Agency Liaisons

These individuals serve as points of contact between the board and their respective agencies. A DOE liaison must be present at all board meetings. TDEC and EPA liaisons are often on hand to contribute to discussion and answer board member questions.



Jay Mullis

John Arthur (Jay) Mullis II is the Manager of the Department of Energy's Oak Ridge Office of Environmental Management (OREM). He was selected to this position in November 2017. He is responsible for safely executing the environmental cleanup of the 32,400-acre Oak Ridge Reservation.



David Adler

David Adler serves as the Deputy Designated Federal Officer for ORSSAB. He is director of the Quality and Mission Support Division for the Oak Ridge Office of Environmental Management.

Melyssa Noe serves as the board's Alternate Deputy Designated Federal Officer. She is branch chief of program support in the Quality and Mission Support Division for OREM.



Melyssa Noe

9

Connie Jones FPA

Constance (Connie) Jones represents Environmental Protection Agency. She is part of the Superfund Division in the agency's Region 4 Office, which covers the Southeast.



Kristof Czartoryski TDEC

Kristof Czartoryski is an environmental consultant with the Tennessee Department of Environment and Conservation. He is part of the agency's Division of Remediation in Oak Ridge.

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD IN OAK RIDGE

BIOGRAPHIES

Chris Hampel (Roane County). Mr. Hampel owns and operates a small business, Pressure Washing Solutions, which he formed in 2016. He previously worked at Energy Solutions, which is a contractor to DOE at the Oak Ridge site. Mr. Hampel has a high school education and trade skill training related to his work experience. He is interested in minority and business issues. He is a resident of Kingston, Tennessee, and was appointed to the board in December 2020.

Amy Jones (Anderson County). Ms. Jones is the senior benefit coordinator and a licensed insurance agent for Madison Insurance Group. She is also a sales manager for Arrowbroker and a real estate agent at Stephenson Realty & Auction. Ms. Jones owned her own business, Double J Enterprises of TN, in Rocky Top, Tennessee until mid-2018. A high school graduate, Ms. Jones has also received her real estate license and insurance license. She is active in a variety of community organizations including serving as an ambassador for the Anderson County Chamber of Commerce, vice chair for the Anderson County Republican Party, past vice chair of the Anderson County Headstart Policy Council, and chair for the State of Tennessee Order of Amaranth Diabetes Charity. She is a committeewoman on the State Executive Committee for the Tennessee Republican Party, past chair of the Women's Ministry Banquet at Main Street Baptist, and president of two groups in the Order of the Eastern Star. Ms. Jones is interested in environmental and county government issues. She lives in Briceville, Tennessee. She was appointed to the board in July 2019 and currently serves as chair of the EM and Stewardship Committee of the EM SSAB in Oak Ridge.

**Noah Keebler (Knox County). As of January 2021, Mr. Keebler is the owner of Arc Transportation, a logistics and freight company. He was previously a nuclear electronics technician with Ametek, which is a manufacturer of electronic instruments and electromechanical devices (no business with DOE or EM). Mr. Keebler received an A.S. in Electrical Engineering from Roane State Community College. He holds a certification in Instrumentation from Ludlum Measurements and several other certifications related to his work experience, including Occupational Safety and Health Administration training, electrical safety experience and radiation worker training. Mr. Keebler has an interest in environmental issues. He was appointed to the board in July 2019, and is a resident of Knoxville, Tennessee.

Michelle Lohmann (Knox County). Ms. Lohmann has been the human resources director for U.S. Cellular since February 2011. Previously, she was the program manager for the University Recruiting and Graduate Education Programs for ORNL/UT. Ms. Lohmann is a member of the Loudon County Boys and Girls Club Advisory Board and has an interest in economic development and environmental issues. A high school graduate, Ms. Lohmann resides in Knoxville, Tennessee. She was appointed to the board in June 2017 and currently serves as chair of the EM SSAB in Oak Ridge.

Gregory Malone (Roane County). Mr. Malone is a retired medical products development consultant. He operated Malone and Associates, Inc., an independent consulting firm, until 2019. Mr. Malone received a B.S. in Engineering with a Welding and Manufacturing concentration from Ohio State University. He is a member of the Oak Ridge Sportsmen's Association and a volunteer for the Great Smoky Mountains National Park. He is interested in environmental and economic development issues. Mr. Malone is a resident of Rockwood, Tennessee, and was appointed to the board in December 2020.

Thomas McCormick (Campbell County). Mr. McCormick is the city manager for the town of Oliver Springs, Tennessee, which includes portions of Anderson, Roane, and Morgan counties. He received a B.S. in Political Science from Middle Tennessee State University. He also has numerous certifications from the State of Tennessee, including as a water and wastewater treatment plant operator. Mr. McCormick lives in Jacksboro, Tennessee and is interested in city/county government and environmental issues. He was appointed to the board in December 2020.

Ann McCurdy (Anderson County). Ms. McCurdy retired in 2014 after more than 40 years as a teacher for middle- and high-school students both in the U.S. and abroad with a focus on the sciences. Most recently she served as a teacher of science and biology for grades 6-10 at Yangon Academy in Yangon, Myanmar. Prior to that, she taught a variety of science courses and environmental studies courses in China, Morocco, Kuwait, and Ecuador. Ms. McCurdy received a B.A. in Biology from Earlham College and an M.A. in Teaching Biology and her teaching certificate from Washington University. She is president of the Oak Ridge League of Women Voters and a member of Tennessee Citizens for Wilderness Planning. Ms. McCurdy is a resident of Oak Ridge, Tennessee, and is interested in civic and educational issues. She was appointed to the board in February 2019.

Marité Pérez (Knox County). Ms. Pérez is a mortgage loan officer at First Community Mortgage. Previously, she worked in a similar position with Mortgage Investors Group. Ms. Perez has also worked with Latin and Haitian communities in the Dominican Republic as a community economic development advisor through the Peace Corps. She has additional business experience as business development manager for a local solar firm ARiES Solar. Ms. Pérez is chair of Centro Hispano of East Tennessee, a nonprofit which promotes empowerment and civic participation of the multicultural community through education and social services. She is also vice chair of the National Association of Hispanic Real Estate Professionals. Ms. Pérez has a B.S. in Social Sciences/Foreign Affairs from Florida State University and an M.B.A. in Global Social Sustainable Enterprise from Colorado State University. She is interested in environmental issues. Ms. Pérez is a resident of Knoxville, Tennessee, and was appointed to the board in July 2018.

Georgette Samaras (Anderson County). Ms. Samaras is director of community outreach for the local hospital system Covenant Health. She has also served as an adjunct instructor of Psychology at Pellissippi State Technical Community College since mid-2018. She is pursuing a Doctorate in Educational Leadership and Organizational Development, received an M.S. in Behavioral Psychology from Walden University, and a B.S. in Molecular, Cellular, and Developmental Psychology from the University of Colorado. Ms. Samaras is also a certified mind-body instructor through the Center for Mind Body Medicine. She is a volunteer with the USA Track and Field Federation and the Cancer Support Community. She is interested in environmental issues. Ms. Samaras resides in in Clinton, Tennessee, and was appointed to the board in July 2019.

Michael Sharpe (Loudon County). Mr. Sharpe is a SharePoint administrator and performs other technology- and web-based tasks for prime contractor Oak Ridge Associated Universities, which manages the Oak Ridge Institute for Science and Education for DOE. It provides science, education, workforce development, and health services that include some Oak Ridge EM areas such as decontamination verifications to support cleanup. He received an A.S. in Computer Programming from ITT Technical Institute and is pursuing a B.S. in Business Administration from Tusculum University. Mr. Sharpe is interested in civic and environmental issues. He is a resident of Lenoir City, Tennessee, and was appointed to the board in December 2020.

Leon Shields (Loudon County). Mr. Shields is the supervisor for field operations for the Lenoir City Utilities Board in Lenoir City, Tennessee, where he has worked for over 27 years. He is also the owner of Instructional Concepts, which provides training in industrial, public, and private application of firearms, explosives, vehicle extrication, and rescue operations. He is a firearms instructor/deputy for the Loudon County Sheriff's Office, an instructor/third party examiner for the State of Tennessee, a firefighter director with Loudon County Fire Rescue, chairman of the Lenoir City Planning Commission/Board of Zoning Appeals, a commissioner with the Lenoir City Housing Authority/Rural Development, secretary for the Loundon County Regional Board of Zoning Appeals, and a commissioner with the Loudon County Regional Planning Commission. A high school graduate, Mr. Shields is a member of several civic organizations, including the Boys and Girls Clubs of Tennessee Valley, Lenoir City High School Technical Advisory Board, Loudon County Chamber of Commerce, Demolay International, and the Fraternal Order of Police. Mr. Shields has an interest in environmental issues. Mr. Shields resides in Lenoir City, Tennessee. He was appointed to the board in June 2017 and currently serves as vice chair of the EM SSAB in Oak Ridge.

Bonnie Shoemaker (Anderson County). Ms. Shoemaker retired in 2008 after 34 years at the DOE East Tennessee Technology Park and ORNL working in a variety of capacities, including chemical laboratory analyst, environmental compliance specialist, plant shift superintendent, emergency management specialist, and engineering technician. She is the recipient of two awards for operations and technical support in environmental compliance and emergency management. Ms. Shoemaker received her B.S. in Biology from UT. She has an interest in environmental and public health issues. Ms. Shoemaker is a resident of Clinton, Tennessee. She was appointed to the board in June 2017 and currently serves as secretary of the EM SSAB in Oak Ridge.

Fredric Swindler (Roane County). Mr. Swindler retired in 2013 as vice president and consultant for quality assurance and regulatory affairs with IsoRay Medical, Inc. in Richland, Washington. He occasionally provides consulting services with Vivos, Inc., a medical device manufacturer in Richland, Washington (no DOE or EM work). He was previously employed as a vice president for quality assurance and regulatory affairs with two other medical manufacturing companies. Mr. Swindler received a B.S. in Biological Engineering from Rose Hulman Institute of Technology in Terre Haute, Indiana, and an M.B.A. from the University of Evansville, Indiana. He is a senior member of the American Society for Quality and has an interest in environmental and public health issues. Mr. Swindler is a resident of Rockwood, Tennessee. He was appointed to the board in July 2016.

John Tapp (Knox County). Dr. Tapp is a civil and environmental engineer with nearly 50 years of experience in all areas of environmental protection and restoration, including private and public utility management, civil and environmental engineering, strategic planning, budgeting, and project development. Dr. Tapp has recently worked for Electric Utility Disaster Specialists, Inc. as an independent technical assistance consultant for the Federal Emergency Management Agency in the water and wastewater field with deployments to the U.S. Virgin Islands and the California Camp Wildfire. Prior work included HDR-ICA Engineering, where he provided consulting in a broad range of areas, including environmental permitting and interaction with state and federal regulatory agencies, and work with the Kentucky Infrastructure Authority, where he managed the statewide planning effort for the Authority. Dr. Tapp spent most of his career as a founding partner in Commonwealth Technology, an environmental and engineering consulting firm, and previously worked with the Kentucky Division of Water, EPA, and the U.S. Public Health Service. Dr. Tapp received his B.S. and M.S. degrees in Civil Engineering and his Ph.D. in Agricultural Engineering from the University of Kentucky. Dr. Tapp has an interest in environmental and economic development issues. He is a member and past president of the Kentucky-Tennessee Water Environment Association, a member of the Water Environment Federation, the Karns Community Club, and the Enhance Powell Committee. Dr. Tapp lives in Powell, Tennessee. He was appointed to the board in June 2017 and currently serves as vice chair of the EM and Stewardship Committee of the EM SSAB in Oak Ridge.

Thomas Tuck (Knox County). Mr. Tuck is a banking executive with TNBANK. He served as president of the bank since 1995 and in March of 2020 transitioned to part-time employment as part of a leadership transition/retirement. Mr. Tuck received a B.S. in Business and Marketing from UT and is a Certified Banker through the School of Banking of the South. Mr. Tuck is a member of the board of directors for local organizations including the Oak Ridge Chamber of Commerce, Oak Ridge Heritage and Preservation Association, and the East Tennessee Economic Council. He is a member of the Y-12 Community Relations Council. He is a resident of Knoxville, Tennessee, and was appointed to the board in December 2020.

Rudolf Weigel (Anderson County). Mr. Weigel is a retired industrial hygienist who most recently worked for Concurrent Technologies Corporation in Arlington, Virginia, conducting industrial hygiene surveys at various Army installations in support of the Army Public Health Command until 2015. From 2002 to 2011 he served as a senior industrial hygienist/safety and health representative with Bechtel Jacobs Company in Oak Ridge, Tennessee. His 36-year career has included work as a bioenvironmental engineer, environmental scientist, and hazardous waste program coordinator. Mr. Weigel received a B.S. in Occupational Safety and Health from Utah State University, and an M.S. in Environmental Health from East Tennessee State University. He was a member of the American Conference of Governmental Industrial Hygienists. He has an interest in environmental and decontamination and decommissioning issues. Mr. Weigel is a resident of Oak Ridge, Tennessee. He was appointed to the board in July 2016.

Zachary Wilkins (Morgan County). Since November 2019, Mr. Wilkins has been a senior industrial hygiene technician with DOE subcontractor Value Added Solutions, Inc., which provides professional services to support the cleanup and reindustrialization efforts at the Oak Ridge site.

From August 2018 to November 2019, he was a laborer for UCOR. Mr. Wilkins received an A.A.S. in Environmental Health from Roane State Community College. He is interested in environmental issues and is a resident of Wartburg, Tennessee, and was appointed to the board in December 2020. Mr. Wilkins received an A.A.S. in Environmental Health from Roane State Community College. He is interested in environmental issues and is a resident of Wartburg, Tennessee, and was appointed to the board in December 2020.

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, June 9, 2021, 6 p.m.

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

CONTENTS

AGENDA

PRESENTATION MATERIALS — To be distributed prior to or at the meeting.

1. Groundwater Background for Issue Group – Recommendation 235 on Groundwater and OREM response

CALENDARS

- 1. June
- 2. July (draft)

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

- 1. May 12, 2021 unapproved meeting minutes To be distributed prior to or at the meeting.
- 2. Draft Board Bylaws changes for review
- 3. Election of Officers

REPORTS & MEMOS

- 1. Notes from EM SSAB Charges Committees
- 2. Incoming Correspondence



Oak Ridge Site Specific Advisory Board Wednesday, June 9, 2021, 6:00 p.m. Virtual meeting

AGENDA

I.	Welcome and announcements (M. Lohmann)
II.	Comments from federal and state agency representatives (D. Adler, C. Jones, K. Czartoryski)
III.	Presentation: Groundwater Remedies at ETTP (D. Adler)
	Questions regarding the presentation/speaker only
IV.	Public comment period (S. Kimel)
V.	 Call for additions & motion to approve agenda (M. Lohmann)
	This ends the presentation portion of the meeting – presenters and subject experts may depart
VI.	Board Business
VII.	Responses to recommendations & alternate DDFO's report (M. Noe)
VIII	A. EM/Stewardship (A. Jones) B. Executive (M. Lohmann)
IX.	Additions to agenda & closing remarks (M. Lohmann)
X.	Adjourn

Bio for Dave Adler

David Adler serves as the director of the Quality and Mission Support Division for the Oak Ridge Office of Environmental Management.

In his more than 25 years at DOE, he has focused primarily on activities related to contaminated site cleanup, waste management and disposition, and most recently, on efforts to reindustrialize the former K-25 facility in Oak Ridge.

Adler holds a bachelor's degree in biology from Rutgers University and a master's degree in toxicology from the University of Michigan.



East Tennessee Technology Park Groundwater Remedies Update

David Adler, Quality & Mission Support Division Director Oak Ridge Office of Environmental Management

We will require groundwater decisions soon at ETTP



Main plant

- Proposed Plan:December 22, 2021
- Record of Decision: January 8, 2022
- K-31/K-33 Area
 - Remedial Investigation/Feasibility
 Study:
 June 30, 2021
 - Proposed Plan:September 30, 2021
 - Record of Decision: April 30, 2022
- Remaining groundwater
 - After path forward for K-31/K-33
 and main plant area finalized



There are thirty years of groundwater investigations at K-31/K-33



- 1987-1989: 21 permanent monitoring wells installed
- 1987-2017: Wells sampled 336 times
- December 2017: DOE, EPA, and TDEC meet to identify wells needing sampled before submitting report
- May 2019: DOE submit D2 Report recommending No Further Action
- May 2019: TDEC and EPA request additional sampling
- June 2019: DOE agrees to collect two more rounds of sampling along with additional analytes
- July 2019: First round completed; Analytical Parameters included Metals, Anion, Polychlorinated biphenyl (PCBs), Semi Volatile Organic Compounds (SVOCs), Volatile Organic Compounds (VOCs), Radiological (gross alpha/beta, Tc-99, U-233/234, U-235/236, and U-238)



There are thirty years of groundwater investigations at K-31/K-33 (continued)



- February-March 2020: Wet season sampling completed
- October–November 2020: Additional dry season sampling completed
- 2020: Agreement to collect four more quarters of groundwater samples to allow for approximately 6 to 8 data points per well for statistically valid trend analyses
- 2020: By triparty agreement, the FFA milestone for the D1 RI/FS Report was moved to 5/31/21, with the understanding that the results of the third and fourth rounds of additional quarterly sampling would be added to the D2 RI/FS
- January—February 2021: Additional wet season sampling completed
- 2021: Five new piezometers installed in former sinkholes and process building footprints and water levels and groundwater samples collected



K 31/K 33 Area MCL exceedances in groundwater January/February 2021



Since completion of all of the K-31/K-33 Area demolition activities in 2015 and installation of dedicated micropurge, low-flow sampling pumps in 2019, there was a reduction in the number of metal and radiological constituents that have exceeded Maximum Contaminant Levels (MCLs):

	Unfiltered Groundwater October/November 2020	Unfiltered Groundwater January/February 2021
Constituent	Well	Well
Alpha activity	UNW-040	None
Antimony	None	None
Arsenic	None	None
Beryllium	None	None
Chromium	BRW-030, BRW-031, UNW-039, UNW-083	BRW-030, UNW-039
Lead	None	None
Nickel	UNW-039, UNW-043, UNW-083	UNW-039, UNW-043, UNW-083

- Chromium:
 - Six unfiltered samples > MCL
- Nickel:
 - Six unfiltered samples > State MCL
- Antimony/Arsenic/Lead:
 - Zero unfiltered samples > MCL

Majority of contaminated groundwater is localized to main plant area

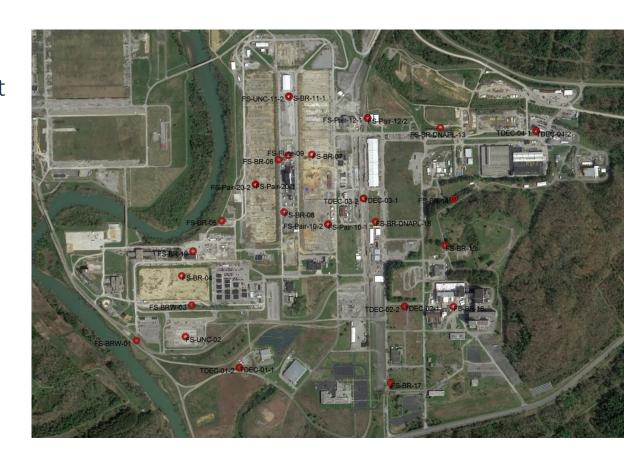




DOE has conducted over twenty years of groundwater evaluation at the main plant area

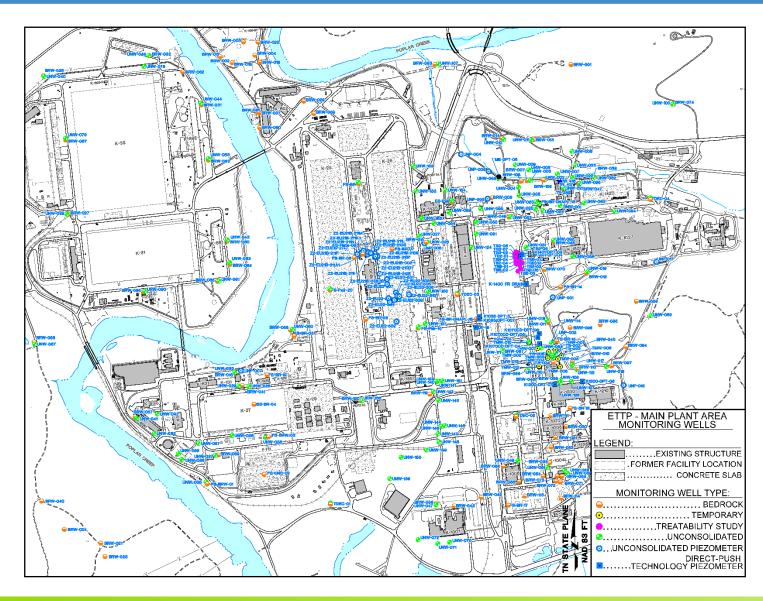


- Groundwater remedial investigation began
 1997-1998
- 355 existing permanent monitoring wells in Main Plant Feasibility Site Area (471 wells for entire ETTP site)
 - 96 new wells in
 2017/2018 as part of treatability study design for K-1401
 - 31 new wells in2018/2019 to supportFeasibility Study



Extensive network of wells in place at East Tennessee Technology Park main plant





Multiple technical alternatives being evaluated for remedy

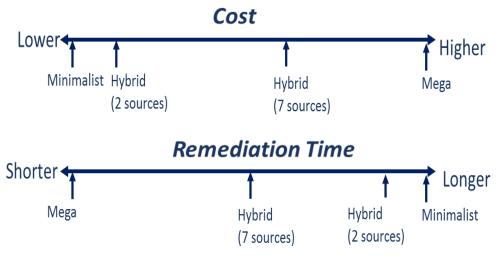


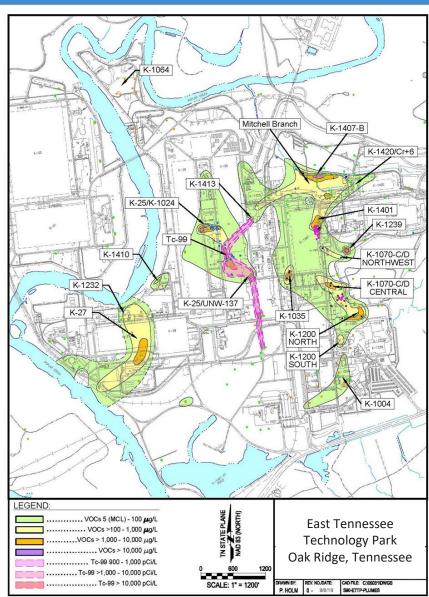
		Major Component				
TMA	Alternative	Unconsolidated Zone	Bedrock			
CVOC	S 1	In situ thermal treatment	In situ thermal treatment			
Sources	S 2	Subgrade biogeochemical treatment unit	Enhanced in situ bioremediation			
	S 3	In situ soil mixing with zero valent iron and bentonite	Enhanced in situ bioremediation			
	S 4	Monitored natural attenuation	Monitored natural attenuation			
	S5	Pump & Treat – extraction wells with above ground treatment system	Pump & Treat – extraction wells with above ground treatment system			
CVOC	P1	Enhanced in situ bioremediation	Enhanced in situ bioremediation			
Plumes	P2	Monitored natural attenuation	Monitored natural attenuation			
	P3	Pump & Treat – extraction wells with above ground treatment system	Pump & Treat – extraction wells with above ground treatment system			
Tc-99	Tc1	Subgrade biogeochemical treatment unit				
Plume	Tc2	Monitored natural attenuation	NA – no significant contamination in			
	Tc3	Funnel and gate	bedrock			
	Tc4	Pump and treat				
Unique	BG1	Permeable reactive barriers at K-1070 C/D	Monitored natural attenuation			
Areas	Cr1	Continued operation of Chromium Water Treatment System	Monitored natural attenuation			
	CW1	Constructed wetlands at Mitchell Branch	Monitored natural attenuation			

We are working with TDEC and EPA to establish interim Record of Decision for main plant groundwater to enable reindustrialization



- Full range of groundwater cleanup approaches under evaluation with DOE, EPA, and TDEC
 - Monitored Natural Attenuation
 - Aggressive high-cost extensive treatment of both high and low concentration area
 - Combination of above





OREM has collected a tremendous amount of data to allow for remediation decisions



- OREM has completed multiple investigations and has a vast monitoring network that provides an immense amount of data
- We have spent millions over the past several years collecting additional groundwater data
- Crews have installed all of the wells requested by EPA/TDEC
- We have collected enough information to work with regulators on developing interim decisions



- Range of technologies and alternatives evaluated in Feasibility Study
- Decisions needed to proceed with groundwater management approach



Questions?

May 12, 2017

Jay Mullis
Acting Manager
Oak Ridge Office of Environmental Management
U.S. Department of Energy
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Mr. Mullis:

Recommendation 235: Recommendations on Groundwater Investigations at the U.S. Department of Energy Oak Ridge Reservation.

At our May 10, 2017, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation Groundwater Investigations at the U.S. Department of Energy Oak Ridge Reservation.

There are five specific points in the recommendation that the board would like you to address in your response.

We appreciate your consideration of our recommendation and look forward to receiving your response by August 14, 2017.

Sincerely,

Belinda Price, Chair

BP/rsg

Enclosure

cc/enc:

Dave Adler, DOE-ORO
Dave Borak, DOE-HQ
Kristof Czartoryski, TDEC
Connie Jones, EPA Region 4
Terry Frank, Anderson County Mayor
Melyssa Noe, DOE-ORO
John Owsley, TDEC

Mark Watson, Oak Ridge City Manager Ron Woody, Roane County Executive File Code 140



Oak Ridge Site Specific Advisory Board Recommendation 235: Recommendations on Groundwater Investigations

at the U.S. Department of Energy Oak Ridge Reservation, Oak Ridge, Tennessee

Background

As a result of past research and industrial activities on the Oak Ridge Reservation (ORR), groundwater beneath several areas of the reservation has become contaminated. Groundwater investigations have been done on and adjacent to the ORR since the 1980s, but a dedicated effort began in 2013 to sample numerous offsite locations and identify near-term onsite groundwater remediation projects. At that time, the Department of Energy's Oak Ridge Office of Environmental Management (OREM), the Tennessee Department of Environment and Conservation (TDEC), and the Environmental Protection Agency (EPA) collaborated on a series of workshops to develop a groundwater strategy for the ORR.

A Groundwater Strategy Team was formed, which held a series of workshops to develop a groundwater strategy. Three workshops reviewed conceptual site models for each ORR watershed; identified affected groundwater plumes and related data gaps; and identified potential groundwater projects.

Two workshops combined and ranked the identified plumes using a modified EPA Hazard Ranking System. Potential projects were ranked, and early action projects were selected.

The final workshop reviewed groundwater use restrictions and policies and alternatives to engineered groundwater restoration.

The strategy team used the findings of the workshops to develop a groundwater strategy document (DOE/OR/01-2628). A number of strategy objectives were identified to guide the path forward for groundwater remediation on the ORR. Those objectives include:

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

As noted above, the strategy team discussed all of the known contaminated groundwater plumes located on the ORR and placed them in the hazard ranking system based on the size of the plumes, contaminant concentrations, and if a plume was moving, especially if it might migrate off the reservation. The team identified 36 potential projects to address the 35 plumes.

Two projects were selected to begin right away. The first was an offsite groundwater assessment. Work began in 2014 to sample 49 offsite locations – 34 wells and 15 springs – to determine if contamination existed. Secondly, if contamination was found, the assessment would investigate if it originated from DOE operations on the ORR.

Three rounds of sampling have been completed. The first round of sampling at 43 locations was completed in the second quarter of FY 2015. Three locations showed contaminant exceedances of EPA National Primary Drinking Water standards for lead, gross alpha activity, or radium. The second round at 48

locations in the fourth quarter of FY 15 and the third round at 18 locations in the second quarter of FY 16 showed no exceedances of the EPA National Primary Drinking Water standards.

The second project undertaken was the creation of a regional groundwater flow model to help determine how groundwater moves. In 2015, a flow model was developed and a test case done on an 8-square mile area at Y-12 National Security Complex. The test was successful and the flow model was expanded to a regional scale model of the ORR and surrounding area.

According to the Federal Facility Agreement, the document that sets milestones for cleanup actions on the ORR, the first large scale decisions on groundwater will be made at East Tennessee Technology Park (ETTP). In 2005 a remedial investigation/feasibility study was done to offer alternatives to treat groundwater at ETTP.

One of the alternatives is a technique known as *in situ* thermal treatment, which heats water, and volatile organic contaminants are extracted from the vapor. The technique might be used to restore groundwater contaminated with dense non-aqueous phase liquids (DNAPLs). DNAPLs were used in large quantities for degreasing equipment at ETTP. Five plume sources at ETTP are thought to have DNAPLs.

If a second round characterization determines *in situ* thermal treatment is a viable alternative, a proposed plan will recommend the treatment in a record of decision scheduled for signing in 2023.

Other groundwater projects are being evaluated. One is the Melton Valley/Bethel Valley Exit Pathways Study to gather data on groundwater behavior in the valleys. The study would look at five plumes at Oak Ridge National Laboratory (ORNL) identified in the groundwater strategy document. Data gathered would be used with flow modeling to evaluate possible scenarios for groundwater flow westward off the reservation under the Clinch River.

Another possible project is the 7000 Area Trichloroethylene Plume Remediation Project in the East Campus of the ORNL. A pilot test done earlier using bioremediation has shown positive results. Bioremediation employs microbes to consume certain contaminants, but additional characterization needs to be done.

Discussion

The Oak Ridge Site Specific Advisory Board (ORSSAB) has been interested in the status of groundwater on and around the ORR for a number of years, and during that time DOE and contractor experts have provided several presentations on groundwater conditions and possible consequences of contaminated groundwater migrating offsite. DOE has even provided some residents to the west of the ORR with water from local water systems so private wells can be monitored for any contaminants that may be related to ORR operations and also ensure the safety of those residents.

Most recently DOE Groundwater Program Manager Dennis Mayton provided a presentation to the board on January 11, 2017, on the status of the Groundwater Strategy. He gave an overview of the groundwater monitoring program in place.

ORSSAB members participated in a tour of groundwater problem sites at ETTP and ORNL on January 25. The board's Environmental Management & Stewardship Committee had a detailed discussion with DOE personnel, including Mr. Mayton, on January 25.

ORSSAB appreciates the substantial effort that has been expended toward monitoring groundwater and developing an understanding of groundwater movement. This is important so that the potential for contaminant migration can be understood and future actions prioritized.

Recommendations

The potential for contaminant migration in groundwater represents an ongoing and future risk to the environment via the potential for media transfer to surface water and to human health if groundwater is used in the future for drinking water. Protection of groundwater therefore is important to the surrounding communities and to ORSSAB.

ORSSAB offers the following recommendations:

- ORSSAB recommends diligent and continued efforts to monitor for potential offsite migration and
 to implement appropriate actions to mitigate or prevent offsite migration in areas such as Melton
 Valley and White Oak Creek if the need should arise. The board requests additional surveillance
 monitoring to establish a monitoring framework in Bethel Valley and annual reports of results to
 the board.
- 2. The Groundwater Strategy document was completed in 2014. At that time only five actions were given priority although 35 plumes were noted as high risk. We recommend that DOE should continue to prioritize based on the highest risk to lowest risk. In addition, with the upcoming completion of the offsite groundwater investigation, ORSSAB urges DOE to include a five-year review of the strategy (in 2019) to revisit the ranking of plumes to ensure that highest-risk plumes are addressed expeditiously and to adjust priorities and budgets based on changes in conditions (such as increased risk to the environment or public health).
- 3. ORSSAB recommends placing a high priority on site-specific modeling in the Melton Valley area to include installation of additional monitoring wells (if needed) and the implementation of treatability and/or pilot-scale options as funding allows. To that end, ORSSAB supports and encourages DOE to move forward with the Melton Valley/Bethel Valley Exit Pathways Study to gather data on groundwater behavior in the valleys. DOE should formulate and initiate a strategy to cooperate with the Tennessee Valley Authority, to commence, continue, and/or enhance sharing of relevant groundwater data and information with the Tennessee Valley Authority.
- 4. ORSSAB recommends that DOE should fully fund and schedule preliminary planning, study, and technology demonstrations so that full-scale final cleanup efforts can begin no later than 2025; as an example, move forward with the 7000 Area Trichloroethylene Plume Remediation Project. In order to achieve this, the board recommends considering refocusing available money from plus-ups, surpluses, etc., toward the groundwater effort. The board requests that DOE provide updates to the board as strategies are developed to allow for comment.
- 5. ORSSAB recommends that DOE maintain communications with offsite groundwater users, especially in Melton Valley and Bethel Valley, as necessary to remain cognizant of planned usage that may pose an unacceptable risk.



Department of Energy

Oak Ridge Office of Environmental Management P.O. Box 2001 Oak Ridge, Tennessee 37831

July 24, 2017

Ms. Belinda Price, Chair Oak Ridge Site Specific Advisory Board Post Office Box 2001 Oak Ridge, Tennessee 37831

Dear Ms. Price:

RESPONSE TO YOUR LETTER, RECOMMENDATION 235: RECOMMENDATIONS ON GROUNDWATER INVESTIGATIONS AT THE U.S. DEPARTMENT OF ENERGY OAK RIDGE RESERVATION, DATED MAY 12, 2017

I would like to express my appreciation for the interest the Oak Ridge Site Specific Advisory Board (ORSSAB) has taken in the groundwater program on the Oak Ridge Reservation.

Provided below are responses to recommendations provided in your recent letter on this subject. Please note that the language in bold is taken from your letter.

 ORSSAB recommends diligent and continued efforts to monitor for potential offsite migration and to implement appropriate actions to mitigate or prevent offsite migration in areas such as Melton Valley and White Oak Creek if the need should arise. The Board requests additional surveillance monitoring to establish a monitoring framework in Bethel Valley and annual reports of results to the Board.

The U.S. Department of Energy (DOE) monitors an extensive network of groundwater wells in Bethel and Melton Valleys annually to ensure that onsite and offsite groundwater conditions are sufficiently evaluated. By valley, the monitoring activities are as follows:

- Bethel Valley: Sampling 48 total wells (127 monitoring events annually)
 Water Levels 49 total wells (628 monitoring events annually)
- Melton Valley: Sampling 100 total wells (218 monitoring events annually)
 Water Levels 72 total wells (2,168 monitoring events annually)
- Melton Valley Offsite: Sampling 23 total wells (41 monitoring events annually)
 Water Levels 16 total wells (832 monitoring events annually)
- In addition, DOE co-sampled with the Tennessee Department of Environment and Conservation (TDEC) approximately 35 residential wells this year with the potential to sample an additional 35 wells.

RESPONSE TO YOUR LETTER, RECOMMENDATION 235: RECOMMENDATIONS ON GROUNDWATER INVESTIGATIONS AT THE U.S. DEPARTMENT OF ENERGY OAK RIDGE RESERVATION, DATED MAY 12, 2017

As part of the offsite Groundwater Remedial Site Evaluation, DOE has recommended additional monitoring be conducted offsite over the next few years. DOE, the U.S. Environmental Protection Agency (EPA), and TDEC are still reviewing the data to determine the appropriate number of wells to sample.

All sampling results will continue to be reported annually in the Remediation Effectiveness Report. DOE would be happy to include updates on the results of sampling in the briefings provided to the ORSSAB during monthly meetings.

2. The Groundwater Strategy document was completed in 2014. At that time only five actions were given priority although 35 plumes were noted as high risk. We recommend that DOE should continue to prioritize based on the highest risk to lowest risk. In addition, with the upcoming completion of the offsite groundwater investigation, ORSSAB urges DOE to include a five-year review of strategy (in 2019) to revisit the ranking of plumes to ensure that highest-risk plumes are addressed expeditiously and to adjust priorities and budgets based on changes in conditions (such as increased risk to the environment or public health).

DOE is conducting a groundwater investigation at the East Tennessee Technology Park (ETTP) that will support the final site-wide Record of Decision (ROD) at ETTP. The ROD at ETTP will address 11 of the plumes identified in the groundwater strategy.

DOE agrees that periodic reevaluation of monitoring data should be conducted to ensure protection of public health and environment. The primary focus of this effort will be to ensure that no significant offsite exposures occur, and that groundwater resource damages are understood and appropriately addressed. The timing of groundwater actions will be prioritized according to actual risks.

3. ORSSAB recommends placing a high priority on site-specific modeling in the Melton Valley area to include installation of additional monitoring wells (if needed) and implementation of treatability and/or pilot-scale options as funding allows. To that end, ORSSAB supports and encourages DOE to move forward with the Melton Valley/Bethel Valley Exit Pathways Study to gather data on groundwater behavior in the valleys. DOE should formulate and initiate a strategy to cooperate with the Tennessee Valley Authority, to commence, continue, and/or enhance sharing of relevant groundwater data and information with the Tennessee Valley Authority.

DOE, EPA, and TDEC recently agreed on moving forward with the Melton Valley/Bethel Valley Exit Pathway (MVBVEP) Study as the next groundwater project. The objective of the MVBVEP project is to address data gaps and uncertainty for high-ranking plumes that have the potential for offsite migration. Additional onsite sampling and groundwater modeling efforts to 600 feet depth below ground surface will be used to determine potential flow paths and data gaps.

RESPONSE TO YOUR LETTER, RECOMMENDATION 235: RECOMMENDATIONS ON GROUNDWATER INVESTIGATIONS AT THE U.S. DEPARTMENT OF ENERGY OAK RIDGE RESERVATION, DATED MAY 12, 2017

DOE and Tennessee Valley Authority officials have met on multiple occasions to share information gained from our respective groundwater projects. Close coordination with Tennessee Valley Authority will continue.

4. ORSSAB recommends that DOE should fully fund and schedule preliminary planning, study, and technology demonstrations so that full-scale final cleanup efforts can begin no later than 2025; as an example, move forward with the 7000 Area Trichloroethylene Plume Remediation Project. In order to achieve this, the board recommends considering refocusing available money from plus-ups, surpluses, etc., toward the groundwater effort. The board requests that DOE provide updates to the board as strategies are developed to allow for comment.

It is important to note that the Oak Ridge Office of Environmental Management Program has multiple priorities competing for limited budget appropriations, and that groundwater projects are not necessarily the highest funding priority. Given remaining priorities associated with above ground hazard mitigation efforts, and other priorities associated with surface water restoration, it is unlikely that full scale cleanup efforts for groundwater can begin by 2025. The Oak Ridge Office of Environmental Management remains committed to the current practice of updating the Board on annual budget allocations, and discussing associated program priorities.

DOE, EPA, and TDEC recently agreed to move forward with scoping activity for additional groundwater characterization activities in Bethel Valley, with the objective of producing a Remedial Investigation Work Plan by 2020. This plan will address Bethel Valley groundwater plume(s) characterization data gaps including ecological and exit pathway issues. This work will support alternative development for the Bethel Valley Groundwater ROD, and characterization work needed to implement in-situ bioremediation of the 7000 Area volatile organic compound plume at Oak Ridge National Laboratory.

5. ORSSAB recommends that DOE maintain communications with offsite groundwater users, especially in Melton Valley and Bethel Valley, as necessary to remain cognizant of planned usage that may pose an unacceptable risk.

DOE currently has over 100 active licenses with residents. Some of these licenses allowed DOE to sample wells as part of the Offsite Groundwater Remedial Site Evaluation. The other licenses were put in place to connect private residence to public water supplied by the Watts Bar Utility District. Since water connection began nearly seven years ago, DOE has continued to approach residence to renew licenses and offer connections to owners who previously declined the offer.

RESPONSE TO YOUR LETTER, RECOMMENDATION 235: RECOMMENDATIONS ON GROUNDWATER INVESTIGATIONS AT THE U.S. DEPARTMENT OF ENERGY OAK RIDGE RESERVATION, DATED MAY 12, 2017

DOE utilizes multiple methods to reach homeowners (i.e., mail, phone, door-to-door visits, door knob hangers, etc.) Also, DOE has been co-sampling residential wells with TDEC over the past several years. Approximately 35 wells have been sampled over the past year, DOE and TDEC oversight remains cognizant of water usage in the area.

Thank you again for your continued interest in this important component of the Oak Ridge Reservation Environmental Management Program. If you have any questions or if we can be of further assistance, please contact Melyssa Noe at 241-3315 or me at 576-0742.

Sincerely,

John A. Mullis II Acting Manager

a Winim

cc:

Terry Frank, Anderson County Mayor Mark Watson, City of Oak Ridge Manager Connie Jones, EPA Region 4 Ron Woody, Roane County Executive Kristof Czartoryski, TDEC, Oak Ridge Chris Thompson, TDEC, Oak Ridge David Borak, EM-4.32, FORS Dave Adler, EM-94 John Blevins, EM-90 Melyssa Noe, EM-942



Oak Ridge Site Specific Advisory Board

June 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	Executive Committee Meeting – 4 p.m. (Virtual)	3	4	5
6	7	8	9 Board meeting – 6 p.m. (Virtual)	10	11	12
13	14	15	16	17	18	19
20	21	22	23 EM/Stewardship Committee meeting 6 p.m. (Virtual)	24	25	26
27	28	29	30			

All meetings will be held virtually until further notice. For information about attending meetings, please email orssab@orem.doe.gov at least 1 week prior to the scheduled meeting.

ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780



Oak Ridge Site Specific Advisory Board

July (draft)

2021

Topic – Budget

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3
5 Independence Day Observance – Board Offices Closed		7	8	9	10
12	13	14	15	16	17
19	20	21	22	23	24
26	27	28	29	30	31
	5 / Independence Day Observance – Board Offices Closed 12	5 6 7 Independence Day Observance – Board Offices Closed 12 13 19 20	5 6 7 7 7 7 7 7 7 7 7	1	1 2 5 6 7 8 9 9 9

All meetings will be held virtually until further notice. For information about attending meetings, please email orssab@orem.doe.gov at least 1 week prior to the scheduled meeting.

ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

FINAL May 12, 2021 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting virtually via Zoom on Wednesday, May 12, 2021 at 6 p.m. Copies of referenced meeting materials are attached to these minutes. A video of the presentation portion of the meeting was made and is available on the board's YouTube site at www.youtube.com/user/ORSSAB/videos.

Members Present

Leon BakerMichael SharpeTom TuckShell Lohmann, ChairLeon Shields, Vice ChairZach Wilkins

Harriett McCurdy Fred Swindler Georgette Samaras John Tapp

Members Absent

Andrea Browning Greg Malone Dennis Wilson Richard Burroughs Marite Perez Rudy Weigel

Chris Hampel Bonnie Shoemaker,

Amy Jones Secretary

Noah Keebler Robert Whitaker

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Dave Adler, ORSSAB Deputy Federal Designated Officer, DOE-OREM Melyssa Noe, ORSSAB Alternate Deputy Designated Federal Officer (DDFO), OREM Brian Henry, Y-12 Portfolio Federal Project Director, OREM Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC) Connie Jones, U.S. Environmental Protection Agency (EPA)

Others Present

Shelley Kimel, ORSSAB Support Office Sara McManamy-Johnson, ORSSAB Support Office Roger Petrie, OREM Dennis Mayton, OREM Ben Williams, OREM

¹Third consecutive absence

Susan DePaoli, OREM Contractor Carl Froede, EPA Sidney Jones, EPA Heather Lutz, TDEC Suzanne Sawusch, TDEC Chris Thompson, TDEC Pat Flood, TDEC Sonya Johnson, UCOR Kent Fortenberry, UCOR Conner Ingram, UCOR Scott Anderson, UCOR Donovan Robinson, DOE-HQ

Seven members of the public were present.

Liaison Comments

Mr. Adler – Mr. Adler said OREM is nearing completion of the Biology Complex project at Y-12 National Security Complex (Y-12), which will clear land space for Y-12 to use for future mission. At Oak Ridge National Laboratory (ORNL), OREM has completed the Tritium Target Preparation Facility and the removal of a structure that was part of the radioisotope development lab, a significant milestone. Additionally, there was a groundbreaking for the West End Protection Area Reduction Project (WEPAR) at Y-12. He said this project relocates the security fencing and security systems so much of OREM's work will be outside the security fence instead of inside, which will significantly increase the efficiency of OREM's work. He said that project is slated for completion in 2025. Next, he said ensuring adequate waste disposal capacity is one of the key things that enables successful cleanup. He added that ORSSAB has already submitted a recommendation, and although OREM is not specifically requesting another recommendation, the board is welcome to submit another. He then recapped key points from the last ORSSAB recommendation regarding waste disposal – promoted security funding for the completion of the project; ensuring good public engagement throughout the project; and ensuring the facility built had all the capacity needed to accommodate all the waste OREM expected to generate. He said he wanted to emphasize that the most-hazardous material would not go into the proposed facility, but a facility is needed to handle the less-hazardous material.

Ms. Jones – None.

Mr. Czartoryski – None.

Presentation

Ms. Lohmann introduced Brian Henry, presenter for the evening's topic, Ongoing Efforts to Assure Waste Disposal Capacity for the Oak Ridge Reservation (ORR).

Mr. Henry gave members an overview of current and planned disposal capacity and how they correlate with the planned cleanup projects at ORNL and Y-12. He said DOE operates several engineered landfills for safe and compliant disposal of ORR remediation, demolition, and sanitary waste. Those facilities are permitted by TDEC. DOE also has a low-level radioactive waste disposal facility called the Environmental Management Waste Management Facility (EMWMF) that operates under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). He added, however, that as OREM moves its cleanup focus to ORNL and Y-12, additional disposal capacity is needed to have the same success at those facilities as OREM had at the East Tennessee Technology Park (ETTP). He said each disposal facility has established waste acceptance criteria to determine whether waste is acceptable for disposal.

He then went into additional detail on Oak Ridge's three distinct sites – ETTP, ORNL, and Y-12 – and the disposal capacities that would be needed for those sites. He discussed the successful cleanup at ETTP and the importance of adequate waste capacity in the cleanup at that site. He said that OREM has moved to doing work at Y-12 and ORNL, where there are over 300 buildings to be demolished between the two sites. DOE maintains a list of high-risk facilities, and of the 254 facilities on that list, 66 are in Oak Ridge. The hazards vary among physical, chemical, and nuclear, depending on the missions that took place in those facilities.

Mr. Henry added that the pace of cleanup – and pace of waste generated – is highly dependent on the budget OREM receives each year. He said Oak Ridge has been fortunate to receive favorable funding over the last four years, which has enabled OREM to move from ETTP to cleanup at Y-12 and ORNL.

Mr. Henry then said it was important to note that all of DOE's operating landfills are within the Oak Ridge Reservation and are located within DOE-controlled areas. An advantage to that is there are roads located within the reservation called haul roads that allow DOE to truck the wastes to the facilities and keep them out of the private sector. He next showed members a map that depicts both operational and closed facilities on the reservation.

Mr. Henry said that management of various wastes from cleanup operations requires multiple pathways – recycle/reuse, disposal at onsite sanitary landfills, disposal at onsite CERCLA facilities, and disposal at offsite facilities. He said this holds true for cleanup operations throughout the DOE complex. He said that when you look at the waste by hazard, the vast majority – 99.8 percent – is shipped offsite. After cleaning out the facilities, there is a lot of building materials, soils, and concrete and that has much lower contamination levels but represents the larger volume that is disposed of onsite.

He said waste disposal decisions follow a waste hierarchy and gave a brief overview of that decision process.

Next, Mr. Henry gave members an overview of EMWMF, the remaining capacity of which will be used to support completion of ETTP cleanup. He said the 28-acre disposal facility opened in 2002. Lined disposal cells receive low-level radiological and chemical waste from CERCLA cleanup of ORR and associated sites. He added that OREM worked with regulators to increase the facility's capacity by redesigning the final cap, which increased capacity from 2.2 million cubic yards to 2.3 million cubic yards. He said that's important because it allows OREM to operate the facility for longer and bridge the gap between when EMWMF is full and when the proposed EMDF could become available. He said EMWMF is currently about 80 percent full and is projected to be full in the late 2020s, although that is highly dependent on future cleanup funding budgets.

Mr. Henry said OREM is doing work at Y-12 and ORNL, which is where the focus will be for the near-term. He said that the majority of the time spent and the majority of the cost is associated with cleaning out a building so that it can be demolished. For the large buildings at Y-12, it will take a number of years to do the characterization and to clean out those buildings to get them ready for demolition, which is where the majority of the waste will be generated, so there is some time. However, EMDF will need to be ready to move right into demolition. He said that as OREM emphasizes the waste hierarchy, they are also trying to maximize the amount of waste that goes into the permitted landfills. To that end, OREM plans to do some buildouts of the permitted capacity at its sanitary landfills.

He told members the proposed site of the proposed Environmental Management Disposal Facility is at Central Bear Creek Valley and its projected capacity is similar to EMWMF at 2.2 million cubic yards. He said OREM expects to issue the first draft Record of Decision (ROD) to regulators for review by early July 2021. Regulators will generate comments on that draft, and OREM will work with regulators to resolve those comments before issuing the second draft. He said that ideally, OREM would like to have two years of overlap with EMWMF open and the Environmental Management Disposal Facility (EMDF) available because some of the waste is heavy and

needs to be on the lower levels of the cell.

Regarding the proposed location of the EMDF at Central Bear Creek Valley, Mr. Henry said there were several sites considered, and the Central Bear Creek Valley site was the preferred location after discussions among DOE and regulators. He next gave an overview of process DOE used to present the Proposed Plan to the public in Fall 2018 and some of the responses DOE received. Those comments and DOE's responses to those comments will be included with the first draft ROD submitted. He added that the Proposed Plan identified seven of the State's main concerns that are in the process of being resolved, and he discussed the status of each item's resolution.

He next described the three major paths DOE must complete in parallel to build a new disposal facility. First, under DOE Order 435.1, OREM received a Preliminary Disposal Authorization Statement (DAS) and will develop remaining documents for eventual Operational DAS. Parallel to that, OREM is working through the CERCLA regulatory process, which includes submitting the first draft ROD for EMDF before July 2021 milestone for Federal Facilities Agreement (FFA) review, working with FFA parties to resolve issues and approve a ROD, and developing CERCLA documents for design and operations. Under DOE Order 413.3B, OREM will develop the final design and complete associated documentation and approvals to support construction.

After the presentation, board members asked the following questions:

- Mr. Wilkins asked if EMDF is scheduled to be completed by 2025.
 - o Mr. Henry said the 2026 timeframe is currently the earliest it could be completed.
- Mr. Tapp asked for information about a letter/email submitted by Mr. Sidney Jones.
 - o Mr. Adler said the letter raised some questions about the information that was available on the contents of the cell and the information that was used to determine percentages shipped offsite. He said that while it's not uncommon for people to have differences of opinion of what a given dataset says, OREM is confident in its interpretation of what percentages of offsite disposal necessary according to radiological activity and volume. He said the wastes are very thoroughly analyzed for radioactivity and chemical hazards. The sampling plans used to drive this characterization activity must first be approved by both the State and EPA it's not just DOE deciding.
- Ms. McCurdy asked for clarification about what a geomembrane is comprised of.
 - o Mr. Henry said a geomembrane is like a plastic geotextile membrane on the order of about 60-80 millimeters thick. He said if you think about a sheet of plastic you could buy at a hardware store, a geomembrane is about ten times thicker than that type of material.
- Mr. Baker asked whether the 66 Oak Ridge buildings listed on DOE's excess contaminated facilities could increase or decrease depending on funding.
 - o Mr. Henry said those 66 buildings are on DOE's list of excess contaminated facilities, but there are more facilities at Y-12 and ORNL that are part of the long-term cleanup efforts. What adequate funding does is allow OREM to get that cleanup done sooner. If the budgets go down, the areas will still be cleaned up, it will just take longer. He said OREM would like to finish Y-12 and ORNL cleanup in the late 2040s. He said that timeframe might stretch out a little bit if the budgets are lower.

Questions from the Public

- Mr. Thomas Fraser asked what are the contaminated buildings at ORNL and what are the
 contaminants involved there. He also asked what factors were considered for location of the
 proposed landfill.
 - o Mr. Henry said there were several factors considered, including geological, hydrological, land use, and a number of others.
 - ORNL include legacy facilities from the 1940s through 1970s. He said Oak Ridge played a key role in the development of experimental nuclear reactor designs, as well as in the development of isotope technologies, so the facilities to be addressed at the site are old, de-fueled reactors and a collection of old buildings that were involved with the isolation and extraction of isotopes. He said the typical approach to the job is to remove the areas that have the higher levels of contamination, and the proposed landfill would deal with what remains after.
- Mr. Doug Colclasure asked if the materials from the gas-cooled reactor that was never operational be recycled and to what extent can the landfill be avoided by the recycling of steel in other things.
 - o Mr. Henry said that DOE generally has moratorium of recycling materials if they were inside a radiological area, so if that facility has materials that were never inside of a radiological area and can be screened to be clean, then they are available to be recycled.
 - Mr. Adler added that OREM does place an emphasis on recycling wherever possible. Many of OREM's jobs involve recycling metals in particular, but there are constraints on what can be recycled because there are very strict requirements to not recycle any metal that may have become contaminated. He said if the material is eligible for recycling, then it will be recycled.
- Mr. Thomas Fraser asked about how the structure makeup and components of the proposed landfill will ensure contents remain contained and whether there were any changes from the design of EMWMF.
 - o Mr. Henry said Resource Conservation and Recovery Act (RCRA) Subtitle C landfills have very prescriptive and defined criteria for liner systems, so EMWMF and EMDF both follow that. He said that there is generally a 10-foot-thick geologic buffer at the bottom of a landfill to separate the waste from the groundwater. Above that, there will be about a 3-foot-thick clay liner, and then a leachate collection system and a leak-detection system both including geomembranes between the layers. These combined layers and membranes total about 15 feet between the waste and the groundwater. He said both landfills have this same setup.
- Mr. Doug Colclasure said there are a number of water table wells associated with the proposed EMDF site and asked whether any of the test wells flow unaided during heavy rains as have occurred over the past five years.
 - o Mr. Henry said they do not. He said several wells have been put in as part of the characterization effort and they're used to estimate the current groundwater levels. Where the proposed site is located, there is a large knoll area at the northern portion of the site,

as well as a depressed saddle to the north where land is lower than the bottom of the waste would be. There are two tributaries to the east and the west where the land is lower than the waste would be, and to the south the land slopes down as you go toward the creek. He said that how far below the surface the groundwater is depends on the season and the proximity to the drainage tributaries. As you get closer to the drainage tributaries, the groundwater levels are closer to the surface and near surface at certain times of the year. As you get to the knolls, the groundwater is deeper. He said OREM has about 2 years of data on those wells that were used as part of OREM's discussions with regulators.

- Mr. Thomas Fraser asked what the worst-case scenario for the local environment and where is the offsite waste transported to.
 - o Mr. Henry said DOE facilities have a very rigorous process that involves defense depths and analysis to make sure the facility is designed to not have a negative impact to the environment or the public. In addition to the process within DOE, the CERCLA process and working with EPA and TDEC is also there to ensure that the facility is safe and does not have impact. He said CERCLA also includes monitoring so after facilities are built, there are monitoring wells to make sure that there's not an issue in or around those facilities, and if there are, that corrective actions can be taken such that there is no significant negative impact to the public or the environment. Regarding offsite waste, Mr. Henry said typically there are waste disposal facilities in Nevada, Utah, and Texas.
 - o Mr. Adler added that the worst-case scenario is limited by the type of waste that goes into the facility, and this facility would be accepting building demolition material. He said a worst-case scenario would not give significant negative scenarios.
- Ms. Virginia Dale asked for additional information about the process for determining the waste acceptance criteria.
 - O Mr. Henry said there are several different types of waste acceptance criteria, such as analytical waste acceptance criteria, which comes from modeling, and such as administrative waste acceptance criteria. He added some information about waste acceptance criteria that goes into the ROD and there is also a primary CERCLA document that follows the ROD that goes into further details on how waste acceptance criteria is implemented.
 - o Mr. Adler added that there will be a future public forum for discussing waste acceptance criteria, although the exact timing of that has not been determined yet.

Public Comment

- Mr. Doug Colclasure submitted a comment in advance (see attached Public Comment #1)
- Ms. Virginia Dale submitted a comment in advance (see attached Public Comment #2)

Board Business/Motions

1. Ms. Lohmann asked for a motion to approve the meeting agenda.

a. 5.12.21.1 Motion to approve the agenda

Motion made by Mr. Baker and seconded by Mr. Shields. Motion passed unanimously.

- 2. Mr. Shields asked for a motion to approve minutes from the February 12, 2020 meeting.
 - **a. 5.12.21.2 Motion to approve February 12, 2020 meeting minutes** Motion made by Mr. Tapp and seconded by Mr. Baker. Motion passed unanimously.
- 3. Mr. Shields asked for a motion to approve minutes from the March 10, 2021 meeting.
 - **a. 5.12.21.3 Motion to approve March 10, 2021 meeting minutes**Motion made by Mr. Tapp and seconded by Mr. Baker. Motion passed unanimously.
- 4. Mr. Tapp gave a brief overview of the Recommendation on OREM's FY 2023 Budget Priorities (see attached) and asked for a motion to approve.
 - a. 5.12.21.4 Motion to approve Recommendation on OREM's FY 2023 Budget Priorities Motion made by Mr. Shields and seconded by Mr. Baker. Motion passed unanimously.
- 5. Ms. Lohmann gave members background information about charges requested of the board by headquarters. The first of the charges is to develop a best-practice white paper that DOE can use to augment existing practices and expectations for future outreach activities. The second charge is to identify SSAB 10-year expectations and guiding principles that can be used as a complex-wide framework for DOE's EM interaction with stakeholders and communities. She said each of these charges have been assigned a sub-committee to develop an end-state product to go to the national SSAB. Ms. Lohmann said she will be working on the second charge, and she offered anyone on the board the opportunity to participate in either charge.

Responses to Recommendations & Alternate DDFO Report

Ms. Noe said there are no open recommendations. Regarding the new member package, she said a draft package was submitted to headquarters, and it has passed a preliminary review and is ready for formal resubmission after it is signed off on by either Laura Wilkerson or Jay Mullis.

Committee Reports

<u>Executive</u> – Ms. Lohmann said the Executive Committee would continue to meet via Zoom for the foreseeable future. She said the committee met the week before and discussed the work plan and the upcoming Chairs Meeting, including the charges the board had been tasked with during the previous Chairs meeting.

<u>EM & Stewardship</u> – Mr. Tapp asked if issue groups will still try to meet before the EM & Stewardship Committee meetings.

Ms. Kimel said if issue group members decide they would like to try to meet before the EM & Stewardship Committee meetings, staff could arrange Zoom usage to do so.

Additions to the Agenda & Open Discussion

Ms. Lohmann reminded members that issue group signups are open, and she invited interested members to contact staff if they are interested in participating in a specific topic's issue group.

Action Items Open	
None	
Closed	
None	
The meeting adjourned at 7:25 p.m.	
I certify that these minutes are an accurate account of the Advisory Board.	May 12, 2021, meeting of the Oak Ridge Site Specific
Michelle Lohmann, Chair	Bonnie Shoemaker, Secretary
June 9	, 2021
Oak Ridge Site Spec	rific Advisory Board
ML/sm	



Oak Ridge Site Specific Advisory Board

BYLAWS

Contents

1.	MII	SSION	3
II.	FU	NCTIONS, SCOPE, AND ACCOUNTABILITY	3
	A.	Functions:	3
	B.	Scope	3
	C.	Accountability	3
III.	ME	MBERSHIP	4
	A.	Authority	4
	B.	Terms of Office	4
	C.	Vacancies	4
IV.	ME	MBERSHIP RESPONSIBILITIES	4
	A.	Board Commitments	4
	B.	Liaison Commitments	5
V.	ВО	ARD STRUCTURE	5
	A.	Chair, Vice Chair, and Secretary	5
	B.	Committees:	7
	C.	Other Committees and Task Forces	7
	D.	Structures of Committees, Ad-hoc Committees, and Task Forces	7
	E.	Executive Committee	7
	F.	Work Sessions	8
	G.	Executive Session	8
	H.	Removal of Board Officers	8
	I.	Replacement of Officers	8
VI.	DE	CISION MAKING	9
	A.	Quorum for Meetings	9
	B.	Approval of Recommendations	9
	C.	Proxy Voting	9
	D.	Bylaws Amendments	9

	E.	Removal of Officers	9
	F.	Requirements for Recommendations to EM	9
	G.	Administrative Decision Making	0
	H.	Procedures and Parliamentary Law	0
VIII	. (CONDUCT AND FORMAT OF MEETINGS 1	0
	A.	Meeting Format	0
	B.	Conduct of Meetings	1
IX.	BU	DGET1	1
	1.	Authority	. 1
	2.	Compensation	. 1
	3.	Travel Expense	. 1
X.	EV	ALUATION1	. 1
XI.	СО	NFLICT OF INTEREST1	2
	A.	Definition	2
	B.	Enforcement1	2
	C.	Recusal	2
	D.	Principles of Conduct	2
		a. Exceptions:	2
XII.	AM	IENDING THE BYLAWS1	
	A.	Policy	3
	В.	Approval1	
XIII		ADOPTION OF THE BYLAWS 1	3
XIV	, (SUBORDINATION AND SEVERARILITY OF THE RVI AWS	3

I. MISSION

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

II. FUNCTIONS, SCOPE, AND ACCOUNTABILITY

- A. Functions: At the specific request of EM, the Board will provide independent advice and recommendations to the Assistant Secretary for EM, the DOE Oak Ridge Office (ORO) Manager, or the DOE ORO Assistant Manager for EM. The Board will provide advice and recommendations in response to charges issued by EM or the Site Manager.
- **B.** Scope: The scope of the Board includes:
 - The opportunity for the Board to discuss with EM their proposals and plans for such matters as EM facility expansions and closings, environmental projects, and the impact of environmental regulations; and
 - Any aspects of EM issues related to cleanup standards and environmental restoration, waste management and disposition, stabilization and disposition of non-stockpile nuclear materials, excess facilities, future land use and long-term stewardship, risk assessment and management, and cleanup science and technology activities.
- C. Accountability: The Board interacts with the appropriate EM decision makers to provide advice on matters within its scope, on behalf of the citizens of Oak Ridge and the surrounding communities.
 - 1. The Board seeks a free and open two-way exchange of information and views between Board members and EM, where all are invited to speak and to listen.
 - 2. Board members may request access to independent technical advice, staff, and training.
 - 3. The Board will develop specific operating procedures and undergo requisite training to ensure that all members will hear a wide range of views and use constructive methods for resolving conflict, making decisions, and dealing with the differing viewpoints.
 - 4. The Board will always remain accountable to the public and EM, and seek to promote multicultural community involvement. The Board will develop culturally appropriate procedures to ensure public participation in EM's decision-making processes.
 - 5. In compliance with the Federal Advisory Committee Act, Board meetings will be open to the public, and the Board will give advance notice of a minimum of 15 days. Board meetings will be held at regular times in public locations to encourage maximum public and Board participation.

- EM will always remain mindful of the various stakeholder interests represented on the Board. It will seek to ensure that all interested parties and stakeholders continue to be adequately and equitably represented.
- 7. The Board members will send all requests to the EM Deputy Designated Federal Officer (DDFO) to ensure a prompt response. The DDFO is responsible for tracking DOE responses to requests from the Board and ensuring the completeness of those responses.
- 8. Site Specific Advisory Boards are jointly chartered as the EM Site Specific Advisory Board under the Federal Advisory Committee Act. The Board is thereby subject to the requirements of the EM Site Specific Advisory Board Charter, the Federal Advisory Committee Act (5 USC Appendix), and Federal Advisory Committee Management Requirements (41 CFR 101-6).
- The Board shall develop and publish an Oak Ridge-specific annual report and seek stakeholder input and develop a general work plan each year based on the Board's charge to guide the Board and its committees' activities.
- 10. The Board will also maintain a repository of the Oak Ridge Board documents.

III. MEMBERSHIP

- A. Authority: Pursuant to delegated authority, the Assistant Secretary for EM is authorized to appoint and remove EM SSAB members.
- **B. Terms of Office:** The Board shall consist of not more than 22 voting members. Two nonvoting student representatives identified each year by area high schools will-may participate in Board activities for one year. The Board membership is on a rotation schedule that will encourage new individuals to participate and will maintain a balance between continuity and diversity inherent in the makeup of the Board.
 - 1. Terms of office will be two years.
 - 2. Members may serve three terms for a total of six years.
 - 3. If after significant recruitment efforts, it is found that the member pool is limited, a request for an exception from term limits may be made by the affected Field Manager to the Assistant Secretary.
- C. Vacancies: As soon as a vacancy exists following completion of a Board member's term, resignation, or removal, Board members, members from the Oak Ridge communities at large, or individuals who work in the Oak Ridge area may be considered to fill the vacancy. Nominees should meet, as far as possible, the Board's existing stakeholder balance, diversity, and geographical distribution. The DDFO shall forward his/her recommendations to the Office of EM in DOE Headquarters for approval. When a vacancy exists due to resignation or removal of a Board member, the vacancy shall be filled by interim appointment for the remainder of the unexpired term in accordance with the DOE EM Site Specific Advisory Board Guidance.

IV. MEMBERSHIP RESPONSIBILITIES

A. Board Commitments: Board members make the following commitments:

Commented [81]: Some schools have not sent candidates in recent years

- 1. To attend regular meetings and receive training;
- 2. To review and comment on EM and other documents within their purview that come before the Board, and submit timely recommendations to EM;
- 3. To be available for committee work between Board meetings, and to participate fully in the affairs of the Board;
- 4. To work collaboratively and respectfully with other Board members and liaisons in the best interests of both the Board and the public;
- 5. To represent accurately all matters before the Board;
- 6. To handle in a responsible manner information and materials provided by the agencies, particularly drafts developed for an agency's in-house use, that might have significant future revisions as part of the agency's working practices;
- 7. To share any written communication about or for Board activities with the Board as a whole and with the DDFO;
- 8. To act for the Board or as its representative only with the majority vote of the Board;
- 9. To serve on at least one committee or task force during any given twelve month period as appointed by the Chair; and
- 10. To abide by the terms and conditions of the EM SSAB Charter and these bylaws.
- **B.** Liaison Commitments: The Board requests that liaisons make the following commitments:
 - To define and communicate clearly to the Board the respective decision-making processes of the agencies they represent;
 - 2. To provide timely access to information pertinent to EM and associated environmental issues and related decision making;
 - 3. To inform the Board in a timely and proactive manner of agency processes, programs, projects, and activities pertinent to the Board's mission and purpose.

V. BOARD STRUCTURE

- A. Chair, Vice Chair, and Secretary: The Board will elect by majority vote, a Chair, Vice Chair, and Secretary, who will ensure that a diversity of viewpoints are considered in all Board discussions. It is preferred that candidates for the office of Chair have previous experience on the Executive Committee to better facilitate the function of said committee. The Chair will support the Board in a balanced and unbiased manner, irrespective of any personal views on a particular issue and see that all Board members have the opportunity to express their views.
 - The election for Chair, Vice Chair, and Secretary will <u>ideally</u> be held before the first meeting of the fiscal year, <u>but may be held as the first item of board business at the first meeting of the fiscal year</u>. The terms of the Chair, Vice Chair, and Secretary will be one fiscal year.

- The Chair will serve as liaison with the Federal Coordinator, support staff, and facilitator(s), assisting in the preparation of the agendas, minutes of the meetings, and other necessary arrangements.
- 3. The Chair certifies to the accuracy of all minutes.
- 4. The Chair signs the certification of a recommendation that the Board has passed by consensus/majority. If consensus/majority is not reached, the Chair may refer the matter back to a committee or sign and send to DOE the majority and minority reports.
- The Chair assures necessary administrative support for the committees and task forces, and requests DOE support through the DDFO.
- 6. The Chair shall recommend appointment of members of task forces to the DDFO and ensure that the membership of the committees and task forces reflects the diversity of the Board to the extent practicable.
- 7. The Chair serves between regular meetings of the Board as contact for EM, interest groups, and the general public.
- 8. The Vice Chair serves as Chair in the absence or incapacity of the Chair.
- 9. The Secretary shall:
 - a. Assume the duties of the Vice Chair in his/her absence or disability;
 - **b.** Work with administrative staff to give due notice to DOE, Board members, and the public of all Board and committee meetings;
 - Keep full and accurate records of the proceedings of the Board and committee meetings (including attendance), with assistance from administrative staff;
 - **d.** Notify the Executive Committee of any member with two consecutive absences from regularly scheduled Board meetings;
 - e. Review minutes of Board meetings with the administrative staff for timely distribution to Board members; and
 - f. Work with the DOE Federal Coordinator, administrative staff, and any designated committee to review an annual report and an annual work plan. The Board year begins October 1.
 - **g.** Prior to any vote, provide a status of members present to verify whether a sufficient quorum exists for recommendations.
- 10. The Chair, Vice Chair, and Secretary will have other duties as assigned by the Board.
- 11. In the absence of the Chair, Vice Chair, and Secretary, the immediate past Chair, if that person still serves on the Board, shall serve as Chair of the Board meeting. In the absence of the immediate past Chair, the immediate past Vice Chair, if that person still serves on the Board, shall serve as Chair of the Board meeting. If none of these persons is present, those Board members present shall select, with the approval of the DDFO, a Chair for the meeting.
- 12. No officer of the Board shall serve more than two consecutive years in the same office.

- **B.** Committees: The Board will establish its committees prior to the beginning of each fiscal year to reflect the Board's approved work plan for that year.
- C. Other Committees and Task Forces: The Board may establish ad hoc committees or task forces as it deems necessary.

D. Structures of Committees, Ad-hoc Committees, and Task Forces:

- Membership on committees will be on a volunteer basis, and Board members must serve on at least one committee.
- Committee members may develop additional operating procedures consistent with the bylaws.
- 3. Committees may not directly submit recommendations to EM. They are solely responsible for producing draft proposals or information for the full Board. Before presenting a recommendation to the Board, the committee should have passed the recommendation by majority vote of the members attending the meeting.
- 4. The committees will meet independently of the Board. If the meetings of the committee are open to the public, they must hold them in public locations after appropriate notice.
- If a written summary of the committee meetings is prepared, the Chair of the committee will provide it to the Board.
- 6. Election of the Chair for the committees will occur annually, or as necessitated by vacancies. Standing committees may, at their discretion, internally select, elect, appoint, or remove committee Co-Chair or Vice Chair (either title bearing the same intended meaning), from among only the properly appointed Board members of the committee. Co-Chairs or Vice Chairs shall serve and act in the temporary absence of the duly elected committee chairperson.
- 7. Committee Chairs shall notify the Board Chair and the DDFO of the selection, election, appointment, or removal of any standing committee Co-Chair or Vice Chair.
- 8. Except for the Nominating and Executive committees, non-Board members shall be allowed to vote in committee meetings but shall not hold Committee leadership positions.
- 9. Ad-hoc committees and task forces shall be established by the Board for the purpose of investigating special topics. The charge to, Board membership of, and Chair of the ad-hoc committees and task forces shall be established by the Board and approved by the DDFO. The Board shall establish the charge to, term of, and reporting requirements of each adhoc committee and task force.
- 10. Ad-hoc committees and task forces shall be confirmed by the Chair, upon recommendation of the Chair of the respective committee, ad-hoc committee, or task force. Members of the public may be allowed to participate on a non-voting basis for any ad-hoc committee except for the Nominating Committee. The DDFO shall concur in all recommendations for participation by non-Board members.
- E. Executive Committee: The Board has an Executive Committee consisting of the Chair, Vice Chair, Secretary, and Chairs, Co-Chairs, or Vice Chairs of the various standing committees established during the fiscal year. The Executive Committee shall meet at least bimonthly and may hold other meetings at the call of the Board Chair to consider matters of importance

that may require immediate resolution. The DDFO or the DDFO designated SSAB Federal Coordinator shall serve as a non-voting member of the Executive Committee.

- During the intervals between Board meetings, decisions involving the daily business operations of the Board (e.g., setting budgets and agendas, coordinating committee requirements and activities, etc.) shall be made by majority vote of the Executive Committee. However, this committee shall have no authority to set Board policy or make any recommendations to EM.
- Actions on routine general administrative matters requiring time-critical action by the Executive Committee may be handled by polling members of the Executive Committee through any quick means of communication. Decisions will be validated by the Board Chair and documented in the minutes of the next regularly scheduled Board meeting.
- 3. The Executive Committee shall have no authority to act for the Board on any motion or recommendation that affects a decision made by the full Board. Any motion or recommendation affecting a decision of the Board shall be submitted by the Executive Committee to the Board for consideration at the next regularly scheduled Board meeting.
- **F.** Work Sessions: Work sessions are defined as meetings of the Board, including ex officio members, at which official action may not be taken. They must, however, be formally advertised, to be in compliance with the Federal Advisory Committee Act.
- G. Executive Session (Closed Session): Upon approval of the Secretary of Energy, the Board shall announce fifteen days in advance of the meeting an Executive Session for matters concerning litigation or private personnel matters.
- H. Removal of Board Officers: An officer of the Board (Chair, Vice Chair, Secretary, or standing committee Chair, Vice Chair, or Co-Chair), may be removed from their office for misconduct or neglect of duty by a vote of the Board upon the recommendation of the Executive Committee, the recommendation of the DDFO, or a duly authorized motion tendered by a Board member at a regularly scheduled Board meeting.

I. Replacement of Officers:

- A Board office vacancy (Chair, Vice Chair, or Secretary) that comes into existence will be announced at a regularly scheduled Board meeting.
- 2. An election by the entire Board will be held at the next regularly scheduled Board meeting after the meeting at which the vacancy was announced. In the event of a removed, resigned, or abandoned vacancy in the Chair, Vice Chair, or Secretary, the term of office of any interim replacement election for the Chair, Vice Chair, or Secretary shall expire on September 30th and the regularly scheduled annual election shall be held as provided in Article V, Section A, Number 1.

3. If both the Chair and Vice Chair become vacant at or near the same time, then the Board shall, at the meeting at which the vacancy is announced, elect by majority vote a Chair and Vice Chair to serve the Board until, and at, the next regularly scheduled Board meeting. To prevent delay in Board work, and in the absence of a timely interim election, the Executive Committee shall appoint, subject to DDFO approval, an Acting Chair and Vice Chair (if needed or desired), from among the voting members of the Executive Committee, to serve the Board until the next regularly scheduled Board meeting.

VI. DECISION MAKING

All Board decisions relating to recommendations and advice to DOE shall be reached through parliamentary procedure. The Board shall strive for substantial agreement among Board members for approval of recommendations and advice to DOE.

- **A. Quorum for Meetings:** For the purpose of conducting business, a quorum shall be a simple majority of the membership of the Board or Executive Committee.
- **B. Approval of Recommendations:** Recommendations shall be approved by majority vote of the entire Board membership.
- C. Proxy Voting: Voting by proxy on any Board or committee action is prohibited.
- **D. Bylaws Amendments:** These Bylaws may be amended at any regular meeting of the Board by a majority vote of the entire Board membership, provided that the proposed amendment was submitted in writing and read at a previous regular business meeting. (Also see Section XII.)
- **E. Removal of Officers:** An officer of the Board may be deposed from office for misconduct or neglect of duty in office by a two-thirds vote of the Board.

F. Requirements for Recommendations to EM:

- Standing committees, the Executive Committee, or individual members may propose recommendations to the Board.
- 2. Proposed recommendations must be in writing.
- Proposed recommendations will be included in Board packets or be made available to members prior to the Board meeting, along with supporting background documentation.
- Proposed recommendations will be discussed at Board meetings and will be approved, rejected, or returned to committees for further work (e.g., editing, refinement, and incorporation of public and/or members' comments).
- 5. Proposed recommendations will be introduced as motions for Board approval.
- 6. When an issue comes before the Board, the Chair may refer the issue to the appropriate standing committee or create an ad-hoc committee for that issue. The standing committee or ad-hoc committee will report progress to the Board at the next meeting.
- 7. Board members who disagree with an approved recommendation should document it in writing.

- 8. When it appears that the Board has reached agreement on a particular recommendation, the Chair may call for a vote.
- Recommendations dealing with complicated and/or controversial issues may require more than one draft and may take two or more months to evolve into a form that is acceptable by a majority of the Board.

G. Administrative Decision Making:

- 1. Administrative functions of the Board may be delegated to the Chair who may assign actions to the Federal Coordinator and/or his/her staff.
- If the Board finds need to review or affirm specific decisions made under the authority delegated to the Chair, such affirmation will be expressed by a majority vote of the Board at the next meeting.
- H. Procedures and Parliamentary Law: The current edition of "Robert's Rules of Order" shall apply on all questions of procedures and parliamentary law not specified in these bylaws.

VII. ROLE OF THE FACILITATOR

A professional facilitator may be hired to help the Board organize its work, prepare an agenda based on consultations with the Board and the Chair, facilitate the Board meetings, and work with the staff to prepare the minutes of the meetings.

VIII. CONDUCT AND FORMAT OF MEETINGS

A. Meeting Format:

- 1. Public notices will be printed in the Federal Register at least fifteen (15) days before the meeting. Announcements may be made on the radio and in local newspapers.
- 2. The Board will meet as needed, with the length of meetings determined by the agenda.
- 3. The Board will submit its agenda for the approval of the DDFO. In preparing the agenda, the Board reviews its work plan and, if appropriate, obtains additional input from its members and committees and the public.
- 4. Meetings will be open to the public; a section of the meeting room will be set aside for observers; and public comment is invited at appropriate times during a meeting.
 - a. There will be a fixed agenda time for public comment. A non-recused Board member may not address the Board during the time set aside for public comment. The public comment period may be extended by the Chair or by consensus of the Board members in attendance.
 - **b.** If required, at the discretion of the Chair, the fixed time will be divided equally among the members of the public who request to speak.
 - c. Before a decision on a recommendation is made, the Chair may invite members of the public to offer their input. The Board will determine in advance how much time they will allocate for public input.

- **d.** Members of the public may offer their comments in writing and give them to the DDFO.
- e. Time will be set aside for Board member comments during each meeting.
- 5. Any meeting will be set up in terms of both the physical arrangements and the agenda to facilitate hearing and discussion.
- 6. Minutes of the meetings will be kept by an individual designated by the Chair, distributed to the Board members for their review and made available to the public. Each meeting agenda will include the opportunity for members to make revisions to the minutes of the previous meetings.
 - The Chair or Vice Chair must approve the minutes within 90 calendar days of the meeting to which they relate. In the absence of the Chair or Vice Chair the DDFO must make such certification.
- 7. Any product of the Board, such as policies, positions, reports, advice or recommendations given to DOE, must be reviewed by the Board in final distribution form before distribution and being placed in the DOE public reading rooms and any other places deemed appropriate.

B. Conduct of Meetings:

- The Board may utilize a neutral third party facilitator to assist it in accomplishing its
 mission. In all instances the facilitator will operate in a completely neutral, balanced, and
 fair manner.
- 2. Board members will show respect to each other, EM, liaisons, and the public.

IX. BUDGET

- Authority: Funding amounts will be determined yearly based on the Board's approved work plan and availability of funds. The DDFO retains the fiscal responsibility for the Board but may assign a fiscal agent acceptable to EM.
- Compensation: Board members will serve without compensation but may receive reimbursement for direct expenses related to the work of the Board and meeting attendance.
- 3. Travel Expense: Board, committee, and task force members are required to follow applicable federal travel regulations. All travel expenses must be submitted to the Federal Coordinator for reimbursement according to Federal guidelines. Trip reports by Board members must be prepared within 30 days and submitted to the support staff for inclusion in the Board's records.

X. EVALUATION

A. The Board may submit questions or concerns about the board or the responsiveness of OREM to recommendations and other questions at any time without the formation of a committee.

XI. CONFLICT OF INTEREST

- A. Definition: Board members are prohibited from personally and substantially participating as a Board member in any particular matter in which the Board member or the Board member's spouse, minor child, general partner, or employer has a financial interest. This restriction also applies if the Board member is negotiating or has any arrangement concerning prospective employment with any person or organization that has a financial interest in any particular matter before the Board.
- **B.** Enforcement of Conflict of Interest Policy: Questions concerning conflict of interest shall be referred to the DDFO and/or the Federal Coordinator, who will seek the advice of legal counsel for resolution.
- C. Recusal: If a Board member is aware of a conflict of interest, as defined above, the member shall immediately inform the DDFO and the Board of the interest and shall refrain from participating in discussions and recommendations in which a conflict or potential for conflict of interest exists.
- **D. Principles of Conduct:** Board members shall abide by the following conflict of interest principles:
 - 1. Members shall refrain from any use of their membership, which is or gives the appearance of being motivated, by the desire for private gain.
 - 2. Members shall not use, either directly or indirectly for private gain, any inside information obtained as a result of Board or committee service.
 - 3. Members shall not use their positions in any way to coerce, or give the appearance of coercing, another person to provide a financial benefit to the member or any person with whom the member has family, business, or financial ties.
 - Members shall not knowingly receive or solicit from persons having business with DOE
 anything of value as a gift, gratuity, loan, or favor while serving on the Board or in
 connection with such service.

a. Exceptions:

Members may receive an unsolicited gift from persons having business with or an interest in DOE if:

- The gift has an aggregate market value of \$20 or less per occasion, provided that the aggregate market value of the individual gift received from any one person under the authority of this paragraph shall not exceed \$50 in a calendar year;
- ii. The gift is motivated by a family relationship or personal friendship rather than a member's position; and
- iii. The gift results from the business or employment relationship of a member's spouse or the outside business or employment activities of a member when it is

clear that such gifts are not enhanced because of the member's position.

XII. AMENDING THE BYLAWS

- A. Policy: The Board shall have the power to alter, amend, and repeal these bylaws in ways consistent with the Amended Charter of the EM Site Specific Advisory Board, and other applicable laws, regulations and guidelines. Any member of the public, the Board, or one of the Agencies may propose an amendment. However, to be considered by this Board the proposed amendment must be sponsored by a Board member. The bylaws may be amended at any regular meeting of the Board by a majority vote of the entire Board membership, provided that the proposed amendment was submitted in writing and read at a previous regular business meeting.
- **B. Approval:** All amendments to these bylaws must be approved by the Designated Federal Officer in consultation with the Office of General Counsel.

XIII. ADOPTION OF THE BYLAWS

- **A.** These bylaws will be effective:
 - 1. Upon the affirmative vote of the Board membership,
 - 2. Execution by the Chair,
 - 3. Review and approval by the DOE Office of the General Counsel, and
 - 4. Approval of the EM SSAB Designated Federal Officer.
- **B.** All previous bylaws or procedures are hereby rescinded.

XIV. SUBORDINATION AND SEVERABILITY OF THE BYLAWS

If a conflict arises with respect to any provision of these Bylaws and federal statutes, the laws of the state of Tennessee, or federal or state regulatory authority, then the superseding law or regulation shall control. In the event that any provision of these bylaws is invalid, such invalidity shall not affect the remaining provisions that shall continue in full force and effect.

APPROVED: November 14, 2007

REVISED: April 10, 2019



Oak Ridge Site Specific Advisory Board

OPERATING INSTRUCTIONS

I. DECISION-MAKING	2
A. Principles	2
B. Process for Time-Critical Recommendations	
II. TIME AND PLACE OF BOARD MEETINGS	2
A. Procedure for Specially Called Public Meetings	
III. BUDGET	4
IV. ANNUAL WORK PLAN	4
V. TRAVEL	4
VI. TECHNICAL SUPPORT	4
A. Authority	5
B. Process	
VII. REMOVAL OF BOARD MEMBERS	6
VIII. RESIGNATION OF BOARD MEMBERS	6
IX. ELECTION OF BOARD OFFICERS NOMINATING COMMITTEE	6
X. AMENDING THE OPERATING INSTRUCTIONS	6
ATTACHMENTS	7
A. Travel Request Form	8
B. Trip Report	10
C Technical Support Request Form	

I. DECISION-MAKING

A. Principles

It is the desire of the Board that the following democratic principles embodied in parliamentary law be preserved in the Board's decision-making process:

- 1. The right of the majority to prevail.
- 2. The need to work for the largest majority possible.
- 3. The right of the minority to be heard and its viewpoints, needs, and concerns to be addressed in Board deliberations.
- 4. A regard for the rights of individuals, absentee members, and the Board as a deliberative assembly.
- 5. The right of members to cast votes to show support or non-support of Board issues and recommendations.

It is the desire of the Board that consensus building be an integral feature of the decision-making process and that the Board and its members be accountable to the public for the Board's decisions.

B. Process for Time-Critical Recommendations

Instances may occur when the normal process for approval of recommendations limits or prohibits timely advice to the Environmental Management Program. In these cases, a "fast track" process may be employed. The procedure for time-critical recommendations is as follows:

- 1. Recommendations will be submitted in writing to the Executive Committee.
- 2. The Executive Committee may revise the recommendation.
- 3. The recommendation will be distributed the next day to Board members with an explanation of the time constraints and a deadline for submission of comments.
- 4. Upon receipt of comments, the originators of the recommendation will review the comments and be prepared to discuss the recommendation and any revisions at the upcoming Board meeting.
- 5. The recommendation will be presented for approval at the upcoming Board meeting.
- 6. When a substantive decision must be made at a time when a meeting of the Board or Executive Committee is not scheduled, the Chair shall discuss it with Executive Committee members via telephone or other quick means of communication. Upon request of a majority of Executive Committee members, an Executive Committee meeting may be called, per ORSSAB Bylaws Articles V.E and VI.A.

II. TIME AND PLACE OF BOARD MEETINGS

The regularly scheduled monthly meeting of the Board will be the second Wednesday of every month at 6:00 p.m. at a place announced one month in advance or as determined by previous notification.

A. Procedure for Specially Called Public Meetings

1. Recognition. Any member of the Board who becomes aware of an event or issue believed to merit a special meeting shall notify the ORSSAB staff. The notification should include a brief statement of justification for holding the meeting. The preferred method is by email, or other written means, but phone conversation is acceptable. It is important that

- this notification have sufficient detail to allow evaluation and contact information for the person making the report.
- 2. Evaluation and Recommendation. The ORSSAB staff shall forward this information to the ORSSAB Executive Committee and the DOE Liaison and/or Federal Coordinator for evaluation. The Chair shall determine whether a special Executive Committee meeting needs to be called or if it can be handled by e mail and phone conversation. Informal contact with DOE and others may be appropriate for information gathering. It may be useful for the ORSSAB staff to set up a conference call for the Executive Committee. If the Executive Committee determines that a special board meeting may be appropriate, it will recommend it to DOE for concurrence. This may be by e-mail, phone, or face-to-face meeting, as appropriate. The decision shall be documented in minutes prepared by staff.
- 3. Approval/Concurrence. The ORSSAB Chair shall obtain concurrence from the ORSSAB Deputy Designated Federal Officer.
- 4. Initial Notification. Initial notification will be made to the entire board, local newspapers, and DOE Oak Ridge EM, Tennessee Department of Environment and Conservation, and Environmental Protection Agency personnel, as appropriate. This would include the basic nature of the event or issue for which the special meeting is being planned and include the information available at that time. In the interest of timeliness this notification should be made as soon as practical after the decision to have the meeting has been made.
- 5. Meeting Planning. The Executive Committee and DOE, in coordination with ORSSAB staff, will:
 - A. Set the date and time.
 - B. Determine and invite speakers/panel members, etc.
 - C. Arrange for an appropriate facility to hold the meeting.
 - D. Develop an agenda and outline for the meeting.
 - E. Identify the ORSSAB spokesperson who will have primary responsibility for the event.
 - F. Arrange for video taping, if possible, to record the meeting.
 - G. Arrange for television, radio, internet, and newspaper advertising.
 - H. Coordinate volunteers from the board to assist with the meeting.
- 6. Meeting Execution. Meeting minutes shall be taken and submitted to the board. The minutes should cover key issues raised, and any pending issues should be documented.
- 7. Board Action. The board shall determine whether follow up action or a formal recommendation should be submitted to DOE. This may include recommending that the video recording of the special meeting be aired on local public access television stations.

All actions associated with the special called meeting must be done well and in a timely, pertinent, and factual manner.

III. BUDGET

- 1. DOE has authority over all DOE government funds appropriated to ORSSAB.
- 2. The Executive Committee has administrative authority for decisions on matters involving financial resources. In this capacity, the Executive Committee shall approve requests for activities that require expenditure of government funds.

IV. ANNUAL WORK PLAN

- 1. DOE-EM shall provide a list of issues to be considered for the next year's work plan. In addition the Board solicits input on issues from Board members, agency liaisons, and stakeholders.
- 2. At the annual retreat, these issues are considered for inclusion in the next year's work plan. The issues and topics are screened for mission applicability, prioritized, and tentatively assigned to committees or to the full Board.
- 3. Committee meeting dates are scheduled, and members select the committees on which they wish to serve before the planning meeting is concluded.
- 4. Committees meet prior to the September Board meeting to finalize objectives and tasks, identify technical support/facilitation needs, and complete drafting committee work plans.
- 5. Committees provide revised work plans that are consolidated into an overall Board work plan drafted by support staff and are presented at the October Board meeting.
- 6. Work plans may be revised at any meeting of the originating committee. Meeting minutes shall highlight such revisions.
- 7. A comparison of accomplishments versus the work plan of previous year should be presented by the Chairs at the August planning meeting.
- 8. The work plan shall be submitted to DOE-EM for approval.

V. TRAVEL

- 1. Travel requests must be submitted in writing on the ORSSAB Travel Request Form (see Attachment 1).
- 2. Travel must be directly related to Board activities.
- 3. Travel requests are approved or denied by the Executive Committee.
- 4. Traveler must submit a written trip report (see Attachment 2).

VI. TECHNICAL SUPPORT

Technical support for Board activities includes, but is not limited to, facilitation at Board meetings, the annual retreat, and Chairs' meetings. It may also include technical assistance to committees, so that committee members can understand issues under consideration by the Board.

In all cases, requests for technical support must be reasonable and directly related to Board issues and activities.

A. Authority

- 1. The Executive Committee holds authority to approve technical support requests and may reallocate or request additional hours as deemed necessary.
- 2. The Board may review and change Executive Committee decisions on technical support matters through its normal deliberative decision-making process.
- 3. In consultation with DOE, the Executive Committee and the ORSSAB member or committee through which the technical support request is generated will recommend the group or individual(s) to be tasked to supply the technical support.
- 4. Technical support requests and deliverables resulting from those requests must be included in the Board's public records.

5. ORSSAB committees are encouraged to develop schedules and estimates for technical support tasks at the beginning of the fiscal year based on committee work plans.

B. Process

- 1. Support staff compiles technical support requests on behalf of Board members and committees for submission to the Board Finance Committee for review and to the Executive Committee for approval. Requests must be submitted on the ORSSAB Technical Support Form (Attachment 3). Scope of work and time frames must be specific (the DOE Federal Coordinator may be contacted for assistance).
- 2. The Executive Committee develops estimates of Board technical support needs (e.g., monthly Board meetings and annual retreat facilitation).
- 3. The Board Finance Committee reviews technical support requests to determine if resources are available to fund them, based on funds budgeted at the beginning of the fiscal year.
- 4. The Executive Committee approves, amends, or rejects requests based on the applicability of the scope of work to Board business and the reasonableness of hours requested. Board members and committee Chairs may provide additional justification for technical support requests to the Executive Committee during its review of the requests.
- 5. Following Board Finance Committee review and Executive Committee approval of technical support hours and scope of work, the DOE Federal Coordinator prepares a task order for the requested technical support.
- 6. The DOE Federal Coordinator, the Executive Committee, and the ORSSAB member or committee through which the technical support is generated may review potential groups or individuals to be tasked to supply the technical support and recommend the group or individual most suited to fulfilling the scope of work.
- 7. Once the Federal Coordinator completes the task order and the procurement request, the Contracting Officer is notified and contacts the technical support contractor to initiate the work release.
- 8. Upon award of the contract, the ORSSAB member or committee through which the technical support is generated works directly with the technical support contractor to accomplish the scope of work.

VII. REMOVAL OF BOARD MEMBERS

ORSSAB recognizes that DOE has the sole authority to appoint and remove members from the Board. Should a member miss two consecutive regularly scheduled Board meetings, then the following process shall be used by ORSSAB to determine whether the Board should ask DOE to remove the member: (absences due to travel on ORSSAB business are not counted as absences)

- 1. The ORSSAB Secretary will inform the Executive Committee of the two consecutive absences.
- 2. At the next regularly scheduled Board meeting, removal of the Board member will automatically be placed on the agenda as an item to be voted on.
- 3. If the Board member attends the next regularly scheduled Board meeting, then the vote will be automatically removed from the agenda.
- 4. If a Board member does not attend the next meeting, the vote will automatically go forward. If two-thirds of the members present, with a minimum of a simple majority of the membership, vote to recommend removal, a request will be forwarded to DOE asking that DOE:

- a. Notify the Board member of the vote, and request his/her resignation from the Board.
- b. Appoint a replacement as soon as possible.
- 5. If the required two-thirds vote to request the removal of a member is not achieved, then the "clock starts over" with regard to absences, and a subsequent vote is not automatically placed on the agenda until two more consecutive Board meetings are missed.

VIII. RESIGNATION OF BOARD MEMBERS

Members who wish to resign shall submit a letter to the Assistant Secretary of Environmental Management at DOE Headquarters with copies to the ORSSAB Chair, Secretary, and Deputy Designated Federal Officer.

IX. NOMINATING COMMITTEE NOMINATION OF BOARD OFFICERS

The Nominating Committee is an ad hoc committee and shall:

The board shall solicit the membership for interest in serving as Chair, Vice Chair, or Secretary of the board

- 1. Be elected at a regular Board meeting At least two months preceding the annual election of officers.
- 2. Be composed of ORSSAB members who are not officers.
- 3. Contact the membership and obtain the consent of all nominees.
- 4. Have the option to conduct its meeting(s) in private.
- 5. Have the right as individual members to be nominated for any office.
- 6 Present Distribute to the membership a slate-list of nominees for Board offices-prior to the election.

X. AMENDING THE OPERATING INSTRUCTIONS

These Operating Instructions may be amended at any regular meeting of the Board by a two-thirds vote of the entire Board membership, provided that the proposed amendment was submitted in writing and read at a previous regular business meeting.

ATTACHMENTS



Oak Ridge Site Specific Advisory Board TRAVEL REQUEST FORM

This section to be completed by ORSSAB member:	
Member:	Date submitted:
Meeting name:	
City:	Dates:
Purpose for attending meeting:	
Registration required? Cost: \$	Registration made? Registration paid?
Hotel required? Number of nights:	Reservation already made?
Hotel (first choice):	Hotel (second choice):
Transportation: Airline: Person	al Vehicle*: Rental Car*:
Metro, taxi or shuttle:	Other (list):
Departure date:	Return date:
Preferred flight departure time:	Preferred flight return time:
Will any personal travel be associated with attended	ance at meeting or conference? If yes, explain:
* Justification for use of personal vehicle or rental	car:
I understand that upon return I am to provide the Board a vereport will be distributed to Board members, and a copy we ORSSAB Travel Guidelines and Procedures supplied to members.	
Signature:	Date:

This section to be completed by ORSSAB Travel Coordinator:

ESTIMATED COSTS Registration Fee \$ PA Mileage to/from Airport (__¢ per mile) \$ Airport Parking \$_____ Airfare Rental Car \$ Other Transportation (i.e., shuttle, taxi, etc.) \$ Per Diem _____ Lodging Taxes M&IE_____ Travel Manager Fee \$12.80 GovTrip TAV Fee \$13.50 Other (list)

Other (list)		<u>\$</u>
		Total \$
This section to be completed	by Board Finance & Process	s Committee:
\$	Travel budget for cur	rrent fiscal year
- <u></u>	Total travel costs incu	urred to date
\$	Travel budget remain	ning at time of new request
	Estimated travel costs	s for new request
\$	Travel budget remain	ning
Committee Chair:		Date:
This section to be completed	by Executive Committee:	
Approved:	Denied:	Date:
Executive Committee Chai	r:	Date:



Oak Ridge Site Specific Advisory Board

TRIP REPORT

I.	Name of Traveler:	name
II.	Date(s) of Travel:	dates
III.	Location of Meeting:	location
IV.	Name of Meeting:	name of meeting
V.	Purpose of Travel:	
Reason	n for travel goes here	
VI.	Discussion of Meeting:	
Discus	sion of what took place at meeting or confe	erence goes here
VII.	Significance to ORSSAB:	
Explai	n why trip was important to your ORSSAB	activities or committee work
VIII.	Names & Telephone Numbers of Signifi	cant Contacts:
This in	nfo goes here	
IX.	Action Items:	
	ny outstanding actions from meeting or conne some ORSSAB information or if they pr	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Х.	Traveler's Signature & Date:	
Signat	ure: (via e-mail)	Date:



Oak Ridge Site Specific Advisory Board TECHNICAL SUPPORT REQUEST FORM

Scope of Work Title:			·
	Specific Task (s)	Time Frame	Estimate Hours
		Total	
Member or Committ	ee Chair:	Date:	
is section to be comple	ted by Board Finance Committee:		
_	Committee budget for affected lin	ne item	
	Line item costs incurred to date		
\$	Line item budget remaining at ti	me of new request	
	Cost of new request		
\$	Line item budget remaining		
Ψ			

This section to be completed by Exe	ecutive Committee:		
Approved:	Denied:	Date:	
Executive Committee Chair:		Date:	

- Example -

Scope of Work Title: <u>Technical Support for Review of the ETTP Zone 2 FFS and Proposed Plan</u>

Specific Task (s)	Time Frame	Estimated Hours
Prepare simplified bulleted product that will be useful to the board for full understanding as to what would be the end results of each alternative: a. What would the site look like? b. What DOE controls would have to remain in place? c. What restrictions would be in land notices? d. Are the NEPA concerns adequately addressed?	July-Aug	24
Meet and discuss with EM committee, committee issue managers, and city/county officials the public's expectations for ETTP Zone 2: a. Site appearance b. Historical preservation expectations c. Slabs, underground lines, fences, surface water, basements d. Economic growth/concerns e. Restrictions	July-Aug	6
Prepare concept proposal(s) – what alternative best represents the public's/officials' view	July-Aug	2
Develop SSAB recommendations with EM committee during the public review period (July)	Sept.	4
	Total	36

Election of Officers for Fiscal Year 2022, beginning in October

It is time to consider election of officers to the Chair, Vice Chair and Secretary positions on the board. Please consider these leadership roles as part of your service to the board. This is particularly important this year, as 4 of 5 current officers will be entering their third and final term of board membership.

Elected officers (with support from staff)

- o Lead the monthly meetings,
- Meet approximately once a month (generally the first Wednesday of the month) to discuss board business such as recommendations, following up on action items, and to draft/approve meeting agendas.
- o Provide summaries of board activities outside main meetings
- o Review and approve board documents (such as meeting minutes and recommendations) prior to presentation to the full board
- o Represent the board at occasional meetings such as the EM SSAB Chairs Meeting twice a year to conference with other boards.
- o Are given priority for some travel/training opportunities. It is preferred that the Chair have previous experience on the executive committee as vice chair, secretary, or EM Stewardship chair/vice chair.

All members are eligible, although current officers may be subject to term limits. It's preferred someone with prior leadership experience in an officer role (Board vice chair/secretary or EM & Stewardship chair) be Chair if possible, but the other positions are excellent learning experiences, particularly the chair/vice chair positions on the EM & Stewardship Committee.

If you are interested and/or have questions, please email staff at orssab@orem.doe.gov at your earliest convenience. Responses will be collected by **August 31, 2021** for presentation at the September Executive Committee and Board meetings. If you would like to nominate someone else, staff can address that as well.

Voting will occur at the October board meeting. Nominations can occur "from the floor" prior to a vote, but it is helpful to have a list of candidates to begin with for efficiency

Elections for EM & Stewardship chair and vice chair will occur at the October committee meeting.

As a reminder current officers are:

Chair	Michelle Lohmann – term limited and may not serve in this position again
Vice Chair	Leon Shields – term limited and may not serve in this position again
Secretary	Bonnie Shoemaker – term limited and may not serve in this position again

EM/Stewardship Committee

Chair	Amy Jones
Vice Chair	John Tapp

Notes from Michelle Lohmann regarding EM SSAB Charge Committee on Strategic Vision input

From: Shell Lohmann

Sent: Wednesday, May 26, 2021 8:26 AM

Subject: Re: [EXTERNAL] Re: EM SSAB Strategic Vision Committee

For clarification, the information I sent out post-meeting are my notes that capture two bodies of information. I am not sure where the numbering came from unless it was some sort of formatting issue. The information was intended just to be bulleted.

The first section (1-3) is context information that was provided at the Chair's meeting as to the ask from DOE for this charge. These were the notes I took when the charge was introduced at the meeting. The remaining items noted (4-10) were the recommendations we discussed on our call on Monday, save for the last bullet, which I added as an afterthought.

On 5/24/2021 1:30 PM, Lohmann, Michelle wrote:

Charge #2 - SSAB Expectations/Guiding Principles

- 1. Identify SSAB end-state expectations and guiding principles that could be used as a complex-wide framework for DOE EM's interactions with stakeholders/communities
 - 1. We will document:
 - 1. Our expectations regarding what EM mission completion looks like at our site (this is not necessarily what DOE is saying end state completion looks like this is what we as a board/community think it needs to look like; we need to identify if we see gaps)
 - 2. Our expectations for how DOE EM will interact with local stakeholders/communities to reach that vision (template to be provided)
 - Chairs will collaboratively discuss the individual board results, identify commonalities, and develop a complex-wide SSAB expectations and guiding principles framework (Spring 2021 – Fall 2021)
 - 3. Define the best way to communicate the 10-Year Strategic Vision

Potential Recommendation Items Discussed:

- 4. Ensure Strategic Vision includes hyperlinks that go directly to each site for ease of search/reading (what is relevant to specific sites)
- 5. Outline what we want to be always be included in the yearly update what should be communicated and by who
- 6. Ask for regularly scheduled engagement and/or updates via a variety of media (use social, video, newsletters (monthly/weekly), etc.
- 7. Ask for the SV document to be written in lay terms, with language geared to a non-technical level of understanding
- 8. Define who we want the SV to go to (this is where we define stakeholders: public, communities, public officials, media, etc.)
- 9. Ask that SSAB be given the draft of the document in a timely fashion so as to be afforded time to provide meaningful comments/feedback
- 10. Always include information as to workforce planning to support timely completion of work



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
210	5/7/2021	Petrie, DOE	Jones, EPA	EPA Comments: Addendum to the Waste Handling Plan (WHP) for Consolidated Soil and Waste Sites within Zone 2, ETTP (DOE/OR/01-2328&D1/A2)	DOEIC, Notified board officers of receipt
211	5/10/2021	Petrie, DOE	Richards, EPA	EPA Approval Transmittal of Phase 1 Technical Memorandum for Exposure Unit 5 Upper East Fork Poplar Creek (UEFPC) Characterization Area Attachment C.3 to the UEFPC Soils Remedial Action Work Plan (RAWP) (DOE/OR/01-2423&D2, Revision 1, Attachment C.3)	DOEIC, Notified board officers of receipt
212	5/10/2021	Jones, EPA Young, TDEC	Henry & Petrie, DOE	Final Federal Facility Agreement Extension Request for the Y-12 National Security Complex Ancillary Facilities Waste Handling Plan	DOEIC, Notified board officers of receipt
213	5/11/2021	Petrie, DOE	Jones, EPA	EPA Approval: Waste Handling Plan (WHP) for Pre-Demolition and Demolition of Ancillary Facilities at the Y-12 National Security Complex, Oak Ridge, Tennessee (DOE/OR/01- 2863&D2)	DOEIC, Notified board officers of receipt
214	5/12/2021	Jones, EPA Young, TDEC	Henry & Petrie, DOE	Federal Facility Agreement Milestone Extension Request for Submission of the Y-12 National Security Complex 9616-09, 9811-06, and 9811-07 Facilities Phased Construction Completion Report	DOEIC, Notified board officers of receipt
215	5/13/2021	Snyder, DOE	Mullis, DOE	Request for Appointment of Members to the Environmental Management Site-Specific Advisory Board in Oak Ridge	DOEIC, Notified board officers of receipt
216	5/14/2021	Jones, EPA Young, TDEC	Felosi & Petrie, DOE	Transmittal of Phased Construction Completion Report for Demolition of Building 7025 at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/OR/01-2892&D1)	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
217	5/14/2021	Jones, EPA Young, TDEC	Carden & Petrie, DOE	Transmittal of the Errata to the Addendum 6 to the Fiscal Year 2007 Phased Construction Completion Report for the Zone 2 Soils, Slabs, and Subsurface Structures at East Tennessee Technology Park, Oak Ridge, Tennessee: Exposure Unit Z2-37 Confirmation (DOE/OR/01-2723&D2/A6/R1)	DOEIC, Notified board officers of receipt
218	5/14/2021	Petrie, DOE	Young, TDEC	Addendum to the Waste Handling Plan for the Consolidated Soil and Waste Sites within Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee DOE-OR-01-2328- D1-A2	DOEIC, Notified board officers of receipt
219	5/17/2021	Jones, EPA Young, TDEC	Carden & Petrie, DOE	Change Control Board Authority Transmittal of the Addendum 2 to the Supplemental Sampling and Analysis Plan for the East Tennessee Technology Park Sitewide Residual Contamination Remedial Investigation K-31/K-33 Area Oak Ridge, Tennessee (DOE/OR/01- 2749&D1/A2/R1)	DOEIC, Notified board officers of receipt
220	5/19/2021	Petrie, DOE	Young, TDEC	TDEC Approval Letter Federal Facility Agreement (FFA) Extension Request for the V-12 National Security Complex Ancillary Facilities Waste Handling Plan	DOEIC, Notified board officers of receipt
221	5/20/2021	Petrie, DOE	Jones, EPA	EPA Approval Errata to the Addendum to the Waste Handling Plan for the Consolidated Soil and Waste Sites Within Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01- 2328&D1/A2)	DOEIC, Notified board officers of receipt
222	5/21/2021	Petrie, DOE	Young, TDEC	RE: Errata to the Addendum 6 to the Fiscal Year 2007 Phased Construction Completion Report for the Zone 2 Soils, Slabs, and Subsurface Structures at East Tennessee Technology Park, Oak Ridge, Tennessee: Exposure Unit Z2-37 Confirmation (DOE/OR/01-2723&D2/A6/R1)	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
223	5/24/2021	Jones, EPA Young, TDEC	Mayton & Petrie, DOE	Transmittal of the Addendum to the Waste Handling Plan for the Demolition of Biology Complex Located at the Y-12 National Security Complex, Oak Ridge, Tennessee (DOE/OR/012720&D2/A2)	DOEIC, Notified board officers of receipt
224	5/24/2021	Petrie, DOE	Adams, EPA	EPA Approval of the Addendum 6 to the FY 2007 PCCR for Zone 2 Soils, Slabs, and Subsurface Structures at the ETTP Oak Ridge, TN Exposure Unit Z2-37	DOEIC, Notified board officers of receipt
225	5/24/2021	Petrie, DOE	Jones, EPA	EPA Approval to the FFA Milestone Extension Request for Submission of the Y-12 National Security Complex 9616-09, 9811-06, and 9811-07 Facilities Phased Construction Completion Report	DOEIC, Notified board officers of receipt
226	5/25/2021	Jones, EPA Young, TDEC	Mayton & Petrie, DOE	Transmittal of the Addendum to the Removal Action Work Plan for the Y-12 Facilities Deactivation/Demolition Project, Oak Ridge, Tennessee: Pre-Demolition and Demolition of Building 9213 and Ancillary Facilities 9409-36, 9703-14, and 9999-2 (DOE/OR/01-2479&D1/A10/R1)	DOEIC, Notified board officers of receipt
227	5/26/2021	Petrie, DOE	Young, TDEC	TDEC Approval Letter: Federal Facility Agreement Milestone Extension Request for Submission of the Y-12 National Security Complex 9616-09, 9811-06, And 9811-07 Facilities Phased Construction Completion Report (PCCR)	DOEIC, Notified board officers of receipt
228	5/26/2021	Petrie, DOE	Young, TDEC	TDEC Approval Letter Waste Handling Plan for the Big Spring Water Treatment System Waste at the Y-12 National Security Complex, Oak Ridge, Tennessee DOE/OR/01- 2868&D1	DOEIC, Notified board officers of receipt
229	5/26/2021	Jones, EPA Young, TDEC	Daffron & Petrie, DOE	Transmittal of the Remedial Investigation/Feasibility Study Report for the K-31/K-33 Area at ETTP (DOE/OR/01-2893&D1)	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
23) 5/27/2021	Petrie, DOE	Young, TDEC	Waste Sites within Zone 2, East	DOEIC, Notified board officers of receipt



Department of Energy

Oak Ridge Office of Environmental Management P.O. Box 2001 Oak Ridge, Tennessee 37831

May 28, 2021

Ms. Michelle Lohmann, Chair Oak Ridge Site Specific Advisory Board Post Office Box 2001 Oak Ridge, Tennessee 37831

Dear Ms. Lohman:

RESPONSE TO RECOMMENDATION 248: ON THE FISCAL YEAR 2023 U.S. DEPARTMENT OF ENERGY OAK RIDGE OFFICE OF ENVIRONMENTAL MANAGEMENT BUDGET PRIORITIES

Reference: Letter from Michelle Lohmann to Jay Mullis, *Recommendation 248:*On the FY2023 Oak Ridge Environmental Management Budget Priorities, dated May 17, 2021

I would like to express my appreciation for the interest the Board has taken in the Fiscal Year 2023 budget formulation effort. Thank you for your recommendations. We will submit your recommendations to the Environmental Management Federal Advisory Committee Act Designated Federal Officer.

In addition, I am providing a response to each of the Board's recommendations below:

1. Complete transfer of all applicable land parcels at ETTP for productive purposes. Continue working with community partners to fully realize the economic development potential of reindustrialization after transfer.

Response: Working with community partners in the economic development arena, OREM will continue to transfer available land parcels at the East Tennessee Technology Park to other DOE program/community organizations.

2. Provide adequate funding to construct and operate the urgently needed new onsite disposition facility to allow uninterrupted cleanup progress at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex (Y-12).

Response: The Oak Ridge Office of Environmental Management (OREM) will continue to request funding in our budget submissions to construct and operate the new onsite facility.

3. Increase funding where possible to ensure the Mercury Treatment Facility meets the operational date of 2025 as presented to the community and the Oak Ridge Site Specific Advisory Board. In addition, consider using plus-ups or surplus funds to upgrade equipment and technology that may have improved since the original schedule was developed.

RESPONSE TO RECOMMENDATION 248: ON THE FISCAL YEAR 2023 DOE OAK RIDGE ENVIRONMENTAL MANAGEMENT BUDGET PRIORITIES

Response: Congress has fully funded this Line-Item for the Mercury Treatment Facility construction project in Fiscal Year 2021. We can only use Line-Item funding appropriated by Congress for this project to construct this facility.

4. The expansion of ORNL's Aquatic Ecology Laboratory provides a vital resource to the EM complex. Future requests should continue funding support for research into mercury and methyl-mercury pollution and prioritize designing and testing new and improved remediation technologies.

Response: OREM will continue to request funding in our budget submissions to advance technologies for dealing with mercury.

5. Provide adequate funds to maintain or upgrade infrastructure to ensure safe transportation of waste from cleanup projects to disposal.

Response: OREM is funding upgrades to improve roads this year that will allow safe and efficient transportation of cleanup debris to disposal sites.

If you have questions or if we can be of further assistance, please contact me at 576-0742, or Dave Adler at 576-4094.

Sincerely,

John A. Mullis Mullis Date: 2021.05.28 14:15:22

John A. Mullis II Manager

cc:

Terry Frank, Anderson County Mayor Connie Jones, EPA Region 4 Mark Watson, Oak Ridge City Manager Ron Woody, Roane County Executive Kristof Czartoryski, TDEC, Oak Ridge Chris Thompson; TDEC, Oak Ridge Kelly Snyder, EM-3.2 Dave Adler, EM-94 Melyssa Noe, EM-942