

# Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, April 10, 2024, 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

PRESENTER BIO

CALENDARS

1. April
2. May (draft)

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

1. Draft March 13, 2024, Full Board Meeting minutes for approval

REPORTS & MEMOS

1. FY 2024 Incoming Correspondence
2. FY 2024 Travel Opportunities
3. Trip Reports
  - a. Amy Jones
  - b. Kris Bartholomew
4. Member Bios
5. Abbreviations & Acronyms



**Oak Ridge Site Specific Advisory Board**  
**Wednesday, April 10, 2024, 6:00 p.m.**  
Hybrid meeting  
**AGENDA**

---

- I. Welcome and announcements (A. Jones) ..... 6:00–6:05
  - II. Comments from federal and state agency representatives  
(M. Noe, R. Petrie, S. Urquhart-Foster, K. Czartoryski)..... 6:05–6:10
  - III. Presentation: Aquatic Ecology Research and Technology Development in East Fork Poplar Creek  
(T. Mathews )..... 6:10–6:30  
**Issue Group:** *Butler, Jones, McCurdy, Sharpe*  
*– Members, please inform staff if you wish to join this or any other topic on the Work Plan.*  
Questions regarding the **presentation/speaker only**..... 6:30–6:40
    - i. Board members
    - ii. Guests – Indicate you wish to speak by standing. Online: use the “raise hand” action in Zoom and wait to be acknowledged. Or type your question in the chat.
  - IV. Public comment period (S. Kimel)..... 6:40-6:50
    - i. Comments on **other topics or concerns** for DOE or the board – Comments previously received to be read into the record.
    - ii. *Comments pertaining to this meeting will continue to be accepted by email to [orssab@orem.doe.gov](mailto:orssab@orem.doe.gov) by no later than 5 p.m. EST on **Monday, April 15, 2024.***
  - V. Call for additions & motion to approve agenda (A. Jones)..... 6:50
    - A. Requests for new action items
    - B. Next meeting – 6 p.m. June 12 on ETPP Main Plant Groundwater Remedy Selections
- 
- This ends the presentation portion of the meeting – presenters and subject experts may depart*
- 
- VI. Board Business (A. Jones) ..... 7:00–7:10
    - A. Vote to Approve Previous Meeting Minutes
      - a. Minutes of March 13, 2024
  - VII. Responses to recommendations & DDFO’s report (M. Noe) ..... 7:10–7:15
  - VIII. Committee reports..... 7:15–7:20
    - A. Executive (A. Jones)
      - i. Next meeting – June 5
    - B. EM/Stewardship (M. Butler)
      - i. Next meeting – April 24 continued discussion on Aquatic Ecology Research; and FY 2026 Budget Prioritization/Input
      - ii. *Aquatic Ecology Research – Recommendation not requested but if needed*
      - iii. *Budget Recommendation requested. Issue group updates based on progress of draft.*
  - IX. Additions to agenda & closing remarks (A. Jones)..... 7:20–7:30
  - X. Adjourn ..... 7:30

Teresa Mathews is a Senior Scientist and the Group Leader for the Biodiversity and Ecosystem Health Group at Oak Ridge National Laboratory (ORNL).

Her research is focused on understanding how ecological interactions can affect the biogeochemical cycles of nutrients and contaminants in aquatic ecosystems.

She received her Ph.D. in Coastal Oceanography from the School of Marine and Atmospheric Sciences at Stony Brook University in New York in 2007 and joined ORNL in 2009.



# Oak Ridge Site Specific Advisory Board

# April

# 2024

**Topic: Aquatic Ecology Research and Technology Development in East Fork Poplar Creek**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b>	<b>2</b>	<b>3</b> Executive Committee meeting – 4 p.m. (virtual)	<b>4</b>	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b> Full Board Meeting – 6 p.m. (hybrid)	<b>11</b>	<b>12</b>	<b>13</b>
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b> EM & Stewardship Committee meeting – 6 p.m. (hybrid)	<b>25</b>	<b>26</b>	<b>27</b>
<b>28</b>	<b>29</b>	<b>30</b>				

For information about attending meetings virtually or in person, please email [orssab@orem.doe.gov](mailto: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

## May (draft)

# 2024

Topic: N/A

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b> No Executive Committee meeting	<b>9</b>	<b>10</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b> No Full Board Meeting	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b> No EM & Stewardship Committee meeting	<b>29</b>	<b>30</b>	<b>31</b>

For information about attending meetings virtually or in person, please email [orssab@orem.doe.gov](mailto: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*

### **DRAFT March 13, 2024, Meeting Minutes**

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its full board monthly meeting virtually via Zoom and in person at 1 Science.gov Way on Wednesday, March 13, 2024, at 6 p.m. Copies of referenced meeting materials are attached to these minutes. A video of the meeting was made and is available on the board's YouTube site at [www.youtube.com/user/ORSSAB/videos](http://www.youtube.com/user/ORSSAB/videos).

#### **Members Present**

Kris Bartholomew  
Raiyan Bhuiyan  
Mary Butler  
Harold Conner, Jr.  
Paul Dill  
Amy Jones  
Mike Mark

Harriett McCurdy  
Christine Michaels  
Charles Moore  
Tonya Shannon  
Michael Sharpe  
Rachel Stewart  
Tom Tuck

#### **Members Absent**

Atilio Anzellotti  
Candace Atkinson  
Rosario Gonzalez

Noah Keebler  
Thomas McCormick

<sup>1</sup>Third consecutive absence

#### **Liaisons, Deputy Designated Federal Officer, and Alternates Present**

Melyssa Noe, ORSSAB Deputy Designated Federal Officer (DDFO), OREM  
Karen Thompson, OREM  
Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC)  
Samantha Urquhart-Foster, EPA

#### **Others Present**

Leah Alexander, OREM

Sierra Generette, UCOR  
Shelley Kimel, ORSSAB Staff  
Sara McManamy-Johnson, ORSSAB Staff  
Abby Newberry, OREM

One member of the public was present.

### **Liaison Comments**

**Ms. Noe** – Ms. Noe began her comments by introducing new member Tonya Shannon. Next, Ms. Noe told members that Congress recently passed its budget for 2024, which included the largest budget ever for OREM at \$694 million. Additionally, she said DOE EM headquarters had released its Strategic Vision document for 2024 through 2034. This document includes a 10-year look-ahead for projects expected to be completed at Oak Ridge during that timeframe. Next, she told members the second phase of the Environmental Management Disposal Facility (EMDF) project had begun, with crews recently beginning field work for the groundwater fill demonstration study. After that demonstration study is operational, data will be collected for two wet seasons to help finalize the design for EMDF. Before closing her comments, Ms. Noe introduced new members Rachel Stewart and Raiyan Bhuiyan.

**Mr. Czartoryski** – No comments.

**Ms. Urquhart-Foster** – Ms. Urquhart-Foster said she recently moved to Oak Ridge, so she would be attending meetings in person moving forward.

### **Presentation**

Mr. Bartholomew introduced OREM's Karen Thompson to present the topic of discussion, FY 2026 Budget Prioritization/Input.

Ms. Thompson began her presentation by giving members an overview of the federal budget process. She said each Cabinet-level department submits a budget to the Office of Management and Budget (OMB), which then consolidates those budgets and prioritizes them. That prioritized budget is then sent for the President's approval before being submitted to Congress. She then further broke down the process after the proposed budget reached Congress through to when the President signs the bill into law and OREM receives its budget.

Ms. Thompson said before all that happens, each individual office develops a budget. She said OREM maintains a comprehensive work plan that reflects all the priorities and work scope for the site for a life cycle. That life cycle is consistent with the site's federal facility agreements (FFAs) and gives an overall look at the work needed on the site. She said differences encountered between previously planned work and actual work are accounted for in the budget development process. She then described how OREM uses that comprehensive work plan to map out future work and prioritize the budget. She said the work is organized into four categories: maintaining safe and compliant operations, meeting regulatory milestones, enabling needed infrastructure, and continuing cleanup activities. After the site receives a planning target from headquarters, the plan is refined to fit within that target dollar amount.

She then discussed OREM's priorities, which include closure of East Tennessee Technology Park



(ETTP), demolition of excess contaminated facilities at ORNL and Y-12, building infrastructure to enable cleanup (Mercury Treatment Facility (MTF) Outfall 200 and EMDF), disposition of uranium-233 (U-233) material, disposition of legacy transuranic contact-handled (CH) / remote-handled (RH) debris and sludges, and maintaining and operating facilities at ORNL and Y-12.

Ms. Thompson next briefly discussed an extract from the President's FY 2024 Budget Request to the House Energy and Water Development Committee, with an overview of budgeted amounts for example Oak Ridge projects.

Ms. Thompson concluded her presentation by discussing the current status of the federal budget and added that this is an opportunity for the board to provide input on the FY 2026 budget.

Board members asked the following questions:

- Mr. Conner asked if OREM's budget development process includes provisions to account for additional funding that may be received. He then commented on the correlation between site cleanup performance and funding amounts received at the site.
  - Ms. Thompson said OREM's process utilizes a prioritization process that also can be applied to higher or lower levels of funding than expected.
- Ms. Butler asked if there is money in the budget to clean up miscellaneous debris, such as remnant cement pilings and ramps, from ETTP before the property is transferred.
  - Ms. Thompson said the closure plan for ETTP involves physically cleaning up the property, including miscellaneous debris.
- Mr. Connor asked if the budget extract discussed included capital projects in the funding amounts.
  - Ms. Thompson said MTF Outfall 200 and EMDF are both capital projects and they are line items included in the budget.
- Ms. Butler asked what amount was requested for the FY 2024 budget amount versus the received amount.
  - Ms. Thompson said the amount requested was \$635 million. The amount received was \$694 million.
- Mr. Bhuiyan asked if there are any active mercury-cleanup projects being funded. He then asked if any work was happening specifically at Melton Hill Lake.
  - Ms. Thompson said Outfall 200, a mercury treatment facility, is being constructed. She said that facility needs to be in place before OREM does final cleanup at some facilities. Additionally, she said technology development is being done specifically to investigate how to better address mercury. She said nothing is going on at Melton Hill currently.

- Mr. Tuck asked what the projected operational date for MTF is. He then asked the status of the budget on that facility.
  - Ms. Thompson said that date is currently being recalculated due to changes to the project plan, and it is not known yet. Regarding the budget for the facility, OREM received enough money to continue construction for FY 2024 and funding is planned for FY 2025. She then gave additional details about the process used to planning for capital line items in the budget.
- Ms. Stewart asked how long the deactivation and decommissioning (D&D) fund ETTP cleanup operates under would be available. She then asked what would happen if projects aren't completed at that time.
  - Ms. Thompson said work under that fund is planned through about 2029 or 2030. She then said if there was ongoing work it would be under defense funding.
- Ms. Stewart asked if the scope of mercury treatment work extends beyond the Oak Ridge Reservation into other tributaries or bodies of water.
  - Ms. Thompson said she didn't have the specifics of the technology development activities and what all they're looking at.
- Mr. Tuck asked if it would be appropriate to call the Outfall 200 MTF project a "linchpin project."
  - Ms. Thompson said it's a vital infrastructure project that will allow cleanup in mercury-contaminated facilities. Mr. Czartoryski said he would call it critical. He said DOE, TDEC, and EPA had an agreement in a record of decision (ROD) that required the MTF be constructed and operational prior to any serious D&D work in the area most affected by mercury contamination.
- Mr. Czartoryski asked if there was any risk of the Outfall 200 MTF project being cancelled if the new cost estimates of the project go over by 50 percent of the original baseline.
  - Ms. Thompson said they are not expecting that, and she said OREM is working with DOE-EM headquarters in the replanning process to complete the project.
- Mr. Czartoryski asked when lifecycle planning starts per budget year.
  - Ms. Thompson said OREM developed a plan for all future work about 10 years ago and that plan is updated as needed changes become apparent. She said prior to each budget cycle, that lifecycle plan is tweaked in the January-to-February timeframe.

**Public Comment**

- Public Comment #1 – Mr. Luther Gibson discussed activities at the Nevada SSAB and public health inquiries related to the Manhattan Project and its associated sites. (See attached.)

**Board Business/Motions**

- Ms. Jones asked for a motion to approve the agenda.
  - 3.13.24.1 Motion made by Mr. Conner and seconded by Ms. Butler. Motion passed.
- Ms. Jones asked for a motion to approve meeting minutes.
  - 3.13.24.2 Motion to approve the February 14, 2024, meeting minutes. Motion made by Ms. Michaels and seconded by Ms. McCurdy. Motion passed.

**Responses to Recommendations & Alternate DDFO Report**

Ms. Noe said there were no open recommendations.

**Committee Reports**

Executive – None.

EM & Stewardship – Ms. Butler said the committee last met February 28, 2024, to continue discussion on Ongoing Efforts to Assure Waste Disposal Capacity and the group did not believe a recommendation was necessary and no recommendation was requested of the group. She added that the topic can be revisited at a later time and a recommendation reconsidered if the group feels it’s necessary. The next committee meeting will be held March 27 to continue discussion on the budget, and a recommendation on this topic is being requested. She asked members of the issue group in particular to be at that meeting if possible.

**Additions to the Agenda & Open Discussion**

None.

**Action Items**

None

The meeting adjourned at 7:03 p.m.

I certify that these minutes are an accurate account of the March 13, 2024, meeting of the Oak Ridge Site Specific Advisory Board.

Amy Jones, Chair

Harriett McCurdy, Secretary

April 10, 2024

Oak Ridge Site Specific Advisory Board

AJ/sbm



## FY 2024 Incoming Correspondence

#	Date	To	From	Description	DOEIC, Notified board officers of receipt
95	3/7/2024	Petrie, DOE	Young, TDEC	TDEC Review: Update to the Administrative Record for the Record of Decision for Comprehensive Environmental Response, Compensation, and Liability Act Oak Ridge Reservation Waste Disposal at the Environmental Management Disposal Facility, Oak Ridge, Tennessee (DOE/OR/01-2794&D2/R1)	DOEIC, Notified board officers of receipt
96	3/7/2024	Petrie, DOE	Young, TDEC	TDEC Comments RE: Submittal of Proposed Changes to the Federal Facility Agreement Enforceable Appendix E Milestones	DOEIC, Notified board officers of receipt
97	3/11/2024	Petrie, DOE	Young, TDEC	TDEC Comments Re: Addendum for the Implementation Process to the Remedial Design Report/Remedial Action Work Plan for Soils, Sediments, and Dynamic Characterization Strategy for Bethel Valley, Oak Ridge, Tennessee (DOE/OR/01-2378&DS/AS/R1)	DOEIC, Notified board officers of receipt
98	3/11/2024	Petrie, DOE	Young, TDEC	TDEC Comments RE: Transmittal of Addendum to the Remedial Design Report/Remedial Action Work Plan for the Decontamination and Decommissioning of Non-Reactor Facilities in Bethel Valley at the Oak Ridge National Laboratory, Oak Ridge, Tennessee: Demolition of Building 2523 and Annex 2523A (DOE/OR/01-2428&D2/A14)	DOEIC, Notified board officers of receipt
99	3/20/2024	Petrie, DOE	Dawson, EPA	EPA Comments: Addendum for the Implementation Process to the Remedial Design Report/Remedial Action Work (RDR/RAWP) Plan for Soils, Sediments, and Dynamic Characterization Strategy for Bethel Valley, Oak Ridge, Tennessee, dated February 2024 (DOE/OR/01-2378&D5/A5/R1)	DOEIC, Notified board officers of receipt



## FY 2024 Incoming Correspondence

#	Date	To	From	Description	DOEIC, Notified board officers of receipt
100	3/25/2024	Urquhart-Foster, EPA; Young, TDEC	Daffron & Petrie, DOE	Transmittal of the Addendum to to the Remedial Action Work Plan/Waste Handling Plan for Liquid and Gaseous Waste Operations at ORNL: Liquid and Gaseous Waste Operations (DOE/OR/01-2830&D1/A2/R1)	DOEIC, Notified board officers of receipt
101	3/28/2024	Petrie, DOE	Young, TDEC	DOE's Transmittal of the Federal Facility Agreement Proposed Appendix J	DOEIC, Notified board officers of receipt
102	4/1/2024	Petrie, DOE	Urquhart-Foster, EPA	EPA Comments: Proposed Changes to the Federal Facility Agreement Enforceable Appendix E Milestones [ID 11975], the proposed Fiscal Year (FY) 2024 Federal Facility Agreement for the Oak Ridge Reservation (FFA), Appendix J [ID 12027], and the Appendix E 2024 - 2026 3-27-24.doc	DOEIC, Notified board officers of receipt
103	4/2/2024	Urquhart-Foster, EPA; Young, TDEC	Henry, Petrie, DOE	Transmittal of the Waste Handling Plan for the Demolition of the Alpha-2 Complex Located at the Y-12 National Security Complex, Oak Ridge, Tennessee	DOEIC, Notified board officers of receipt

## Travel Opportunities

Meeting/Event	Dates	Location	Cost	Additional Info
<b>FY 2023</b>				
<b>EPA National Brownfields Conference</b> Requests: Michaels	Aug. 8-11	Detroit, MI	\$200	<a href="https://brownfields2023.org/">https://brownfields2023.org/</a>
<b>FY 2024</b>				
<b>Waste Management Symposium</b> Requests: Bartholomew, Jones, Bhuiyan	March 10-14	Phoenix, AZ	\$1,780	<a href="http://www.wmsym.org">www.wmsym.org</a>
<b>National Environmental Justice Conference &amp; Training</b> Requests:	April 16-18	Washington, D.C.	NA	<a href="http://thenejc.org">http://thenejc.org</a>
<b>2024 Spring Chairs Meeting</b> <i>Board officers preferred</i> Requests: Jones, Bartholomew, Butler	April 30-May 2	Chillicothe, OH	NA	
<b>RadWaste Summit</b> Requests: <del>Jones</del> , Michaels	June 3-5	Louisville, KY	875 (March 22 reg)	<a href="https://www.exchangemonitor.com/go/radwaste-summit-2024/">https://www.exchangemonitor.com/go/radwaste-summit-2024/</a>
<b>DOE National Cleanup Workshop</b> Requests: Anzeletti*, Dill*, Bartholomew	Sept. 16-18	Arlinton, VA	\$675 (July 9 reg)	<a href="http://www.cleanupworkshop.com">www.cleanupworkshop.com</a>
<b>2024 Fall Chairs Meeting</b> <i>Board officers preferred</i> Requests: <b>NA all invited</b>	September 24-26	Oak Ridge	NA	



## Oak Ridge Site Specific Advisory Board

### TRIP REPORT

---

- I. Name of Traveler:** Amy Jones
- II. Date(s) of Travel:** March 9 – March 15, 2024
- III. Location of Meeting:** Phoenix, AZ
- IV. Name of Meeting:** Waste Management Symposium
- V. Purpose of Travel:**

As an ORSSAB member, participation is needed to help better understand the vital issue related to waste management across the DOE-EM sites.

**VI. Discussion of Meeting:**

While attending the conference, I observed several sessions, and found it challenging to choose which topics to attend. This Waste Management Symposium was the largest attended to date. The conference started with a Plenary session where government leaders gave updates on Waste Management, including speaker William Ike White, Senior Advisor US DOE EM who spoke on the future of radioactive waste management, starting this year Finland will be one of five countries the US will be shipping nuclear waste, the other countries have future dates to join the program. The rest of the day was spent in different sessions one attended was Hot Topics in US DOE EM, Jeff Avery, Principal Deputy Assistant Secretary, US DOE EM was one of the speakers. The panel discussion 2023 milestone for Idaho, Oak Ridge, and Portsmouth, emphasizes the importance of interventions at each site and highlighting the crucial role of individuals at these sites in the success of the EM Program. EM Protocol was mentioned (1) Risk (2) Opportunity (3) Safety (4) Fixing Risk. There was a question about EM 2.0 and the future, Jeff responded with “there is so much more work to be done on EM 1.0 at Hartford, Savannah River and Idaho, for now that is our focus”. There were several subjects that were touched on including WIPP, the fire 10 years ago that shut the program down, what we didn’t know 50 years ago, stakeholders should have a place in conversation about the risk, doing nothing will incur risk. Educating the stakeholder will minimize the risk and there are times we need their input. EM is looking at an open contract model, with envision, better processes, with new thinking and ideas. It is important that contractors follow safety protocols, buy into the vision, and see the problems, make suggestions to fix issues, be able to do self-assessments, learn to improve, know weaknesses and strengths. Understanding that mistakes will be made and how making mistakes should bring change and improvement. It is important we



understand that knowledge can't be transferred, contractors must know the strengths of their team. Envision – logical and technical roadmaps were the subject in different sessions throughout the week and how to relate this to our team leaders. Teamwork and partnerships are the only way to succeed.

I attended multiple sessions each day, learning about the new DOE initiative “Clean-up to Clean Energy”, discussing the repurposing of the portions of land that was used for DOE nuclear weapons programs. Radiological Transportation issues involving State, Tribal and Stakeholders at Praire Island. The discussion was about the contamination around the rail line from the transport of waste by railroad, and the testing done around the railroad and how everyone must work together to keep the residents safe that live and work in the area. Exposures at the grade crossing from a stopped train were found to yield the highest radiation. The radiation from passing trains was higher for individuals living closer to the rail line. Manufactured homes provided little shielding for gamma radiation, however in most cases, the radiation was very low. In order to do the testing, the Praire Island Indian Community, DOE and Pacific Northwest National Labs had to work together and communicate, in order to get the testing completed. There were areas along the rail line that was private property, and the Tribal representative would be the contact to get permission for DOE to enter the property to do testing. Tribal had also asked that the Bison be tested for exposure, which was performed with no real conclusion as the long-term exposure.

Environmental cleanup in Oak Ridge included Laura Wilkerson, Chief Engineer US DOE OREM, Kenneth Rueter, President & CEO, UCOR, Greg Young, Deputy Commissioner TDEC, Terry Frank, Anderson Co Mayor. Oak Ridge was the first site to start cleanup which started in the 1980's, with guidance in the 1990's, then in 2022 the cleanup plan was updated with the following goals (1) Complete cleanup at ETTP (2) Reduce radiological risks at ORNL (3) Reduce environmental risks at Y-12 (4) Ensure adequate onsite waste disposal capacity to support remaining cleanup. As of today, 3,000 acres have been returned to the citizens. 63% of remediation is complete in Oak Ridge and 42% around the country at other sites. Partnerships, communication & collaboration was the biggest statement made throughout the sessions. Focus was on the vision for the future, recruit skilled nuclear workforce to better use of the knowledge we have. It was also announced that Oak Ridge's budget was approved at \$695 million. The cleanup at Oak Ridge is facilitating a new nuclear renaissance, exploring, and enacting new clean energy initiatives.

Portsmouth and Paducah discussion included focusing on new clean-up strategy for Paducah site (1) Achieve Significant Construction Milestones (2) Execute Key Cleanup Projects (3) Reduce the EM Footprint (4) Award Contracts That Enable Accelerated Progress (4) Drive Innovation and Improve Performance. This will accelerate cleanup and will simplify the land transfer process back to the citizens for future use.

Several sessions discussed monitoring challenges at the DOE sites including discussions on short and long-term challenges, and if each site will share lessons learned with other sites the clean up remedies may help reduce the mistakes and implementation, as well as protectiveness of humans and the environment. Other issues discussed were the aging workforce and knowledge management are critical issues in nuclear waste management globally and the environmental restoration of clean energy. During all the sessions I attended the one common thing I heard was that knowledge for

the future workforce is indeed crucial for success. Educating, communicating, collaborating, and understanding the vision are key elements in ensuring the success of all projects. There are still knowledge gaps as we move toward risk assessment and remediation, but sharing lessons learned among the stakeholders is key to DOE's success. It is important to include stakeholders and listen to their ideas for innovation and progress. This approach fosters a more inclusive and effective decision-making process, ultimately leading to successful outcomes.

**VII. Significance to ORSSAB:**

The participation of ORSSAB members in environmental management plays a significant role in impacting the community surrounding the Oak Ridge Site. Engaging in conferences fosters networking, education, and collaboration with other partnering agencies, enhancing the stewardship efforts of ORSSAB members. Presentations and discussions at these conferences address a diverse range of issues related to site decommissioning nationwide, each with unique considerations for restoring sites to safe, eco-friendly, and economically beneficial conditions for communities. This exchange of knowledge and best practices contributes to informed decision-making and sustainable environmental outcomes.

**VIII. Names & Telephone Numbers of Significant Contacts:**

None

**IX. Action Items:**

None

**X. Traveler's Signature & Date:**

Signature: Amy Jones Date: 03/28/2024



## Oak Ridge Site Specific Advisory Board

### TRIP REPORT

---

- I. Name of Traveler:** Kris Bartholomew
- II. Date(s) of Travel:** March 10-15, 2024
- III. Location of Meeting:** Phoenix Convention Center
- IV. Name of Meeting:** 2024 WM Symposia
- V. Purpose of Travel:**

Attend WM Symposia to gain better understanding of WM challenges and procedures at stakeholder sites to gain knowledge to better serve ORSSAB.

**VI. Discussion of Meeting:**

The 2024 conference marked the 50<sup>th</sup> anniversary for WM symposia and had over 3,300 attendants from 30 different countries. The 4-day technical portion of the conference had over 120 separate breakout sessions to choose from, the conference was focused on EM challenges and milestones achieved at US sites as well as sites in several other countries. Many speakers gave presentations that discussed new technologies and processes currently being utilized. I attended multiple sessions each day, listed below are just a few that I found interesting. There was a panel that discussed different contracting and awarding methods that are being used by the DOE EM office including the end state contracting model that focuses on accelerated project completion. EM created the consolidated business center to streamline the procurement process for all sites. Savannah River site discussed how they are processing mixed waste and salt sludge from the legacy era storage tanks by using glass vitrification at an on-site processor to eliminate the need for transportation saving time and money. Another session I attended had discussion about the clean-up project in Port Hope, Canada that is located in a residential area. This project is ongoing and it is complicated due to the large number of residences involved. In some cases, single framing structures were found to have been contaminated during the house building process where materials were in contact with contaminated soils. Lastly, there was a session that discussed long term stewardship of remediated sites by the office of Legacy Management in 29 states and Puerto Rico at over 100 sites. There was a lot of discussion on the importance of recruiting new work force through STEM programs to bring new innovation and fill current roles of an aging workforce in the nuclear field. AI was a hot topic of discussion at the conference looking for solutions to overcome complex obstacles for future advances in the nuclear field.

**VII. Significance to ORSSAB:**

The conference had a lot of focus on the importance of EM and discussed challenges that effect sites across the world with innovative ideas that can be shared for a common goal. I hope the knowledge I gained can benefit ORSSAB stakeholders.

**VIII. Names & Telephone Numbers of Significant Contacts:**

None

**IX. Action Items:**

If anyone has any questions or would like more details in regards to this trip, please feel free to contact me.

**X. Traveler's Signature & Date:**

Signature: *Kris Bartholomew* Date: 4/5/2024

# ORSSAB 2024

## Member Biographies

**Atilio Anzellotti** is a senior scientist with PETNET Solutions and a resident of Oak Ridge. He would bring a unique perspective to the board as he has dual citizenship (US and Venezuela). His B.S. and M.S. degrees in chemistry were received in Venezuela from the University of Los Andes and the Venezuelan Institute for Scientific Research, respectively. He received a Ph.D. in chemistry from Virginia Commonwealth University. Mr. Anzellotti is active in the community and is a member of the American Chemical Society and the Oak Ridge Environmental Quality Board. He is interested in environmental and public health issues.

**Candace Atkinson** is the lead 911 dispatcher for the Anderson County Sheriff's Office. She earned a bachelor of science degree in Occupational Safety and Health from Eastern Kentucky University holds a variety of health-related certifications related to her career in law enforcement and emergency services, including CPR and safety communications. She also holds various certifications from the Federal Emergency Management Agency (FEMA). She is a member of the Omega Nu Lambda National Honor Society and the Southern States Police Benevolent Association. Candace is interested in environmental, civic and public health issues. She lives in Oak Ridge.

**Kris Bartholomew** is the owner of Turn Key Plumbing and Construction, a small family-owned business. A high school graduate with some college, Kris has received licensures related to his trade. Those licenses include general contractor and subsurface sewage installer. He is interested in environmental and public health issues. He lives in Lenoir City.

**Raiyan Bhuiyan** earned a bachelor of science degree in Nuclear Energy Engineering Technology from Thomas Edison State University, where he was a recipient of the Nuclear Regulatory Commission Scholarship. He was also a graduate of the Naval Power School during his time serving in the U.S. Navy and has received certifications in CPR and as an IBM Data Science Professional. Raiyan is interested in environmental and workforce issues. He lives in Oak Ridge.

**Mary Butler** is a former staff pharmacist with Aurora Pharmacy. She received a bachelor of science in pharmacy from the University of Wisconsin. She retired to Rockwood in 2020 and is eager to engage in the community here as she was previously active in several organizations in her native Wisconsin. Mary is interested in civic and educational issues.

**Harold Conner, Jr.**, is a senior engineering advisor with Strata-G. In this role, he focuses on supporting community outreach, university partnerships, student internships and mentoring. Harold is a former K-25 plant manager, serving from 1968-1996. He has bachelor of science and master of science degrees in Chemical Engineering from the University of Tennessee, Knoxville (UT), where he was the program's first African American graduate in 1968. He received his Ph.D. in Industrial and Systems Engineering from the University of Alabama at Huntsville. He is active in many community organizations including: the UT Knoxville Alumni board; the UT Tickle College of Engineering board; the STEM Scouts board; the American Museum of Science and Energy board; and Strata-G's board. He is a fellow of the American Institute of Chemical Engineers and the American Society for Engineering Management. He is also a lifetime member of the National Society of Black Engineers and the National Organization of Black

Chemists and Chemical Engineers. Harold lives in Knoxville and is interested in educational and minority issues.

**Paul Dill** retired in 2018 as a project manager with Project Enhancement Corp. He received a B.S. in industrial engineering/technology management from Roger Williams University and an M.A. in psychology from Ashford University. Mr. Dill also earned a Master Project Manager certification from the American Academy of Project Management. He is currently an associate member of the American Psychological Association and a member of the Society for Personality and Social Psychology. Mr. Dill lives in Oliver Springs, which includes portions of Anderson, Roane, and Morgan counties. He is interested in environmental and public health issues.

**Rosario Gonzalez** is a returning board member who served from 2016 through 2018. She recently retired as cafeteria manager of St. Mary's Catholic Church Cafeteria in Oak Ridge. She completed her secondary education in Mexico and received her GED from Pellissippi State. She lives in Oak Ridge and is interested in environmental and minority issues.

**Amy Jones** is the agency manager for Steve Pyatt Insurance and a licensed agent for Madison Insurance Group, serving as lead agent for their Georgia office and as senior benefits coordinator for their Medicare division. She is also a real estate agent at Stephenson Realty & Auction. She owned her own business, Double J Enterprises of TN, in Rocky Top, Tennessee, for more than 20 years. Amy is active in a variety of community organizations, including the Anderson County Chamber of Commerce, the Anderson County Headstart Policy Council, the Women's Ministry Banquet at Main Street Baptist, the Anderson County Republican Party, the Tennessee Republican Party, the Order of Amaranth, and the Order of the Eastern Star. She founded Christmas for Rocky Top Kids in 2018. She lives in Briceville and is interested in environmental, economic, and county government issues.

**Noah Keebler** is a nuclear electronics technician with Ametek, which is a manufacturer of electronic instruments and electromechanical devices. Prior to that he was a radiological instrumentation specialist with Perma-fix Environmental Services. 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 work-related certifications. Noah has Occupational Safety and Health Administration training, electrical safety experience and radiation worker training and is a member of the East Tennessee Chapter of the Health Physics Society. He has an interest in environmental issues. He lives in Knoxville.

**Michael (Mike) Mark** is a former first responder and hazmat professional. He earned a high school diploma and has many certifications related to his career. He lives in Harriman and is interested in environmental and economic development issues.

**Thomas McCormick** is the city manager for the Town of Oliver Springs, 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. He lives in Oliver Springs and is interested in city/county government and environmental issues.

**Ann (Harriett) McCurdy** retired in 2014 after more than 40 years as a teacher for middle- and high-school students both in the United States 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. Harriett received an M.A. in teaching biology and her teaching certificate

from Washington University and a B.A. in biology from Earlham College. She is a past president of the Oak Ridge League of Women Voters and a member of Tennessee Citizens for Wilderness Planning, which is dedicated to achieving and perpetuating protection of natural lands and waters by means of public ownership, legislation, or cooperation of the private sector with a focus on the Cumberland and Appalachian regions of Tennessee. Harriett lives in Oak Ridge and is interested in educational and environmental issues.

**Christine Michaels** is president of the Oak Ridge Chamber of Commerce. She received a bachelor of science in Public Relations from Empire State College and has an Economic Gardening Certification for entrepreneurial economic development and an Institute for Organization Management certification from the U.S. Chamber of Commerce. She is a member of several organizations including: the Anderson County Economic Development Board, Adventure Anderson County (tourism board), Altrusa Foundation Board, Flatwater Tales Storytelling Festival Committee, and the East Tennessee Economic Development Board. She is a Paul Harris Fellow with the Rotary Club. Christine lives in Oak Ridge and is interested in economic development and business issues.

**Charles Moore** is a source house technician with Mirion Technologies and is pursuing a degree in chemistry from Roane State Community College. He is interested in economic development and environmental issues. He lives in Knoxville.

**Tonya Shannon** works in accounts payable in the finance department for Morgan County and serves as a funeral director through Service Corp. International. She is also a trustee assistant with the Morgan County Trustee Office. She received an A.S. degree in human services from Jefferson Community College. She is a member of the Tennessee Funeral Directors Association and has insurance licensure from Kaplan Financial Education. Tonya lives in Wartburg and is interested in public health and civic issues.

**Michael Sharpe** is a SharePoint administrator and performs other technology- and web-based tasks for 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 OREM areas such as decontamination verifications to support cleanup. He received a B.S. in business administration from Tusculum University and an A.S. in computer programming from ITT Technical Institute. He is interested in civic and environmental issues and lives in Lenoir City.

**Rachel Stewart** is a recent UT Knoxville graduate with a bachelor of arts in College Scholars with an emphasis on Environmental Justice and Radioactive Waste Management. She has interned with the Nuclear Threat Initiative in Washington, DC, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory. Rachel lives in Knoxville and is interested in public health and minority issues.

**Thomas 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. He received a B.S. in business and marketing from the University of Tennessee and is a Certified Banker through the School of Banking of the South. He is a member of boards of directors for local organizations including the Oak Ridge Chamber of Commerce, Oak Ridge Heritage & Preservation Association, and the East Tennessee Economic Council. He is a member of the Y-12 Community Relations Council. He is interested in civic issues and economic development. He lives in Knoxville.

## Abbreviations/Acronyms List for Environmental Management Projects

AM – action memorandum  
ACM – asbestos containing material  
ARARs – Applicable or Relevant and Appropriate Requirements  
ARRA – American Recovery and Reinvestment Act  
BCV – Bear Creek Valley  
BG – burial grounds  
BV - Bethel Valley  
CARAR – Capacity Assurance Remedial Action Report  
CART - carbon steel casing dollies  
CBFO – Carlsbad Field Office  
CERCLA – Comprehensive Environmental Response, Compensation  
and Liability Act  
CD – critical decision  
CH – contact handled  
CNF – Central Neutralization Facility  
COLEX – column exchange  
CS – construction start  
CY – calendar year  
D&D – decontamination and decommissioning  
DARA – Disposal Area Remedial Action  
DNAPL – Dense Non-Aqueous Phase Liquids  
DOE – Department of Energy  
DSA – documented safety analysis  
DQO – data quality objective  
EE/CA – engineering evaluation/cost analysis  
EFPC – East Fork Poplar Creek  
EM – environmental management  
EMDF – Environmental Management Disposal Facility  
EMWMF – Environmental Management Waste Management Facility  
EPA – Environmental Protection Agency  
EQAB – Environmental Quality Advisory Board  
ETTP – East Tennessee Technology Park  
EU – exposure unit  
EV – earned value  
FACA – Federal Advisory Committee Act  
FCAP - Facilities Capability Assurance Program  
FFA – Federal Facility Agreement  
FFS – Focused Feasibility Study  
FPD – federal project director  
FY – fiscal year  
GIS – geographical information system  
GW – groundwater



GWTS – groundwater treatability study  
HQ – Headquarters  
HRE – Homogenous Reactor Experiment  
IROD – Interim Record of Decision  
ISD - In-Situ Decommissioning  
LEFPC – Lower East Fork Poplar Creek  
LGWO – Liquid and Gaseous Waste Operations  
LLW – low-level waste  
MLLW – mixed low-level waste  
MSRE – Molten Salt Reactor Experiment  
MTF – Mercury Treatment Facility  
MV – Melton Valley  
NaF – sodium fluoride  
NDA – non-destructive assay  
NEPA – National Environmental Policy Act  
NNSS – Nevada National Security Site (new name of Nevada Test Site, formerly NTS)  
NPDES – National Pollutant Discharge Elimination System  
NPL – National Priorities List  
OR – Oak Ridge  
ORGDP – Oak Ridge Gaseous Diffusion Plant  
OREIS – Oak Ridge Environmental Information System  
OREM – Oak Ridge Office of Environmental Management  
ORNL – Oak Ridge National Laboratory  
ORO – Oak Ridge Office  
OROP - Oak Ridge Oxide Processing  
ORR – Oak Ridge Reservation  
ORRR – Oak Ridge Research Reactor  
ORRS – operational readiness reviews  
PaR – trade name of remote manipulator at the Transuranic Waste Processing Center  
PCB - polychlorinated biphenyls  
PCCR – Phased Construction Completion Report  
PM – project manager  
PP – Proposed Plan  
PPE – Personal Protective Equipment  
QAPP – Quality Assurance Project Plan  
RA – remedial action  
RAR – Remedial Action Report  
RAWP – Remedial Action Work Plan  
RCRA – Resource Conservation Recovery Act  
RDR – Remedial Design Report  
RDWP – Remedial Design Work Plan  
RER – Remediation Effectiveness Report  
RFI – Request for Information

RGRS – Reactive Gas Removal System  
RH – remote handled  
RI/FS – Remedial Investigation/Feasibility Study  
RIWP – Remedial Investigation Work Plan  
RmAR – Removal Action Report  
RmAWP – Removal Action Work Plan  
ROD – Record of Decision  
RSE – Remedial Site Evaluation  
RUBB – trade name of a temporary, fabric covered enclosure  
S&M – surveillance and maintenance  
SAP – sampling analysis plan  
SEC – Safety and Ecology Corp.  
SEP – supplemental environmental project  
STP – site treatment plan  
SW – surface water  
SWSA – solid waste storage area  
Tc – technetium  
TC – time critical  
TDEC – Tennessee Department of Environment and Conservation  
TRU – transuranic, an artificially made, radioactive element that has an atomic number higher than uranium in the periodic table  
TSCA – Toxic Substances Control Act  
TWPC – Transuranic Waste Processing Center  
U – uranium  
UEFPC – Upper East Fork Poplar Creek  
UPF – Uranium Processing Facility  
URS/CH2M – (UCOR) DOE’s prime cleanup contractor  
VOC – volatile organic compound  
VPP – Voluntary Protection Plan  
WAC – waste acceptance criteria  
WEMA – West End Mercury Area (at Y-12)  
WHP – Waste Handling Plan  
WIPP – Waste Isolation Pilot Plant  
WRRP – Water Resources Restoration Program  
WWSY – White Wing Scrap Yard  
X-10 – Oak Ridge National Laboratory (refers to the original reactor)  
Y-12 – Y-12 National Security Complex  
ZPR – Zero Power Reactor

## Oak Ridge Site Specific Advisory Board Public Comment

Luther Gibson

April 10, 2024

“Aquatic Ecology Research and Technology Development in East Fork Poplar Creek” should logically diverge into a discussion of ecological enhancement as a remedy in CERCLA decision documents. A 2007 Action Memorandum selected ecological enhancement as the non-time critical removal action for K-1007-P1 Pond. In September 2022, the Action Memorandum was updated to change the remedy to pond fill-in to support construction of the Oak Ridge General Aviation Airport. The airport project has had questionable public support or even awareness except among those that colluded and conspired to plan it. The ultimate status of the airport project is unclear, thus making future status of the pond the same. Hopefully, the future of both will become clearer soon.

As an alternative or complement to ecological enhancement, in situ contaminated sediment treatment options such as those researched and developed by Dr. Upal Ghosh and his associates at University of Maryland Baltimore County should be considered. I also made this suggestion when the Engineering Evaluation and Cost Analysis for the 2007 Action Memorandum was being publicly discussed. I have received assurance there is cognizance at ORNL of this work and alternative technology.

ORSSAB should reconsider use of the open May 8 meeting date for additional topics that have been raised by TDEC and myself. Presentation topics at local meetings of the other EM SSABs should also be considered.

The Idaho Cleanup Project Citizens Advisory Board (ICP CAB) received a presentation from Dr. Justin Marble, Acting Deputy Assistant Secretary for Waste and Materials Management (EM 4.2), on “EM Corporate Transuranic (TRU) Strategy.” I confirmed with the ICP CAB chair, whom I know, that Dr. Marble presented virtually. So, Headquarters presentations to ORSSAB could also occur.

Despite the title, Dr. Marble’s presentation had slides on DOE legacy radioactive waste in general, mentioning the Waste Information Management System (WIMS), which has data I used to review claims about the adequacy of ORR CERCLA waste disposal capacity. Dr. Marble’s presentation also mentioned the Annual Transuranic Waste Inventory Report, which should be reviewed for what it says about Oak Ridge. Uncertainty about treatment options for TRU sludge cannot but impact Oak Ridge volume estimates for disposal at WIPP. The original EIS for the TRU Waste Processing Facility estimated that cementation would result in three times the treated waste volume of the initially preferred but later abandoned low-temperature drying alternative.

Finally, I would like to encourage ORSSAB to consider having a real planning retreat before start of the next Board year.

Thank you as always for your attention.