressed current monitoring programs.

- On June 18, 2003, the committee sponsored a public meeting on groundwater issues at EMWMF. About 30 members of the public attended the meeting.
- The committee authored the "Endorsement of Remote-Handled TRU Waste Permit Modification Request;" "Recommendation Concerning DOE Oak Ridge TSCAI Resource Conservation and Recovery Act (RCRA) Part B Permit Renewal;" "Comments on the Environmental Assessment for Proposed Changes to the Sanitary Biosolids Land Application Program on the ORR;" "Recommendation Concerning the Depleted Uranium Hexafluoride Disposition Program at ETTP;" "Recommendation to Accelerate Removal of Remote-Handled TRU Waste from the ORR;" and "Endorsement of Preferred Alternative for Underdrain at the EMWMF"

OTHER 2003 AD HOC COMMITTEES

EM HEALTH AND SAFETY ISSUES

The Board established this committee in October 2002 to review health and safety protocols practiced by DOE and its contractors and subcontractors. Members of the committee were Donna Campbell, John Kennerly, Steve Kopp, George Rimel, Kerry Trammell, and Charles Washington. The committee published its report "Findings and Recommendations of the Environmental Safety and Health Issues Ad Hoc Committee" on February 12, 2003.

SCARBORO SAMPLING REPORT

The Board established this committee in October 2002 to review the sampling report, which had been issued by EPA earlier in the year. Members of the committee were Jeannie Bonner, Luther Gibson, Norman Mulvenon, and Charles Washington.

BOARD FINANCE

The Board established this committee in June 2003 to study the ORSSAB budget, including its structure and the allocation of funds. Members of the committee were Donna Campbell, Dave Mosby, Norman Mulvenon, and Kerry Trammell.

MEMBERSHIP

BEN ADAMS

Ben is a registered professional engineer, landscape architect, and land architect with 41 years of practice in design sciences. He is employed by ACHW, Inc., and holds a B.S. degree in civil engineering. Ben is a member of the Oak Ridge Chamber of Commerce and the Oak Ridge Breakfast Rotary Club, and he is on the board of the East Tennessee Economic Council. Ben lives in Oak Ridge.

JAKE ALEXANDER

Jake is a regulatory compliance manager with British Nuclear Fuels, Ltd., in Oak Ridge and a member of the adjunct faculty with the University of Tennessee's Engineering Graduate School. He serves on the Oak Ridge Health Agreement Steering Panel and is a former member of the Oak Ridge Environmental Quality Advisory Board.



Outgoing student representatives Jenna Carignan and David Johnson received plaques of appreciation from Gerald Boyd at the April 9, 2003, ORSSAB meeting.

RICHARD (DICK) BERRY

Dick is the former chairman and CEO of Rembco Geotechnical Contractors, Inc., based in Knoxville. He now consults in the geotechnical field. He is a member of the American Society of Civil Engineers and the American Institute of Chemical Engineers. A resident of Lenoir City, Dick received his B.S. degree in chemical engineering and an M.S. degree in business administration.

RHONDA BOGARD

Rhonda is Manager of RADCON Dosimetry and Records for BWXT Y-12 at the Y-12 National Security Complex (Y-12). She holds a B.S. in plant and soil science and an Masters in Public Health in occupational health and safety. A resident of Oak Ridge for 45 years, Rhonda is active in the Smoky Mountain Hiking Club and Jewish community activities.

DONNA CAMPBELL

Donna was a charter member of ORSSAB and served two terms (1995–1999) in addition to her current term, which began in July 2001. She is a librarian for Tetra Tech FW, Inc., in Oak Ridge and holds B.S. and M.A. degrees in biology and an M.S. degree in library science. A Harriman resident, Donna is a preschool teacher and is active in the jail ministry at First Baptist Church of Kingston. She also volunteers with local public libraries and is a member of the Special Libraries Association. Donna served as FY 2003 Secretary.

HEATHER COTHRON

Heather is employed by SAIC as an engineer and project manager at ORNL. She holds a B.S. degree in biology and an M.S. degree in chemical engineering and is a certified Project Management Professional and a Registered Environmental Manager. In 1997-1999 she was the DOE representative on the FUSRAP community/stakeholder group, and she also worked as a regulator with TDEC. Heather lives in Oliver Springs.

AMY DEMINT

Amy has lived in Kingston for the past 18 years and works as a metallurgical engineer in the BWXT Y-12 Technology Development Organization, focusing primarily on processing uranium metal. She has B.S. and M.S. degrees in metallurgical engineering.

LUTHER V. GIBSON, JR.

Luther works in the BWXT Y-12 Analytical Chemistry Organization and holds an M.S. degree in chemical engineering. He has worked for DOE contractors for 27 years on environmental technologies. He served as ORSSAB chair in FYs 2001 and 2002 and was the 1998-99 Chair of the East Tennessee Chapter of the

Air & Waste Management Association. He is also a member of the Citizens Advisory Panel of the Local Oversight Committee and the American Institute of Chemical Engineers. Luther resides in Roane County.

PATRICIA H. HILL

Pat is an artist and teacher who has worked as an art director for the Boys & Girls Clubs of Knoxville, as a graphic artist at the *Knoxville News-Sentinel*, and as a teacher at the Apostolic Christian School in Knoxville. She is a member of the Pellissippi Genealogical and Historical Society, the Smithsonian Institution, and the National Trust for Historic Preservation. Pat resides in Knoxville.

JOHN KENNERLY

John is a retired chemical engineer who worked for Lockheed Martin. He has experience in diverse environmental management technology areas. He also has experience in process development and design and other areas of technology. He is a member of the Sierra Club, the American Institute of Chemical Engineers, the American Society of Testing and Materials, the Tennessee Ornithological Society, the Board of Directors for Tennessee Wesleyan College, and the program advisory committee for the annual Waste Management Conference. John is a Knoxville resident.

BARBARA KOSNY

Barbara is the ORSSAB student representative from Oak Ridge High School for the term May 2003–April 2004. She is the cofounder and president of the Environmental Club in Oak Ridge and has participated in Envirothon—a national environmental science competition. Barbara intends to study environmental science or international relations in college.

ROBERT McLEOD

Bob is a Registered Professional Engineer and Registered Professional Geologist with Robert S. McLeod and Associates. He has more than 30 years experience in engineering management and environmental work and has managed numerous DOE projects, including two remedial investigation/feasibility studies and the program to implement the DOE Hazardous Waste Remedial Actions Program. From 1988 to 1996 he managed the Oak Ridge office of Parsons Engineering Science. Bob lives in Oak Ridge.



To mark his retirement from ORSSAB, Steve Kopp received a plaque of appreciation and a special cake at the July 9, 2003, meeting. Charles Washington also retired in FY 2003. Both had served the full six year limit allowed by ORSSAB bylaws.

JOHN MILLION

John is retired chemist who worked at the K-25 site, now known as ETTP. A resident of Oak Ridge since 1957, John has a high interest in the well-being of the community. He is a member of the Woodland Neighborhood Association, which is in close proximity to Y-12.

DAVID MOSBY

Dave is a project manager in the Project Management Organization at BWXT Y-12, where he manages engineering and construction projects at Y-12. An Oak Ridge resident, he is a member of the Oak Ridge City Council and serves as a community representative for the NAACP. Dave served as ORSSAB Chair for FY 2003.

NORMAN MULVENON

Norman is retired from EG&G ORTEC, where he held a series of positions in marketing and sales. He is the current Chairman of the Citizens Advisory Panel of the Local Oversight Committee and is a member of the NAACP-Oak Ridge Branch, the League of Women Voters of Oak Ridge, and the Oak Ridge Environmental Justice Committee. Norman holds a B.S. degree in biological sciences and is an Oak Ridge resident. Norman served as the ORSSAB Vice Chair for FY 2003.

LINDA MURAWSKI

Linda lives in Knoxville, where she owns and operates a small business providing consulting services in emergency preparedness, emergency management, crisis communication, and hazards mitigation. She is Vice President of the Technical Society of Knoxville, Vice President of the Tennessee Literacy Coalition, and a member of the Roane County Damage Assessment Team. Linda holds B.S. and M.S. degrees in education.

LUIS REVILLA

Luis is a Fire Systems Engineer with the Fire Department at the Y-12 National Security Complex. He is a certified paramedic, fire fighter, fire inspector, and hazardous materials technician. He holds an Associate of Arts degree and is a graduate of the Donnellson Law Enforcement Academy. Luis lives in Knoxville, where he coaches baseball and basketball in the Farragut Community and is involved in church activities.

GEORGE RIMEL

George has lived in Clinton for the past 6 years and has worked as a steam plant operator/stationary engineer with BWXT Y-12 for the past 26 years. He is a member of the Atomic Trades and Labor Council and the Claxton Optimist Club. He has been active in Behavior Safety Training and presently conducts classes in Homeland Security Training.

ATUR SHETH

Atur is the ORSSAB student representative from Farragut High School for the term May 2003–April 2004. He is a member of the National Honor Society, Mu Alpha Theta, and the Science Honors Society. He has competed on the math team, the Science Olympiad, and the science bowl. Atur has served as a docent at the Knoxville Museum of Art, assisted in the Farragut branch of the public library, and has volunteered at the East Tennessee Baptist Hospital. Atur plans to pursue a career in medicine.

CHRISTOPHER SMITH

Chris is a self-employed computer consultant specializing in database and geographical information

system consulting. He is a former foreign service officer and holds an A.B. degree in political science and an M.S. degree in biosystems engineering technology. Christopher lives in Decatur and serves on the Meigs County E-911 board.

KERRY TRAMMELL

Kerry works for NHC Healthcare and holds an M.S. degree in health planning and administration. An Oak Ridge resident, he has served two terms on the Oak Ridge Chamber of Commerce and is currently president of the Anderson County Health Council.

OTHER MEMBERS AND STUDENTS SERVING IN FY 2003

The Board would like to gratefully acknowledge the participation of the following members and student representatives who also served a portion of their terms on ORSSAB during FY 2003: Jeannie Bonner, Jenna Carignan, David Johnson, Steve Kopp, Colin Loring, and Charles Washington.

**SPECIAL THANKS
TO SHEREE BLACK**



On behalf of its current and former members, ORSSAB would like to extend appreciation to Sheree for her many years of dedicated support to the Board. Sheree served in the ORSSAB support office from

1996 until October 2002 and was instrumental in keeping the many day-to-day activities of the Board operating efficiently.

PUBLIC OUTREACH

The goal of ORSSAB public outreach is to achieve the Board's mission as it relates to community involvement: "The Board is committed to reflecting the concerns of the communities impacted by environmental management of the ORR and to serving as a communications link between the public and DOE."

ORSSAB invites public participation in Board activities and uses a variety of methods to achieve its outreach goals. Following are some of the methods and materials used by the Board to get the word out about ORSSAB and its activities.

24-hour information line—A recorded phone message (at 865-241-4750) offers up-to-date information on ORSSAB meetings and special events.

800 number— Stakeholders from outside the local calling area can get in touch with the support office by calling toll free: 1-800-382-6938.

Advocate newsletter— Over 900 newsletters are mailed out quarterly to inform stakeholders about ORSSAB activities and maintain an ongoing dialogue with the community.

ORSSAB annual report— The report is sent to state legislators, local media and organizations, and governmental agencies to promote awareness of Board activities.

Briefings and presentations—Presentations to local civic, educational, and governmental organizations serve to encourage public participation in Board activities, and they are an important way to achieve the Board's educational and communication goals.

Brochure—Distributed at meetings, conferences, and presentations, the brochure draws a quick portrait of Board activities and includes a reply card that makes it easy to get more information about the Board.

Cable TV—Most Board meetings begin with an EM-related presentation, and this portion of the meeting is broadcast on the local cable station to help educate the public about EM activities.

Conference presentations—Board members periodically make presentations at local and national conferences on EM- and SSAB-related topics.

Information booklet—This guide to the SSAB designed for distribution to the public at local libraries and other resource agencies.

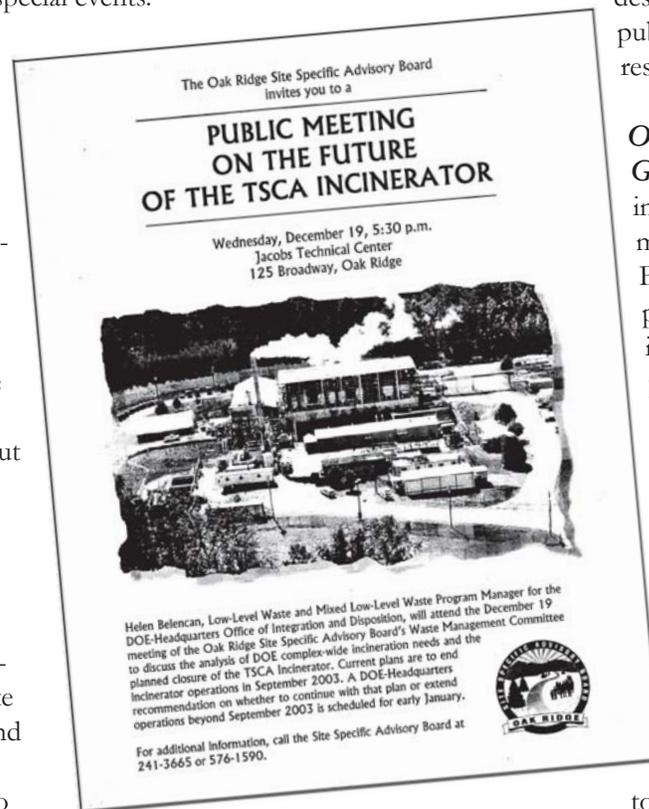
ORR Educational Resource Guide—The guide was developed initially as a tool for Board members but is also distributed at Board outreach presentations to promote the SSAB as an information resource for the public.

Newspaper ads—An ad is placed in the *Oak Ridger* each month to inform the public about Board meetings. Ads are also used to advertise special meetings and events.

News releases—Releases are developed on newsworthy topics, such as appointments to the Board, public meetings

sponsored by ORSSAB, and special presentations at Board meetings.

Special mailings and posters—The Board advertises special presentations and events by sending out special mailings to local civic and EM stakeholder groups. Posters are also used to advertise these special activities.



APPENDIX A: FY 2003 BOARD MEETINGS

The tasks facing DOE-ORO EM are varied and complex, and the numerous programs involved in cleanup work are constantly evolving to meet EM needs. Keeping up with all those programs and activities is a challenge in and of itself, and one way ORSSAB does so is by devoting time during each monthly Board meeting

for presentations by individuals who play key roles in cleanup and management of the ORR. Following is a list of FY 2003 presentations and a sampling of photos from Board meetings. Video tape recordings of meetings may be viewed by calling the DOE Information Center at (865) 241-4780.

Date	Presentation	Speaker
September 12, 2002	Reindustrialization	Susan Cange, DOE
October 10, 2002	TDEC Residential Well Monitoring Program	Don Gilmore, TDEC
November 14, 2002	Update on the EMWMF	Bill Cahill, DOE
December 10, 2002	Emergency Management Preparedness and Communications	Bobby Davis and Steve Wyatt, DOE
January 9, 2003	Overview of EM Activities in Melton Valley	Dave Adler, DOE
February 13, 2003	Deletion of Mixed TRU Milestones from the Site Treatment Plan	Gary Riner, DOE Bill Childres, TDEC
March 13, 2003	Long-Term Stewardship Strategic Plan	Ralph Skinner, DOE
April 10, 2003	Oak Ridge Comprehensive Closure Plan Proposal	Bob Sleeman, DOE
May 14, 2003	ETTP Depleted Uranium Hexafluoride Cylinder Program	Dave Hutchins, DOE-ORO
June 11, 2003	Groundwater Issues at EMWMF	John Michael Japp, DOE-ORO
July 9, 2003	Topics for ORSSAB Consideration in FY 2004	Dave Adler, DOE-ORO; Jeff Crane, EPA; John Owsley, TDEC
August 2, 2003	Annual Planning Retreat & Meeting	

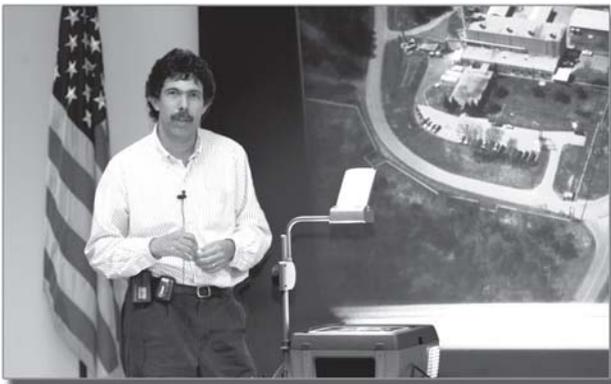


Lorene Sigal and Bob Sleeman share insights with the Board on aspects of the EM cleanup program at ORSSAB meetings on February 12, 2003, and September 12, 2002, respectively. Lorene, a charter member of ORSSAB who retired in June 2001, gave an in-depth overview of stewardship from her perspective as an early advocate of stewardship for the Oak Ridge Reservation. Bob, who is the director of DOE's Melton Valley Closure Project, presented an overview of the DOE-ORO lifecycle baseline process. The baseline is an integrated plan that contains the scope of work, schedule, and budget for DOE's EM program activities.

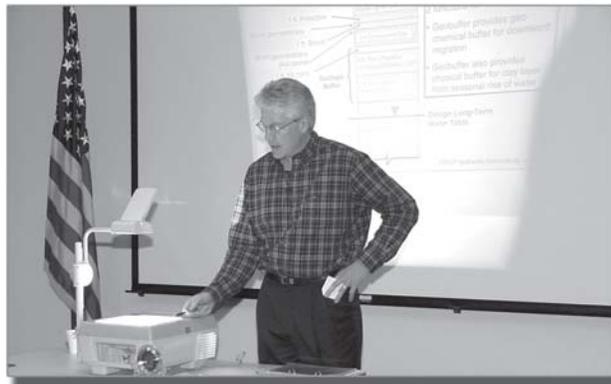




ORSSAB Chair Dave Mosby makes a point at the annual planning retreat, held August 2, 2003, at the DOE Information Center. Also shown are retreat facilitator Lori Greening and ORSSAB member John Kennerly. The all-day event offered members an opportunity to examine FY 2003 accomplishments and make plans for 2004. A major change to the Board's FY 2004 committee structure was made when the Environmental Restoration and Waste Management committees were combined to form a single EM Committee.



Dave Adler of the DOE-ORO EM program discusses remediation of the Molten Salt Reactor Experiment (MSRE) at the April 9, 2003, Board meeting. MSRE operated at ORNL from 1965 until it was shut down in 1969. During routine surveillance and maintenance, uranium hexafluoride migration through the MSRE off-gas system to the charcoal beds was discovered. Corrective actions for the uranium deposit removal from the charcoal beds were initiated to mitigate the risks of a nuclear criticality at MSRE or contaminant release. A ROD was signed in June 1998 for removal of the fuel and flush salts. Preliminary plans are to demolish the facility below grade, entomb it, and cap the two-acre area.



On June 11, 2003, John Michael Japp of the DOE-ORO EM program spoke on groundwater issues at the Environmental Management Waste Management Facility (EMWMF). Groundwater levels at the waste cell were higher than anticipated, and in some areas groundwater appeared to be immediately below the base of the clay liner. An engineering study was initiated in March 2003, and of the seven alternatives studied for lowering the groundwater table, four were discarded and three remained under consideration. Of those three, the most cost-effective and potentially successful path forward was considered to be the placement of an underdrain at Cell 3 of EMWMF, at a cost of roughly \$1.5 million.



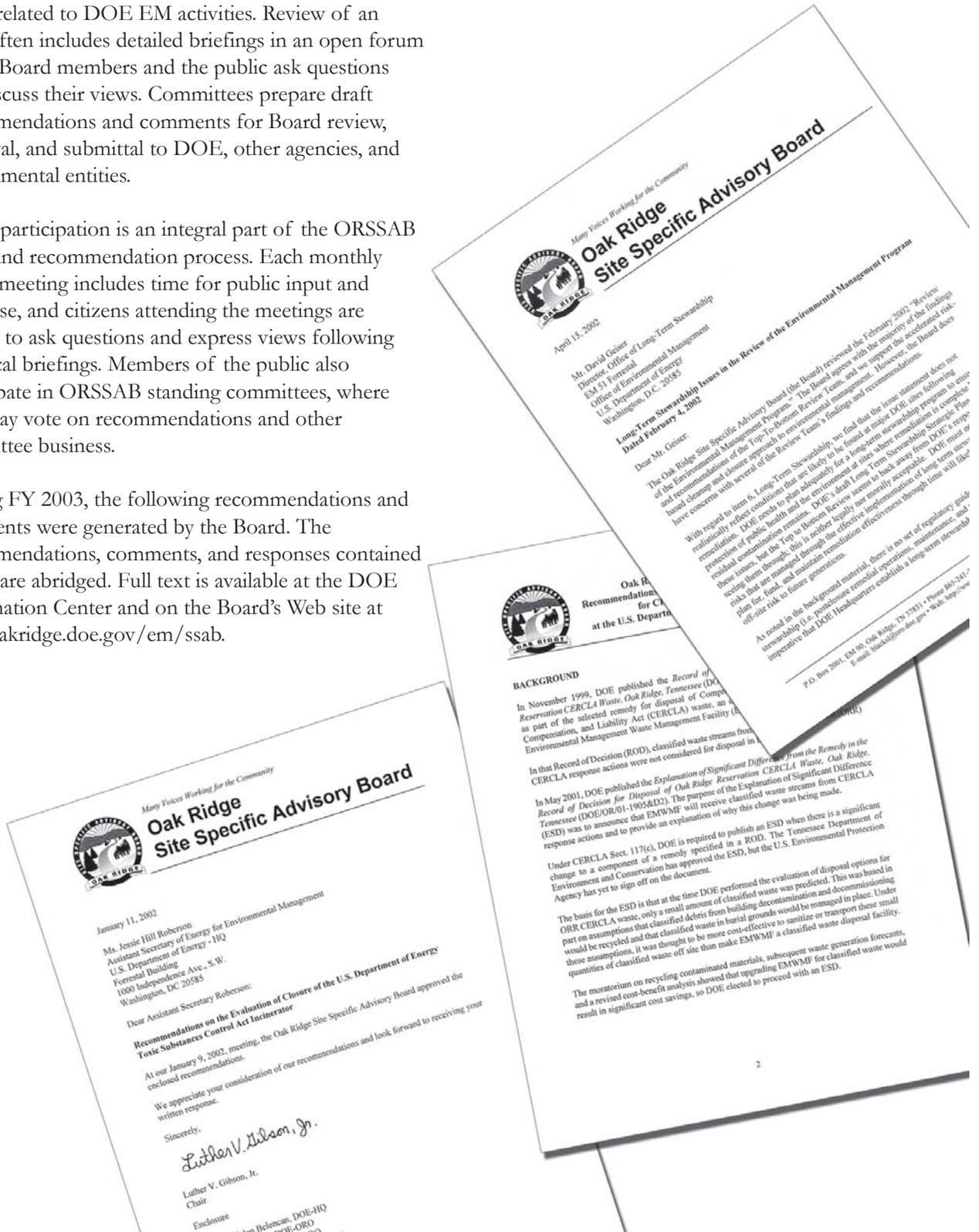
Doug McCoy, Environmental Restoration Program Manager at TDEC, gave a presentation on Federal Facility Agreement (FFA) acceleration concepts at the October 9, 2002, Board meeting. The "Oak Ridge Accelerated Cleanup Plan Agreement" was published in June 2002 to spell out how the three FFA parties (TDEC, DOE, and EPA) would work together to implement the Accelerated Cleanup Plan for the ORR. The plan calls for streamlining decision-making to accelerate cleanup, resolve current FFA milestone disputes, and establish future actions needed to complete the plan.

APPENDIX B: FY 2003 RECOMMENDATIONS AND COMMENTS

Since its formation, the Board has studied a variety of issues related to DOE EM activities. Review of an issue often includes detailed briefings in an open forum where Board members and the public ask questions and discuss their views. Committees prepare draft recommendations and comments for Board review, approval, and submittal to DOE, other agencies, and governmental entities.

Public participation is an integral part of the ORSSAB study and recommendation process. Each monthly Board meeting includes time for public input and response, and citizens attending the meetings are invited to ask questions and express views following technical briefings. Members of the public also participate in ORSSAB standing committees, where they may vote on recommendations and other committee business.

During FY 2003, the following recommendations and comments were generated by the Board. The recommendations, comments, and responses contained herein are abridged. Full text is available at the DOE Information Center and on the Board's Web site at www.oakridge.doe.gov/em/ssab.



COMMENTS ON THE *DOE LONG-TERM STEWARDSHIP STRATEGIC PLAN PREDECISIONAL DRAFT, VERSION 2.0, DATED JUNE 21, 2002*

BACKGROUND

ORSSAB submitted comments on Version 1 of this document in February 2002 and followed up with comments on Version 2. The plan, which is designed to be similar in structure to the DOE Strategic Plan, has three major goals: to effectively execute, document, and evaluate long-term stewardship activities at DOE sites; build long-term stewardship into the way DOE does business; and build a sustained capability for current and future generations regarding environmental remedies.

Following are general comments supplied by the Board to DOE-HQ. Numerous detailed comments were offered as well.

RECOMMENDATIONS/COMMENTS (APPROVED 9/12/02)

ORSSAB appreciates the opportunity to comment on the DOE *Long-Term Stewardship Strategic Plan Predecisional Draft*, Version 2.0, dated June 21, 2002. As you know, Oak Ridge stakeholders have been heavily involved in long-term stewardship since the first stewardship committee was formed as part of the Oak Ridge End Use Working Group in 1997. The ORSSAB Stewardship Committee continues to work on long-term stewardship issues and the committee also serves informally as a Citizens' Board for Stewardship and will continue to do so until the ORSSAB completes its mission and is disbanded. At that time, a formal Citizens' Board for Stewardship will be constituted.

Generally, we find that Version 2.0 is better organized, more informative, better-written, and covers most of the long-term stewardship elements that were described in our 1998 and 1999 stewardship reports. Boxes 1 and 2 on early pages of Part II provide decision-makers with a clear picture of the activities and needs associated with long-term stewardship of contaminated sites. And the plan provides a basis for incorporating long-term stewardship into the department's management initiatives and strategic planning.

We look forward to reading the Implementation Plan (mentioned on page ii of the "Note to Readers") and trust that it will be forthcoming soon. We have a sense of urgency about implementation of long-term stewardship because remediation of the ORR Melton Valley Waste Site is scheduled for completion in 2006.

However, we find that some issues require additional clarification or development to ensure that "...current long-term stewardship obligations are met and the creation of future liabilities is minimized."

RESPONSE

The response to the Board's comments is expected to be reflected in the revised document.

REORGANIZATION OF THE DOE SITE OFFICE

BACKGROUND

In June 2002, the DOE Office of Science released its *Oak Ridge Operations Alternative Management Model Initiative Report*, which suggested elimination of the local ORR site manager's role. ORSSAB responded with the following letter to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 9/12/02)

ORSSAB understands that DOE plans to eliminate the Site Manager's role as it currently exists at DOE-ORO. ORSSAB hereby expresses our concerns about this change, as we feel it will negatively impact EM Program activities at the ORR as well as public participation in those activities.

At the ORSSAB meeting on August 3, 2002, the *ORO Alternative Management Model Initiative Report*, dated June 2002, was discussed. During the discussion of the preferred alternative, "National Nuclear Security Administration's Model Applied to ORO," the elimination of the ORO Manager dominated the discussion. We generally agree with the advantages of a National Nuclear Security Administration (NNSA)-like model in Section V of the preferred alternative, but we also completely agree with the disadvantages of an NNSA-like model in Section VI. The ORSSAB feels that the ORO Manager is the single point of contact for DOE, and the absence of the Manager will create a gap in relations with Oak Ridge stakeholders. The absence of the Manager also removes the responsibility and authority for managing the reservation as well as being the arbiter to resolve multiple-party issues.

We also feel that potential exists for the DOE site offices to assign additional responsibilities to their deployed staff rather than utilize expertise residing in the Service Center, particularly if allocation of funding to the site offices becomes reduced by any amount.

We are particularly concerned about the integrity of EM on the reservation. EM crosses over a number of program boundaries, and we are apprehensive that the proposed Oak Ridge Management Council will not be able to effectively resolve crosscutting issues that overlap programs, contractors, or sites. The ORO Manager has always been an effective judge in past instances that

involved these issues. For these reasons, we ask that you encourage your Headquarters' management to reconsider elimination of the Site Manager's position at DOE-ORO.

RESPONSE

The following response was received from DOE-ORO Manager Michael Holland in correspondence dated October 16, 2002: "Thank you for sharing with me the concerns of the ORSSAB regarding the manager's position at ORO. I appreciate the ORSSAB taking the time to review the ORO Alternative Management Model Initiative (AMMI) Report. In response to concerns like yours we recently completed an additional study of a management model used at ORO from 1983 to 1999. This study will be available in the near future. I want to immediately address your concern by assuring you that we have no intention of eliminating the ORO manager. We also recognize the important role the manager must continue to play in resolving crosscutting program and reservation issues and representing DOE to stakeholders. I would also like to take this opportunity to update you on our restructuring efforts at ORO.

The AMMI provided ORO an opportunity to develop a conceptual design for the organization that will allow DOE to best deliver its missions on the ORR. The President's Management Reform Agenda is driving all federal agencies to reduce layers of management, clarify roles, responsibilities, authorities and accountabilities, simplify requirements, and streamline management processes. As part of DOE's efforts to meet the Agenda, the Office of Science initiated in July a restructuring project for its headquarters and field organizations. The ORO AMMI conceptual design is a part of this project.

The restructuring project is now conducting the detailed design work. As we continue to develop the final design for ORO, it is clear that effective coordination of the reservation programs, including EM, is necessary. It is also clear that a manager responsible for dealing with crosscutting program issues, and for representing DOE to stakeholders, is necessary. As we continue to refine the final design, these important aspects of the management of ORO are being considered."

ENDORSEMENT OF RH TRU WASTE PERMIT MODIFICATION REQUEST

BACKGROUND

DOE is seeking authorization to ship remote-handled (RH) TRU waste to WIPP as part of DOE's effort to accelerate the disposition of legacy waste. To obtain authorization, DOE submitted a Class 3 modification request for the WIPP RCRA permit. Following are ORSSAB's comments on the request, which were addressed to the New Mexico Environment Department (NMED).

RECOMMENDATIONS/COMMENTS (APPROVED 10/9/02)

Oak Ridge has the largest percentage of the 3,800 cubic meters of defense-related RH-TRU waste in the DOE complex. Oak Ridge also has relatively high annual rainfall levels and shallow, interconnected aquifers, making it an unsuitable location for the indefinite storage and disposal of RH-TRU wastes; therefore, the ORSSAB has a vested interest in the acceptance by NMED of this permit modification request. If approved, the RCRA permit modification would allow the management, storage, and disposal of mixed RH-TRU waste at WIPP. We offer these comments in support of the proposed request:

- RH-TRU waste constitutes only 14% of the total curie activity in DOE's TRU inventory, and the effects of the radionuclides (greater than 20 year half-life) associated with this waste are two orders of magnitude lower than that in the contact-handled TRU waste.
- The preliminary assessment analyses show that the characteristics of RH-TRU waste will have a negligible impact on the potential long-term release of radionuclides into the environment.
- The Land Withdrawal Act of 1992 allows the disposal in WIPP of up to 175,564 cubic meters of TRU waste, including 7,080 cubic meters of RH-TRU waste. The estimated inventory of RH-TRU waste in the DOE complex is well below this level, and final disposal volumes will be further reduced by treatment.
- DOE's proposed RH-TRU waste characterization plan is performance based and includes the acceptable knowledge process, visual examination, radiography, and characterization at time of packaging. Use of these tools, in combination when appropriate, will

ensure that WIPP waste acceptance criteria will be met and items indicating presence of hazardous constituents or prohibited items of concern to safe management of the RH-TRU waste will be identified.

- The RH-TRU wastes from Oak Ridge will all be characterized and repackaged in a specially designed processing facility. The wastes processed in this facility should meet or exceed the waste acceptance criteria proposed in the Class 3 RCRA permit modification request.

DOE's crosscutting approach of accelerated legacy waste disposition will result in reduced risk to the public and the environment. It is ORSSAB's hope that NMED will accept this permit modification request and allow shipment of RH-TRU waste to the WIPP.

RESPONSE

The following (abridged) response was received from Steve Zappe, NMED WIPP Project Leader, in correspondence dated February 19, 2003: "Thank you for your February 7, 2003, follow-up letter to your endorsement of the RH TRU Waste permit modification request currently under consideration by the NMED. Under the regulations governing permit modifications, NMED issues a response to comments at the time any final permit decision is issued. Because the RH TRU permit modification is being handled under the Class 3 process, we are not obligated to respond to comments until a final permit modification is approved. Currently, NMED is developing a Notice of Deficiency (NOD) that should be issued to the Permittees at WIPP by the end of this month.

In response to your hope that "NMED will accept this permit modification request and allow shipment of RH TRU waste to the WIPP," it should be apparent that by issuing a NOD we demonstrate that we have concerns with the modification as it was submitted. The NOD will identify specific technical and regulatory deficiencies that must be addressed by the Permittees before NMED can develop a draft permit recommending approval of RH TRU waste at WIPP."

COMMENTS ON THE PREFACE TO THE SITE TRANSITION FRAMEWORK FOR LONG-TERM STEWARDSHIP

BACKGROUND

In Fall 2002, DOE-HQ released its draft “Site Transition Framework for Long-Term Stewardship” as part of its guidance to sites preparing for closure. These sites included Fernald, Weldon Spring, Mound, and Rocky Flats. The document provides a framework for the transition of a site or portions of a site from cleanup to long-term stewardship and provides a checklist approach for affected parties. The goal is to ensure that nothing in the closeout process is overlooked and that appropriate actions have been completed prior to a site’s transfer into long-term stewardship.

Knowing that portions of the ORR will transition into long-term stewardship in the next few years, ORSSAB members took a keen interest in this topic and generated the following, which were addressed to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 10/9/02)

ORSSAB has reviewed the subject document and has developed comments per your request. Generally, we find that the document is very well done and very well thought out. It does a good job taking into account many of the concerns we have expressed in the past regarding DOE’s approach to long-term stewardship. We urge DOE to adhere to the principles and practices set forth therein.

Specific comments on the document are as follows:

- Preface, second paragraph, last sentence beginning: “Subsequent applications should be conducted and used...” The meaning of this statement is not clear. Please clarify.
- Page 2, II, A. “The site at the time of closure...” Add to the examples: Describe the initial risk at the site and the risk remaining following remediation. This will provide a reference baseline.
- Page 3, III, B. 1. Are you specifying the analytical methods to be used? Only the requirements should be specified. Changes in methodology should be allowed as long as performance is maintained.

Thank you for the opportunity to comment on this important document, and we look forward to continuing our work with you in the development of long-term stewardship plans for the ORR.

RESPONSE

The response to comments is expected to be reflected in the revised document.

RECOMMENDATIONS ON FACT SHEETS FOR EXPLANATIONS OF SIGNIFICANT DIFFERENCE FOR CERCLA RODs

BACKGROUND

In October 2001, ORSSAB provided recommendations to DOE to ensure that sufficient public input was received on Explanations of Significant Differences (ESDs) to CERCLA RODs. The recommendation asked DOE to provide broad public notification of the intent to prepare an ESD at the earliest possible date so that public issues and concerns can be considered in the preparation of the ESD. ORSSAB also recommended that DOE publish a fact sheet that clearly explains the rationale behind the ESD and the potential impacts on the original decision.

In 2002, DOE proposed an ESD for the Melton Valley ROD to address remediation of four new waste management units, and DOE asked ORSSAB to review the draft fact sheet. The ORSSAB EM Committee offered informal comments to DOE but also believed that a formal recommendation was warranted.

Following are ORSSAB's comments, which were addressed to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 11/13/02)

ORSSAB would like to see DOE take a more descriptive and comprehensive approach to developing fact sheets for ESDs. Because there is no opportunity for public comment and little other information regarding ESDs, the fact sheets represent the major source of information with regard to these important events in the remedial decision-making at the ORR.

Overall, ORSSAB offers the following principles for use in developing future ESD fact sheets and encourages DOE to apply these principles to all fact sheets to make them more "user friendly" and easy to read.

- **Clearly State the Purpose and Public Importance of the Fact Sheet Up Front** - At the very top of the fact sheet and highlighted for easy reading, DOE should clearly state the main purpose of the fact sheet and why it is important to the public. Topics to address include: What are the proposed changes? How and when will they be made? How can the

public comment or find more information? What makes the ESD significant?

- **Clearly Provide the Context for the Fact Sheet** - Some detail regarding the purpose and scope of the original ROD is necessary to orient the reader to the significance of the proposed changes. DOE should not assume that the reader is familiar with the topic. Provide a rationale for the decision.
- **Use Less Narrative and More Bullets** - Clearly list key points so that the reader can understand key issues. Avoid use of long narrative paragraphs, which are hard to read.
- **Use More and More Descriptive Subheadings** - These help orient the reader and identify key information.
- **Use Diagrams, Maps, and Pictures to Orient the Reader** - Readers need to understand the nature of the subject, and visuals would greatly enhance their understanding. Clear descriptive captions are essential.
- **Provide Background** - Describe and define what a ROD, an ESD, a ROD amendment are.

RESPONSE

The following (abridged) response was received from DOE-ORO Assistant Manager for EM Gerald Boyd in correspondence dated May 7, 2003: "Thank you for the November 14, 2002, letter and recommendations regarding the substance and format to be used for future fact sheets prepared to inform the public of planned changes to a signed ROD. As you may be aware, we will soon be discussing with the Federal Facility Agreement Regulators the preparation of an ESD for the Molten Salt Reactor Experiment ROD. The members of the ORSSAB will be provided draft copies of the fact sheet prepared to provide to the public sufficient information to understand the nature of the change(s) being proposed to this ROD. We believe that these fact sheets are a valuable tool for providing the public with the information necessary for their understanding the nature of and rationale behind the ESD changes, and we will follow the principles recommended by the Board as closely as possible in these efforts."

COMMENTS ON THE LUCIPs FOR MELTON VALLEY, BETHEL VALLEY, AND UPPER EAST FORK POPLAR CREEK

BACKGROUND

The Land Use Control Implementation Plans (LUCIPs) for these three areas of the ORR were released in September and October 2002. They describe what actions must be taken to implement and maintain the controls necessary to ensure protectiveness that their respective remedial actions were designed to achieve. Following are ORSSAB's comments, which were addressed to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 11/13/02)

ORSSAB and its Stewardship Committee, which has been designated by DOE as the interim Citizens' Board for Stewardship, have reviewed the subject documents and developed the following comments.

Each of the LUCIPs reviewed has consistent language and structure. The LUCIPs appear to accomplish the intent of section 2.6 of the Land Use Control Assurance Plan tri-party memorandum of understanding dated November 11, 1999. Section 2.6 details unit-specific requirements for LUCIPs and further states, "The LUCIP should accomplish the following:

- identify the area that is under restriction (e.g., a survey plat that is prepared by a registered land surveyor and approved by an Oak Ridge Reservation DOE Realty Officer, a detailed description or map, etc.),
- identify each land use control objective for the waste unit (e.g., prohibit residential use, etc.), and
- specify the specific controls and mechanisms required to achieve each identified objective (e.g., install/maintain a fence, post warning signs, etc.)."

Since the waste units and areas of concern include "active measure actions" along with institutional controls (i.e., land use controls) the land use controls appear to have been included in the respective RODs.

The three tables included in each LUCIP provide the reviewer an informative snapshot of the remedial actions, Land Use Controls and required monitoring of the Land Use Controls. The maps and associated text identify the areas under restriction; the survey plats filed

with the City of Oak Ridge Community Development Department and recorded with the registrar of deeds in the appropriate county after completion of all remedial actions will provide greater detail.

The ORSSAB asks that operability and internal consistency be improved in the following areas to assure that the LUCIP meets community needs over time:

1. The discussion of property record restrictions contemplates the possibility of transfers of restricted-access lands, while other portions of the text seem to assume DOE control will continue indefinitely. Each Land Use Control discussion should indicate how it will be carried forward after any property transfer.
2. Relative to property record restrictions, the document fails to recognize that such restrictions are meaningless unless DOE uniformly enforces the restrictions, if necessary, through the civil courts. Enforcement needs to be explicitly recognized as part of the Land Use Control. Monitoring such Land Use Controls will require verification that such enforcement has taken place.
3. The ORSSAB has suggested that the DOE seek appropriate zoning of areas with restricted access in the near term while DOE still owns the land. We request that the LUCIP text stating that such zoning will not occur be removed. Such zoning would be in accord with DOE's intended use of the land, so enforcement would not be an issue.
4. The generally thorough section on property record notices does not explicitly indicate that such notices need to contain a brief description of the buried waste components. This critical information must be included in the property record notices.
5. The discussions of fencing and signs suggest that annual inspections may suffice. The maximum time that an incursion may be allowed to continue in each area should be stated. (A one-year inspection interval implies that a six-month incursion would be tolerable.)

RESPONSE

The response to comments was reflected in the revised document.

RECOMMENDATION ON THE RCRA PART B PERMIT RENEWAL FOR TSCAI

BACKGROUND

The Toxic Substances Control Act Incinerator (TSCAI) was constructed in the 1980s to thermally treat RCRA hazardous and low-level radioactive mixed waste containing PCBs. The RCRA Part B permit for waste treatment was issued on September 28, 1987, and



TSCAI is the only incinerator in the DOE complex permitted to burn TSCA, RCRA, and radioactive waste solids and liquids. It combusts PCBs at 99.9999% efficiency and is the cornerstone of the DOE-ORO Site Treatment Plan. Selected out-of-state wastes are allowed per the yearly TSCAI Burn Plan.

routine operations began in 1991. The permit was due for renewal after 10 years, but delays occurred for a number of reasons. An updated permit application was finally submitted in 2002. Following are ORSSAB's comments, which were addressed to TDEC's Combustion Section of the Division of Solid Waste Management.

RECOMMENDATIONS/COMMENTS (APPROVED 11/13/02)

We recommend that TDEC Division of Solid Waste Management expedite the TSCAI RCRA Part B permit renewal to establish final permit conditions

incorporating the risk assessment results after adequate review and comment by an engaged public.

ORSSAB is an independent, federally appointed citizens' panel that provides advice and recommendations to DOE on its Oak Ridge EM Program. The group was formed in 1995. The Board is dedicated to providing

informed recommendations and advice to the DOE EM Program regarding environmental restoration, stewardship, and waste management, as well as land use and economic development of contaminated areas. Recommendations regarding environmental justice, health and safety issues, and other subjects may be developed at the Board's discretion. The Board is committed to reflecting the

concerns of the communities impacted by environmental management of the ORR and to serving as a communications link between the public and the relevant government agencies, including local governments.

RESPONSE

The response to comments is expected to be reflected in the permit.

COMMENTS ON THE ENVIRONMENTAL ASSESSMENT FOR PROPOSED CHANGES TO THE SANITARY BIOSOLIDS LAND APPLICATION PROGRAM ON THE ORR

BACKGROUND

In October 2002, DOE released this document to make changes to the land application program. Following are ORSSAB's comments addressed to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 11/13/02)

ORSSAB offers the following comments and questions, which should be addressed in determining whether an environmental impact statement will be prepared or a Finding of No Significant Impact will be issued.

- More information is needed on the soil hydraulic conductivity and other physical properties of the soils for the six active sites, which total 329 acres.
- The map on page 1-6 needs to be revised and enlarged to show soils.
- The map should have corresponding tables and legends, which identify the six active sites with data that incorporate estimates of exposure under worst scenario antecedent moisture conditions and lowest hydraulic conductivity.
- More history on the six active sites as well as the inactive sites would be helpful in narrative form.
- What were the prior uses and proximity of individuals over time to the sites?
- On page 1-5, the paragraph relating to the city of Oak Ridge's plans needs updating. Some discussion of what has transpired since then is needed.
- In light of the August 2002 referendum's defeat, the financial status of the city's operations and planned improvements needs to be reevaluated and discussed.
- Please explain the statement on page 1-5 that refers to the city's planned new treatment system, which would "increase solids content and sterilize biosolids... resulting in more manageable and safer material." What is meant by "more manageable and safer?"
- The Executive Summary identifies an alternative to the proposed dose rate increase being "to leave the existing ORR land application sites altogether in favor of free distribution of the biosolids material to the public." This option should be evaluated.
- How close to the 4 mrem/yr are we actually now? Or does the gamma monitoring not give enough data for this to be calculated?

- Appendix D is based on a 20-year program, and it is also stated that we have 7 years remaining in that program; this would give a start date of 1989. What does 1989 correspond to, in reference to the Land Application Program started in 1984 and ORNL adding waste in 1999?
- Europium-155 has a higher limit than uranium. Does this imply that europium is a fairly large contributor?
- Why does the Rogers site have 56.8 percent of the allocated dose, according to Table 4.2?
- Why are the cesium-137 concentrations in 1999 increased, uranium-235 concentration in 1996 high, and the uranium-238 concentration usually low compared to the limit (Table B.4)?
- More details need to be provided on the proposed thermal treatment system and the fate of radionuclides undergoing thermal treatment in the proposed system evaluated.
- The results of the survey of publicly owned treatment works for baseline radioactivity associated with biosolid products should be discussed.
- The letter from the TDEC Division of Radiological Health claimed as approving the increase to 10 mrem/yr appears to only acknowledge concurrence at a planning level.
- According to the *Oak Ridge Reservation Annual Site Environmental Report for 2001*, Outfall 502 (West End Treatment Facility) had zero discharge for the calendar year. Please provide details on what portions of the approximately \$133,000 cost are due to effluent monitoring and treatment process changes.
- Why not evaluate additional alternatives, such as retaining the 4 mrem/yr limit with addition of Y-12 West End Treatment Facility discharge and excluding ORNL or ETTP biosolids or other discharges?

RESPONSE

David Allen of DOE-ORO responded on March 4, 2003, that "comments received by numerous individuals and organizations were incorporated, as appropriate, into the final assessment." A response to comments table was also incorporated as an appendix to the document.

COMMENTS ON THE DRAFT POLICY “CLEANUP DRIVEN BY RISK-BASED END STATES” AND DRAFT GUIDANCE “DEVELOPMENT OF RISK-BASED END STATES”

BACKGROUND

The draft policy and guidance were issued in early 2003 to set forth a framework for the Risk-Based End State Visions, which were submitted by the sites to DOE-HQ in FY 2004. Following are ORSSAB'S comments, which were addressed to DOE-HQ.

RECOMMENDATIONS/COMMENTS (APPROVED 2/12/03)

The ORSSAB Stewardship Committee, which has been designated by the DOE-ORO EM Program as the interim Citizen's Board for Stewardship (Public Involvement Plan, DOE/OR/01-1950&D3, October 2001), reviewed the subject documents and developed the enclosed comments, which were subsequently approved by the ORSSAB. Please note that the ORR cleanup strategy has been driven by risk-based analysis and an end-state vision developed by the DOE-ORO EM Program, the local regulators, and the citizen's End Use Working Group. In other words, Oak Ridge has risk-based inputs with stakeholder agreement.

ORSSAB concurs that implementation of this headquarters policy and guidance will contribute to completion of the complex-wide cleanup. A focused and rigorous effort by the Department, its regulators and stakeholders; dedicated resources; and clearly defined and articulated end states are integral to completion. Local governments have neither legal mechanisms nor resources to solve long-term stewardship issues.

Stakeholders and regulators must be consulted in the actions needed to develop and achieve risk-based end states. Unless stakeholders and regulators are included, the Department should expect a significant erosion of the trust that has taken years to establish.

Anything less than total cleanup results in an economic burden on the community. Potential economic impacts are not addressed by the Comprehensive Environmental Response, Compensation, and Liability Act. Therefore, economic impacts must be considered when end-state visions are being determined.

It is refreshing to see that the Department policy and guidance includes contingency planning in the event that site conditions change after cleanup is completed. Such Planning is part of a fully developed and integrated long-term stewardship program.

RESPONSE

The response to comments is expected to be reflected in the revised documents.

EM SSAB RECOMMENDATIONS ON TRU WASTE MANAGEMENT

BACKGROUND

In early 2003, all nine EM SSABs met in Carlsbad, New Mexico, to conduct a conference on TRU waste management. The following recommendations were approved at the conference and were endorsed by ORSSAB on March 12, 2003.

RECOMMENDATIONS/COMMENTS (APPROVED 3/12/03)

- We recommend that DOE characterize TRU waste as required to reduce risk and minimize transportation and handling of the waste, while making the confirmation process cost effective.
- The receiving capacity of WIPP is not always sustained. We recommend that the DOE allocate and coordinate resources complex-wide to optimize shipping to match the receiving capacity of WIPP.
- Some requirements affecting the TRU waste management program are overly prescriptive, are hazardous to worker safety, do not contribute to public safety, and are also negatively impacting schedules and costs. These requirements were developed without the experience the National TRU Waste Management Program now possesses. We recommend that DOE, in concert with stakeholders and regulators, initiate an ongoing program to identify, correct, and revise those requirements that interfere with the safe, prompt and cost effective management of TRU waste.
- There are potential TRU wastes for which volumes and disposition paths are not yet identified. These potential TRU wastes may cumulatively exceed the authorized capacity of WIPP. We recommend that the DOE identify volumes and disposition pathways for all potential TRU waste streams; and further, we recommend that DOE, in consultation with stakeholders and regulators, initiate action to assure that WIPP has the capacity to accommodate all of the above listed TRU wastes, as necessary.
- There is TRU waste for which containers are not currently available or planned. We recommend that the DOE accelerate TRU waste container design, licensing and deployment.
- At present, the regulatory framework requires one hundred percent confirmation of TRU waste process knowledge. We recommend that the DOE

streamline TRU waste management by accepting demonstrated process knowledge for TRU waste characterization; and further,

- We recommend that the DOE, in consultation with stakeholders and regulators, reexamine the categorization of TRU waste using a risk-based approach; and further, we recommend that the DOE identify the inventory of orphan TRU waste and assign a corporate project team to develop a path forward.
- We recommend that the DOE evaluate the concept of one or more locations to characterize TRU waste for WIPP disposal; and further, we recommend that the DOE finish its analyses and make a decision with adequate public involvement regarding where to characterize TRU waste for disposal.
- The following issues impede accelerated cleanup:
 - (a) oversized boxes have no available containers or method of transport without size reduction; and,
 - (b) high-activity waste has no available container without requiring repackaging and increased risk to personnel. We recommend that DOE expedite design, certification, and fabrication of appropriate containers, and accelerate the adoption of rail transport, as appropriate.
- We recommend that the DOE revitalize its efforts in coordinating transportation issues with states and Indian Tribes and assist in updating and disseminating information to the public about transportation risks and safety and provide public participation opportunities on transportation issues.

RESPONSE

The following (abridged) response was received from Jessie Roberson in correspondence dated June 2, 2003: "We agree in principle with the recommendations. The recommendations support concepts presented in the National TRU Management Plan, the Performance Management Plan for TRU, and recent and ongoing TRU waste studies by the National Research Council. We are committed to working with the SSABs, other stakeholders, and regulators to implement these recommendations to the extent practicable."

ENDORSEMENT OF THE CITY OF OAK RIDGE'S APPLICATION FOR RENEWED ANNUAL ASSISTANCE PAYMENTS UNDER THE ATOMIC ENERGY COMMUNITIES ACT

BACKGROUND

This endorsement was proposed to address the ability of local governments to establish sustainable tax bases, implement economic self-sufficiency programs, and help balance the socioeconomic inequities that will have to be borne by local governments that serve as hosts for DOE facilities.

RECOMMENDATIONS/COMMENTS (APPROVED 6/11/03)

In its meeting on Monday, April 7, 2003, the Oak Ridge City Council unanimously approved an action to send an application to the United States Secretary of Energy requesting renewed annual assistance payments.

Please be advised that ORSSAB strongly supports this initiative. ORSSAB believes the restored annual assistance payments being requested by the Oak Ridge City Council are justified for the following reasons:

DOE Program Decisions Concerning ORR Land Resources—Some fifteen years ago, DOE negotiated a lump-sum buy-out with the City of Oak Ridge and the two counties that host the ORR. The agreement suspended the payments in lieu of taxes and annual assistance payments that were being made at that time. This agreement was predicated on a commitment from DOE to release a significant amount of ORR land to the City of Oak Ridge over a defined period of time as part of an economic self-sufficiency initiative. Although some parcels were subsequently transferred, much of the previously identified land has been retained by DOE for its own uses, designated by the EM Program to be long-term storage locations for radioactive and/or chemically toxic wastes, or turned over by EM to other government agencies to be managed as wildlife refuge areas. Such actions by DOE limit the ability of local governments to establish a sustainable tax base, and have seriously impaired the implementation of the economic self-sufficiency program.

Equity Issues Associated with EM's Long-Term Storage Location Designations for Radioactive and/or Chemically Toxic Wastes—Ad hoc citizen's working groups, focus groups, and other local citizens have been organized by local DOE officials to formally review and comment on land use and on decision documents for long-term waste storage on the ORR. However, at no time have the citizens of Oak Ridge been given an opportunity to reflect on the broader socioeconomic impacts associated with all of the DOE EM, EPA Region IV, and TDEC waste management land-use decisions taken together. As a matter of practical reality, commercially productive uses for land that has been designated for long-term storage of radioactive and hazardous chemical wastes are, and will remain, quite limited. Reinstatement of annual assistance payments would help balance the socioeconomic inequities that will have to be borne by local governments forced to serve as hosts for such facilities.

RESPONSE

The following (abridged) response was received from Steve McCracken of DOE-ORO EM Program in correspondence dated October 6, 2003: "Thank you for your letter expressing ORSSAB support for the City of Oak Ridge on the issue of annual assistance payments. Because these issues fall outside the purview of the EM Program, a copy of your letter is being forwarded to Gerald Boyd for his use during future consideration of this issue."

RECOMMENDATION CONCERNING THE ACTION MEMORANDUM FOR THE COREHOLE 8 PLUME SOURCE (TANK W-1A) REMOVAL ACTION AT ORNL

BACKGROUND

The ORSSAB Environmental Restoration Committee studied this topic and questioned why the removal action has not been completed because any delay in completing this action is not in keeping with the risk model. The committee agreed that the Board should send a recommendation to DOE-ORO to expedite completion of the removal action.

RECOMMENDATIONS/COMMENTS (APPROVED 6/11/03)

A number of issues revolve around this project. The original action memorandum mentioned TRU waste as a potential contaminate, but the action plan assumed that TRU would not be found. When TRU was found, work was stopped and the excavation was filled. This action was inconsistent with the approved action memorandum.

There was a scope in the original action memorandum, and we question why the removal action has not been completed. The Life Cycle Baseline needs to be sequenced to properly analyze downtown ORNL concurrently with the east and west ends.

The original objective for this action memorandum was to reduce contaminants entering First and White Oak creeks and lower health and environmental risks associated with release of contaminants. Any delay in completing this action is not in keeping with the risk model. TDEC has suggested that this removal action is not consistent with other actions in Bethel Valley, as specified in the ROD. We agree because of the data gaps, especially with this project.

We recommend that DOE-ORO EM expedite and complete the Action Memorandum for the Corehole 8 Plume Source (Tank W-1A) Removal Action at ORNL.

RESPONSE

The following (abridged) response was received from Steve McCracken in correspondence dated January 23, 2004: "Very appropriately, the SSAB has chosen to weigh

in on an issue that has been a source of many lengthy discussions with the Regulators. As you know, the safety of the workers will always be DOE's highest priority. When the excavation work being performed at this location ran into extremely high radioactive material, the selected remediation contract did not anticipate encountering soils with transuranics above 100 nCi/gram that required additional training, equipment, or expertise necessary to appropriately work with this type of material. Based upon significant safety concerns to the contract workers and laboratory employees, insufficient time and funding to recontract the work, and not having access to a final disposal site for the excavated transuranic wastes, EM made the very difficult decision to stop the work and refill the excavation site.

This project has remained a very high priority to the three Parties to the Federal Facility Agreement (FFA) and was therefore kept within the Cost Plus Incentive Fee contract recently signed with Bechtel Jacobs Company, LLC, to be completed by FY 2008. During a recent meeting of the FFA parties' managers, this project and its schedule was a main topic of discussion. DOE agreed with EPA and TDEC that this work would have scheduled within the FFA Appendix E, a milestone for the Removal Action Work Plan to initiate the completion of this work. As you have recommended, our plans are to, at a minimum, complete the scope of work defined within the signed Action Memorandum."

RECOMMENDATION ON THE DEPLETED URANIUM HEXAFLUORIDE DISPOSITION PROGRAM AT ETTP

BACKGROUND

DOE is preparing to initiate transfer of depleted uranium hexafluoride (UF_6) cylinders from ETTP to the Portsmouth Gaseous Diffusion Plant, where a conversion facility is being constructed. Because transport of these cylinders is a potential hazard and removal of this material is integral to DOE's Accelerated Closure Plan goal for ETTP and to the public's desire to mitigate the risk posed by storing the cylinders at ETTP, the Waste Management Committee agreed that ORSSAB should issue the recommendation, which was addressed to DOE-ORO EM.



Depleted UF_6 from gaseous diffusion activities is kept in cylinders located in six yards at ETTP. The cylinders are stored outside and are subject to deterioration through exposure to the elements. The cylinders pose a security risk and a potential hazard to workers and the environment. In addition, surveillance and maintenance on the cylinders contribute to ETTP's already significant landlord costs.

RECOMMENDATIONS/COMMENTS (APPROVED 7/9/03)

ORSSAB fully supports the accelerated shipping schedule for depleted UF_6 cylinders from ETTP. Additionally, we recommend that DOE keep open and not preclude transportation options other than highway.

Finally, we recommend that DOE manage the safety aspects of the program consistent with the entire knowledge base of the hazards associated with handling UF_6 and inform the public about any plans to seek exemptions from more stringent requirements that may be evolving.

RESPONSE

The following (abridged) response was received from Steve McCracken in correspondence dated October 26, 2003: "DOE greatly appreciates your support on the accelerated shipping schedule for depleted UF_6 cylinders.

We are working to resolve outstanding issues related to commencement of cylinder shipments. In response to your recommendation that DOE keep open transportation options other than highway, please understand that the mode of shipment selected was based on a number of factors: site logistical constraints, public safety, stated preference of state emergency management agency staff, and cost. Should future circumstances warrant, DOE will reexamine its transportation options in light of changing conditions. With regard to your concerns on the safety aspects of the program, depleted UF_6 shipments have an excellent safety record. There has never been a release associated with any domestic depleted UF_6 shipments. All shipments will comply with Department of Transportation requirements, and

any exemptions from current or future requirements that may become necessary will be coordinated with the Department of Transportation, and approved by, DOE prior to shipment."

RECOMMENDATION TO ACCELERATE REMOVAL OF RH TRU WASTE

BACKGROUND

Thirteen recommendations on TRU waste were generated the EM SSAB TRU Waste Workshop in Carlsbad, New Mexico in early 2003. ORSSAB members who attended the workshop agreed that the three issues presented by Oak Ridge at the workshop had not been covered sufficiently in the workshop recommendations. The Board agreed that it was appropriate to send these issues to DOE-HQ.

RECOMMENDATIONS/COMMENTS (APPROVED 7/9/03)

The recommendations approved at the SSAB workshop represented issues of concern that were common to stakeholders across the sites. It was not possible to capture every site-specific concern that existed, nor was it necessary for the workshop to be successful. Since the workshop, we have continued to monitor activities related to disposition of TRU waste at WIPP and would like to reiterate and comment on the site-specific concerns presented as our top three issues at the workshop:

Timely acceptance of RH TRU waste at WIPP.

Oak Ridge has approximately 90% of the RH-TRU curie activity in the DOE Complex. A state-of-the-art processing facility has been constructed to perform characterization, treatment, and repackaging of legacy RH and contact-handled TRU waste. Oak Ridge's strategy is based on separation of low-level waste to minimize the amount of TRU waste disposed of at WIPP. Some of the RH-TRU is stored in shallow burial in the very wet Oak Ridge environment and cannot be staged through engineered storage facilities and on to processing until the backlog is worked off. Processing cannot proceed until waste characterization program requirements under the pending RH-TRU waste permit modification request are better understood. The response from DOE Carlsbad Field Office and Washington TRU Solutions to the State of New Mexico Environment Department on the notice of deficiency for the permit modification request indicates fundamental disagreement on the current legal standard for a RH-TRU mixed waste characterization program. It causes reasonable concern to stakeholders about timely resolution. For this reason and complications due to revised budget allocations, the operational activities at

the TRU waste processing facility have been adjusted, but further accommodation likely cannot be made without jeopardizing the investment in and cost-effective utilization of resources and capability. ORSSAB feels strongly that the TRU waste must be removed from the ORR. Long-term storage of RH-TRU could be costly should WIPP not receive permitting from the state of New Mexico.

Acceptance of unique TRU waste streams at WIPP.

Unique or orphaned TRU waste streams of interest to Oak Ridge include non-defense and PCB-contaminated TRU waste. While the volumes are small at Oak Ridge, the mortgage cost of long-term storage remains if these waste streams remain orphaned. We support the necessary legislation and regulatory changes to enable the disposal of unique waste streams provided that direct disposal of these waste streams without treatment will not cause WIPP capacity to be exceeded.

TRU waste shipment logistics to WIPP. This issue was raised prior to the workshop to capture potential concerns beyond the first two stated, and we offer no additional comments in this area.

Please accelerate the removal of RH-TRU and orphaned waste from Oak Ridge.

RESPONSE

The following (abridged) response was received from Jessie Roberson in correspondence dated September 9, 2003: "I am impressed that ORSSAB has developed a comprehensive set of site-specific recommendations related to the hurdles facing the RH-TRU program. We agree in principle with the recommendations. The recommendations support concepts presented in the National TRU Waste Management Plan, the Performance Management Plan for TRU Waste, and recent and ongoing TRU waste studies by the National Research Council. We remain committed to working with ORSSAB, other stakeholders, and regulators to accelerate cleanup of TRU waste sites and to implement, to the extent practicable, recommendations like those offered by the SSAB."

RECOMMENDATION ON GROUNDWATER CHALLENGES AT THE EM WASTE MANAGEMENT FACILITY

BACKGROUND

A rising groundwater problem was identified beneath DOE's new CERCLA waste management facility (EMWMF) in Spring 2003. Several alternatives to the facility design were proposed by DOE to remedy the problem. Because building the facility had wide public support, EPA and the state insisted on getting the public's input before making a decision. ORSSAB provided this forum on two occasions, where public attendance was excellent. In July ORSSAB endorsed DOE's preferred method for placement of an underdrain to address the high groundwater. Following is ORSSAB's recommendation, which was addressed to DOE-ORO.

RECOMMENDATIONS/COMMENTS (APPROVED 7/9/03)

At our July 9, 2003 meeting, ORSSAB voted unanimously (with one abstention) to endorse DOE's concept of placing an underdrain at Cell 3 of the CERCLA waste facility to lower groundwater under the EMWMF. This is the preferred concept that DOE presented to the Board and Waste Management committee in their June meetings.

Timely and successful resolution of this problem is important to the future of the facility and we would like to continue to receive regular updates on the implementation of the selected remedial method. We appreciate your consideration of our endorsement.



An important component of the ORR cleanup plan is to unearth problem wastes and relocate them to new, well-designed disposal facilities on the reservation. This photo shows wastes from a cleanup project being disposed in the new EM Waste Management Facility at Y-12. The facility was designed to minimize the possibility of wastes leaching into the environment by enveloping them above and below in many layers of synthetic and natural liner materials.

RESPONSE

The following (abridged) response was received from Steve McCracken in correspondence dated August 6, 2003: "Thank you for your letter dated July 21, 2003, endorsing DOE's preferred concept of installing an underdrain at the Environmental Management Waste Management Facility. We agree that successful resolution of groundwater issues at the facility is very important, and the input provided by the Board has been helpful to the decision-making process. As you requested, we will continue to provide regular updates on the installation of the underdrain. We appreciate your comments on this topic, and we thank you for your continued advice and recommendations."

COMMENTS ON *LONG-TERM STEWARDSHIP OF DOE LEGACY WASTE SITES—A STATUS REPORT*

BACKGROUND

This study, initiated at the request of DOE's Office of EM, was undertaken to analyze long-term institutional management plans and practices for a small, representative group of DOE legacy waste sites and to recommend improvements to these plans. To inform its review, the study committee visited two DOE sites, Mound and Fernald, as well as the Moab Site in Utah, which was examined as a side study requested by Congress.

At the request of DOE's Assistant Secretary for EM, the National Academies' Board on Radioactive Waste Management asked the committee to end its data-gathering activities early and to prepare a status report based on its work to date. The report is based on what the committee found in visiting three DOE sites, reviewing documents relevant to long-term stewardship at these three and other DOE sites, and engaging in discussions with DOE staff and others. The findings and recommendations are necessarily somewhat limited, in some cases raising more questions than answers, partly because the study did not run its full course.

Following are ORSSAB's comments on the report, which were addressed to DOE-HQ.

RECOMMENDATIONS/COMMENTS (APPROVED 8/2/03)

ORSSAB has reviewed the *Long-Term Stewardship of DOE Legacy Waste Sites—A Status Report*. The ORSSAB heartily endorses the report's Chief Finding as follows:

“The committee observed a compartmentalization of cleanup planning and LTS planning at the sites visited: cleanup planning and execution will conclude at a site, and LTS is left to address the resultant end state.

The committee has found no evidence that DOE (a) is considering requirements for and the likely effectiveness of LTS measures when establishing cleanup goals and approaches, or (b) has worked out practical and enduring means of implementing

LTS so as to realize its goals for protection over the long term. In the recent emphasis by DOE on the objective of accelerating cleanup, the committee has seen no statement of how DOE will balance that objective against future risks. There is the possibility of a need for additional cleanup in the future if remediation is poorly planned or carried out. Moreover, if greater reliance on LTS is chosen over contaminant reduction, the consequences and in turn the risks of LTS failures may increase. Explicit consideration of LTS issues when establishing cleanup goals and approaches would demonstrate that DOE is taking its responsibilities seriously – a key step in building trust among wary stakeholders. The failure to link LTS to cleanup undermines credibility and strengthens the fear among skeptical stakeholders and regulators that a hollow promise of stewardship is being imposed as a substitute for more costly and complete near-term cleanup.

The committee has seen some progress in DOE efforts on LTS in recent DOE documents, but despite statements embracing LTS, the way in which DOE has selected, developed and implemented remedies means that LTS continues to be an afterthought in practice.”

The information-gathering work of the committee ended earlier than planned, and while we prefer the project could have been carried out fully, the conclusions drawn match many concerns of the ORSSAB as set forth in a number of our recommendations, as well as concerns expressed by DOE. In short, we seem to have reached a solid consensus. We hope this ensures that implementation of long-term stewardship plans will move forward.

RESPONSE

No response was requested.

APPENDIX C: ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	U.S. Department of Energy
DOE-HQ	DOE-Headquarters
DOE-ORO	DOE-Oak Ridge Operations
EM	Environmental Management
EMWMF	Environmental Management Waste Management Facility
EPA	U.S. Environmental Protection Agency
ESD	explanation of significant difference
ETTP	East Tennessee Technology Park
FFA	Federal Facility Agreement
FY	fiscal year
IT3	International Conference on Incineration and Thermal Treatment Technologies
LUCIP	land-use control implementation plan
NMED	New Mexico Environment Department
NNSA	National Nuclear Security Administration
NOD	Notice of Deficiency
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
ORSSAB	Oak Ridge Site Specific Advisory Board
RCRA	Resource Conservation and Recovery Act
RH	remote-handled
ROD	record of decision
SNS	Spallation Neutron Source
TDEC	Tennessee Department of Environment and Conservation
TRU	transuranic
TSCAI	Toxic Substances Control Act Incinerator
UF ₆	uranium hexafluoride
WIPP	Waste Isolation Pilot Plant
Y-12	Oak Ridge Y-12 National Security Complex