Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, October 9, 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. October
- 2. November (draft)

BOARD BUSINESS

- 1. Draft ORSSAB officer slate for FY 2025
- 2. Draft June 12, 2024, Full Board Meeting minutes for approval
- 3. Draft August 14, 2024, Full Board Meeting minutes for approval

ISSUE GROUP SIGNUPS

- 1. FY 2025 Work Plan Schedule
- 2. FY 2025 Issue Groups

REPORTS & MEMOS

- 1. FY 2024 Incoming Correspondence
- 2. FY 2024 Travel Opportunities
- 3. EM SSAB Recommendation EM SSAB Website Content

REFERENCE INFORMATION

- 1. Abbreviations & Acronyms
- 2. Member Biographies



Oak Ridge Site Specific Advisory Board Wednesday, October 9, 2024, 6:00 p.m. Hybrid meeting

AGENDA

I.	Welcome and announcements (A. Jones)	,
II.	Comments from federal and state agency representatives (E. Olds, R. Petrie, S. Urquhart-Foster, K. Czartoryski))
III.	Presentation: Natural Resource Damage Assessment (Petrie; Duren, TDEC)	1
	Questions regarding the presentation topic only	
IV.	Public comment period (S. Kimel)	
V.	Call for additions & motion to approve agenda (A. Jones)	ı
VI.	This ends the presentation portion of the meeting – presenters and subject experts may depart Board Business (A. Jones)	1
VII.	Responses to recommendations & DDFO's report (M. Noe)	
VIII	A. Executive (A. Jones) i. Next meeting – November 6 B. EM/Stewardship (M. Butler) i. Next meeting – October 23	J
IX.	Additions to agenda & closing remarks (A. Jones))
X.	Adjourn)

Debbie Duren serves as the Natural Resource Trustee Program Manager for the Tennessee Department of Environment and Conservation (TDEC). Her 34-year career with the department includes working in various technical and managerial roles.

She has managed a variety of projects, including development of technical guidance for performance of natural resource damage assessments (NRDA), performance of risk-based corrective action, and environmental regulations and policies.

She also currently serves as the State Co-Convenor of the U.S. Department of Energy State and Tribal Government Working Group and a Mentor TN mentor.



Oak Ridge Site Specific Advisory Board

October

2024

Topic: Natural Resource Damage Assessment (NRDA)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	Executive Committee meeting – 4 p.m. (virtual)	3	4	5
6	7	8	9 Full Board Meeting – 6 p.m. (hybrid)	10	11	12
13	14	15	16	17	18	19
20	21	22	23 EM & Stewardship Committee meeting - 6 p.m. (hybrid)	24	25	26
27	28	29	30	31		

For information about attending meetings virtually or in person, 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

November (draft)

2024

Topic: U-233 Processing

5	6 Executive Committee	7	8	9
5		7	8	9
	meeting – 4 p.m. (virtual)			
12	13 Full Board Meeting – 6 p.m. (hybrid)	14	15	16
19	No EM & Stewardship		22	23
26	27	28	29	30
		No EM & Stewardship Committee meeting	No EM & Stewardship Committee meeting	No EM & Stewardship Committee meeting

For information about attending meetings virtually or in person, 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

Officer Elections

Potential Slate of Candidates

Officer elections were announced at the June 2024 meeting. Staff also communicated by email to solicit interest in running for board officer positions.

The following candidates expressed interest in sitting on the Executive Committee for this upcoming year. The following list of candidates is submitted for information purposes. Elections will be held at the October ORSSAB meeting and nominations may be made from the floor at that time.

Chair:

Amy Jones – Amy is currently chair and has been a member of the board since 2019.

Vice Chair:

Kris Bartholomew – Kris is currently vice chair. He has been a member of the board since 2022.

Secretary:

Harriett McCurdy - Harriett is currently secretary and has been a member of the board since 2019

As a reminder to all, the following are the rules for the election of Executive Committee officers:

A quorum must be present throughout the meeting.

Chair (or designee): Nominations have been presented for (name) as chair; (name) as vice chair; and (name) as secretary. Are there any further nominations for (chair, then other positions in turn)?

- Any member of the board can put themselves forward for an office at the meeting when nominations from the floor are requested.
- A member can nominate another board member during the meeting if they have that person's consent.

The co-chairs of the EM Stewardship Committee are also members of the Executive Committee. Elections for those positions will take place at the November EM Stewardship meeting.

- Mary Butler is currently a co-chair, but will not seek re-election.
- Co chairs:

Harold Connor – is currently co-chair and has been a member of the board since 2023

Co-chairs:

Charles Moore - has been a member of the board since 2023



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

DRAFT June 12, 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, June 12, 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.

Members Present

Kris Bartholomew
Mary Butler
Christine Michaels
Harold Conner, Jr.
Charles Moore
Paul Dill
Tonya Shannon
Rosario Gonzalez
Amy Jones
Noah Keebler
Harriett McCurdy
Christine Michaels
Tonya Shannon
Rachel Stewart
Tom Tuck

Members Absent

Atilio Anzellotti Mike Mark

Candace Atkinson¹ Thomas McCormick Raiyan Bhuiyan Michael Sharpe

¹Third consecutive absence

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Erik Olds, DOE Oak Ridge Office of Environmental Management (OREM) Deputy Manager Melyssa Noe, ORSSAB Deputy Designated Federal Officer (DDFO), OREM Roger Petrie, ORSSAB Alternate DDFO, OREM Sam Scheffler, OREM Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC) Samantha Urquhart-Foster, EPA

Others Present

Jared Brabazon, TDEC

Carl Froede, EPA
Bob Galinas, UCOR
Sierra Generette, UCOR
Scott Hutchins, DOE
Shelley Kimel, ORSSAB Staff
Heather Lutz, TDEC
Eileen Marcillo, TDEC
Sara McManamy-Johnson, ORSSAB Staff
Belinda Price, Pro2Serve

Seven members of the public were present.

Liaison Comments

Mr. Olds – Mr. Olds told members that crews recently the shipped reactor vessel from the Low-Intensity Test Reactor for out-of-state disposal in Utah, where it has already been disposed. Next, he said crews recently moved the 100th canister of uranium (U)-233 at the U-233 project, which he said is probably OREM's highest-priority project. He said OREM had a priority goal to process 35 canisters in 2024 and is already at 50 canisters so far this year.

Mr. Olds then said early site prep activities have been completed for the Environmental Management Disposal Facility (EMDF) and the second phase – the groundwater field demonstration – is fully underway. He said UCOR has been extremely efficient managing material generated on that site.

Next, Mr. Olds discussed the groundwater records of decision (RODs) at East Tennessee Technology Park (ETTP), telling members the RODs were signed without dispute – the first RODs in more than 20 years to be signed without dispute.

Lastly, Mr. Olds said EM Senior Advisor Ike White was nominated for Defense Nuclear Facilities Safety Board (DNFSB) membership, so he is leaving and Candace Robertson will be taking over as leader of EM.

Mr. Roger Petrie – Mr. Petrie said it is difficult to overemphasize how important these groundwater RODs are. He said these are the first tri-party agreements in groundwater remediation for the Oak Ridge Reservation (ORR) and one of them is a groundwater decision.

Mr. Czartoryski – Mr. Czartoryski said the annual update to the ORR Site Treatment Plan was released to the public for review and comment. The public comment period ends at the end of July.

Ms. Urquhart-Foster – Ms. Urquhart-Foster said EPA Region Four nominated the ORR's ETTP for the National Federal Facility Excellence in Site Reuse Award and Oak Ridge won.

Presentation

Mr. Bartholomew introduced Sam Scheffler, presenter for the evening's topic, Groundwater Remedy Selection at ETTP.

Mr. Scheffler started his presentation by discussing some of the history of the cleanup program in Oak

Ridge in general and at ETTP, specifically. He said there has been considerable building deactivation and demolition, followed by soil remediation and excavation, leading to the current focus on groundwater. He then described the physical layout of the ETTP site and what each area was used for originally.

Next, Mr. Scheffler discussed the K-31/K-33 Area at ETTP and the ROD for the area signed on May 9. He said the remedy selected for the area was monitored natural attenuation with land-use controls. According to Mr. Scheffler, there has been contamination detected in a limited number of current monitoring wells. Concentrations have gone down or trended down in the 21-well network since monitoring began, and in the most recent sampling of a subset of this monitoring-well network, there were no detected exceedances of maximum contaminant levels, although in the last comprehensive sampling of all 21 wells in the network, two exceedances of drinking water standards were detected for two separate contaminants, nickel and chromium. He said that while they were exceedances of those maximum contaminant levels, they were relatively low exceedances. Regarding land-use controls, Mr. Scheffler said there are several land-use controls articulated in the ROD and the deed, and he specifically highlighted the restriction on groundwater use – namely, that use or exposure of groundwater is not allowed without tri-party approval – and that restriction will remain in place throughout the remedy. Next, Mr. Scheffler gave additional information about monitored natural attenuation. He said this basically allows natural processes to reduce the concentrations of contaminants in the groundwater while the wells continue to be monitored.

Mr. Scheffler then described the next steps now that the ROD has been signed. He said the first thing to do is develop a remedial action work plan (RAWP) that will articulate the details of how the remedy will be implemented, including the monitoring frequency, which wells to sample, and whether new wells will need to be installed.

Next, Mr. Scheffler shifted focus to the Main Plant Area, which is the area related to the second groundwater ROD signed, an interim ROD. He said this is a more specific action that is limited to six chlorinated volatile organic compound (CVOC) areas within the Main Plant Area and the remedy selected is enhanced in situ bioremediation, also with land-use controls including groundwater use and exposure prohibition. He said implementing this interim action will help further define the extent of the six plumes, reduce the concentration of CVOCs in the high-concentration areas of each plume, and provide technology performance information that will be used in selecting final actions for these and other plumes at the site. He then gave additional information about enhanced in-situ bioremediation, which is the use of naturally occurring microorganisms. He described the process as injecting those microorganisms and an amendment – generally an emulsified vegetable oil – into the subsurface. That amendment then ferments, releasing hydrogen and acetate, and the microbes then further break down those substances into harmless byproducts.

Mr. Scheffler then discussed ETTP's Zone 1 Area, which he said is still earlier in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process than the K-31/K-33 and Main Plant Areas. He said a remedial investigation work plan (RIWP) for the Zone 1 Area has been approved. During this stage, data will be gathered and compiled into a remedial investigation report, and then a feasibility study will be done to weigh the different actions for remediation in this area.

Board members asked the following questions:

- o Ms. Michaels asked what alpha activity means.
 - Mr. Petrie said alpha activity is radiation related to uranium products.
- o Ms. Butler said she thought the ROD was approved last year.
 - Mr. Scheffler said it was not final last fall.
- o Ms. McCurdy asked what the cost is to put in a well to monitor a plume.
 - Mr. Bob Galinas of UCOR said it very much depends on how deep the well is, the size of the screen and screen materials, and how complicated it is.
- o Ms. McCurdy then asked what would be done for the Main Plant Area.
 - Mr. Galinas said they would be doing conventional, probably six-inch-diameter, rotosonic holes and will likely use mostly one-inch and two-inch screens. He said they are going to be putting in some exit pathway wells that are going to be deep west bay multi-ports, but for the remedy, it's going to be relatively simple screens and 10 feet to maybe 100-plus.
- o Ms. McCurdy asked if by multi-ports he meant digging vertically and then horizontally.
 - Mr. Galinas said there would be no horizontal; it's just a complicated technology that allows you to isolate vertically.
- o Mr. Conner asked since it's been demonstrated that the concentrations of the contaminants of concern are dropping in the K-31/K-33 Area, will the monitoring schedule change in the future.
 - Mr. Scheffler said the frequency of monitoring will be decided within the remedial action work plan that is currently in the planning stages.
- o Mr. Conner asked what kind of timetable that was under.
 - Mr. Scheffler said they hope to have a milestone in place to have the first draft of the remedial action work plan submitted to the EPA and TDEC for review and approval by March 2025.
- o Ms. Jones asked if the plan was the pre-design, and what is the timeline for the main plant investigation
 - Mr. Scheffler said the pre-design investigation is specific to the Main Plant Area, and the remedial action work plan is for the K-31/K-33 Area. Mr. Petrie said from this point forward, it wouldn't be unusual for it to take about a year to get those documents approved.
- o Ms. Butler asked whether the Office of Legacy Management (LM) will be responsible for

monitoring into perpetuity and will there still be oversight by EPA and TDEC when LM takes over.

- Mr. Petrie said that is the plan for LM to take over. One challenge is that LM has no mechanism in place to take care of classified burial grounds and there is a fairly lengthy process to turn over to LM. He said it will still be several years to get to that point. He said there will always be oversight by EPA and TDEC.
- o Mr. Bartholomew asked how many watershed areas there are. He then asked if the water-use prohibition applies to contact.
 - Mr. Scheffler said there are about five or six. Regarding water use, Mr. Scheffler said, yes, the prohibition applies to any exposure.
- o Mr. Czartoryski said he wanted to clarify that the final Main Plant Area remedial investigation goal of finding the extent of the CVOC plumes, lateral and vertical, applies also to non-CVOC plumes that are not being addressed by this interim action. He said for the selected remedy of an interim action to work, you have to know what you are measuring against.
- o Mr. Dill asked if the classified sites will require 24-hour security coverage.
 - Mr. Petrie said yes, they will have access controls, security patrols, land use restrictions.

Public Question

- o Mr. David Rogers asked if any monitoring was being done outside the reservation.
 - Mr. Scheffler said an offsite monitoring program was set up in the 2010s. Under this program, wells have been installed and sampled from as well as several residential areas. He said they have not seen any instances of maximum contaminant levels beyond the border of the reservation.

Public Comment

- Public Comment #1 Douglas Colclasure submitted a comment by email ahead of the meeting. His comment discussed the Oak Ridge Reservation parcel of land referred to as ED-6 and managed by OREM. He asked the board to recommend that ED-6 be exempted from development and protected as greenspace. He then discussed characteristics of that parcel and why he is making this request. (See attached for full comment.)
- Public Comment #2 Mr. Luther Gibson discussed a public comment made during a site-specific advisory board meeting held in April in Nevada in which a member requested earlier release of meeting briefings prior to the meetings. Next, he discussed the status of ETTP in its transition to long-term stewardship and whether ORSSAB will be involved. Lastly, he discussed a web-based application intended to communicate the status of groundwater contamination cleanup efforts at DOE-EM sites across the complex. (See attached for full comment.)

Board Business/Motions

- Ms. Butler and Mr. Moore introduced a draft recommendation compiled by the Budget issue group, and Ms. Jones asked for a motion to vote on FY 2026 Budget Recommendation
 - **6.12.24.1** Motion made by Ms. Michaels and seconded by Mr. Moore. Motion passed unanimously.
- Ms. Jones and Mr. Bartholomew introduced a Chairs Recommendation drafted during the Spring 2024 Chairs Meeting. The recommendation related to website document archival standards. Ms. Jones asked for a motion to approve the Chairs Recommendation on EM SSAB Websites.
 - **6.12.24.2** Motion by Mr. Bartholomew and seconded by Mr. Dill. Motion passed unanimously.
- o Ms. Jones asked for a motion to approve the April 10, 2024, meeting minutes.
 - **6.12.24.3** Motion made by Ms. McCurdy and seconded by Mr. Conner. Motion passed unanimously.
- o Ms. Jones told members that officer elections would be held soon. She said a slate of candidates would be presented during the board's Annual Planning Meeting in August and voting would be held during the following meeting in October. She asked members to contact staff if they are interested in running.

Responses to Recommendations & DDFO Report

Ms. Noe said there are no open recommendations. Regarding officer elections, Ms. Noe said all the current officers are eligible to run again in their current positions or any other position. She also encouraged members to get involved with issue groups and actively participate in the EM & Stewardship Committee. She said the board is currently looking for a chair, vice chair, and secretary, and EM & Stewardship Committee members will vote on a chair and vice chair during the October committee meeting. Next, she said Oak Ridge would be hosting the Fall Chairs Meeting and it would be a good opportunity for members attend and sit in the audience and see what happens at a Chairs meeting. She then told members the board's Annual Planning Meeting would be held in August to discuss topics for the next year.

Committee Reports

<u>Executive</u> – Ms. Jones said the executive committee discussed plans for the Chairs Meeting and Annual Planning Meeting. The next executive committee meeting will be held August 7.

EM & Stewardship – Ms. Butler said the next EM & Stewardship committee meeting will be held June 26. She said a recommendation is not required for this topic, but members may choose to put one

forward if they would like.

Additions to the Agenda & Open Discussion

Mr. Czartoryski said he would like to extend appreciation to DOE for their efforts on groundwater on the Oak Ridge Reservation. Mr. Conner extended thanks to TDEC and EPA for being part of the drive to get to this point.

Action Items

None

The meeting adjourned at 7:16 p.m.

I certify that these minutes are an accurate account of the June 12, 2024, meeting of the Oak Ridge Site Specific Advisory Board.

Amy Jones, Chair

Harriett McCurdy, Secretary

June 12, 2024

Oak Ridge Site Specific Advisory Board

AJ/sbm



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

DRAFT August 14, 2024, Annual Planning Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its Annual Planning Meeting virtually via Zoom and in person at 1 Science.gov Way on Wednesday, August 14, 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.

Members Present

Kris Bartholomew Amy Jones

Mary ButlerHarriett McCurdyPaul DillCharles MooreRosario GonzalezMichael Sharpe

Members Absent

Atilio Anzellotti Thomas McCormick
Candace Atkinson¹ Christine Michaels
Raiyan Bhuiyan Tonya Shannon
Harold Conner, Jr. Rachel Stewart
Noah Keebler Tom Tuck

Mike Mark

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Jay Mullis, DOE Oak Ridge Office of Environmental Management (OREM) General Manager Melyssa Noe, ORSSAB Deputy Designated Federal Officer (DDFO), OREM Roger Petrie, ORSSAB Alternate DDFO, OREM Erin Sutton, OREM

Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC) Samantha Urquhart-Foster, EPA

Others Present

Leah Alexander, OREM

¹Third consecutive absence

Steve Clemons, OREM Emily Day, UCOR Sierra Generette, UCOR Abby Hill, OREM Shelley Kimel, ORSSAB Staff Sara McManamy-Johnson, ORSSAB Staff

Four members of the public were present.

Liaison Comments

Mr. Mullis – Mr. Mullis opened the meeting by giving members an update on recent OREM activities. He said crews are in the process of finishing soil remediation at the East Tennessee Technology Park (ETTP), which helps facilitate the land transfers there. He said there would be an event to celebrate that at ETTP, and members of the public are invited to attend. He added that DOE signed an agreement with the State a few weeks ago to settle DOE's outstanding Natural Resource Damage Assessment (NRDA) responsibilities. DOE has already transferred the balance of the money to the State, \$42 million that the community can access through grants, and the State will be the ones to accept grant applications and distribute the funds, while the NRDA Trustee Council will decide who receives the grants. Roane County, Anderson County, parts of Loudon County, and parts of Knox County may apply. He said the State is in the process of finishing the application website, which is supposed to be up before the end of the calendar year, and DOE will begin public outreach in the next couple months about how to apply for grants. He said there have only be a couple other DOE sites that has settled that, so Oak Ridge is one of the first to do so.

Next, Mr. Mullis said deactivation at Y-12 National Security Complex (Y-12) and Oak Ridge National Laboratory (ORNL) are going quite well. Crews have finished safely removing the third reactor at ORNL, and at Y-12 Alpha-2 is finishing its deactivation and demolition should begin by the end of the calendar year.

Lastly, Mr. Mullis expressed appreciation to the stakeholders and regulators and other partners who attended the tour of the Environmental Management Disposal Facility (EMDF) a few weeks ago. He said the feedback received so far has been very positive. He said EMDF early site prep is ahead of schedule and under budget, and work is underway on items needed to start the groundwater field demonstration.

Mr. Roger Petrie – Mr. Petrie said the build-out of the State's website for NRDA grants should occur within the fiscal year, and after that goes live, DOE plans to have at least three public meetings – one in Clinton, one in Oak Ridge, and one in another area, possibly Kingston. He said they have not been set yet, but the goal is to help people understand how to apply for this money. He then gave additional details about the NRDA Trustee Council.

Mr. Czartoryski – Mr. Czartoryski said the State held a public meeting last week on the on conditional approval of the Site Treatment Plan, and the public comment period expires tomorrow at 4:30 p.m. Eastern Time.

Ms. Urquhart-Foster – Ms. Urquhart-Foster said DOE has submitted the Zone 1 Final Soils Record of Decision (ROD) for EPA's concurrence and the Feasibility Study Addendum must first be approved, but that should be coming up later this calendar year.

Presentation

Mr. Bartholomew introduced OREM's Erin Sutton to present on OREM's Program Overview and Updates.

Ms. Sutton opened her presentation by giving background information on the DOE Office of Environmental Management (EM), its history, and its active cleanup sites nationwide. She said Oak Ridge is one of the largest of EM's 15 cleanup sites. She then gave an overview of the Oak Ridge site's key areas – East Tennessee Technology Park (ETTP), formerly named K-25, ORNL, and Y-12 – and their respective roles and histories. Ms. Sutton then discussed OREM's key goals for the respective areas. She said OREM's main focus is protecting human health and the environment while enabling critical Department of Defense (DOD) missions, making clean land available for use, and returning land back to the community to help support the local economy.

Next, Ms. Sutton gave an overview of OREM's recent budgets and impacts on the state and local economies. She said the program produces 42,906 jobs and its economic impact totals \$1.3 billion annually and generates nearly \$400 million in personal income.

Ms. Sutton then discussed notable OREM accomplishments, plus current cleanup work underway and planned in Oak Ridge. She said Oak Ridge was the first site in the world to remove a former uranium enrichment complex, which involved removing nearly 500 structures spanning a total footprint of 13 million square feet. The crews responsible for that accomplishment are now deactivating and demolishing excess contaminated facilities at Y-12 and ORNL, and it's expected that 400 additional structures will be removed from these two areas in the next 20-plus years. She added that at ETTP, DOE's work is transforming the former enrichment site to a multi-use industrial center, a national park, and a conservation area, and she described some of the industries planning to move onto the site.

Ms. Sutton said that with the work wrapping up at ETTP, OREM is shifting its focus to ORNL and Y-12, and she described some of the recent progress.

Some of the projects she discussed included demolitions of the Bulk Shielding Reactor and the Low Intensity Test Reactor, removal of portions of the Oak Ridge Research Reactor, the Uranium-233 (U-233) Disposition Project, the Sludge Processing Facility Buildouts Project, and construction on the Mercury Treatment Facility (MTF) Headworks Facility and the MTF Treatment Plant.

Each agency then provided their input for ORSSAB topics for FY 2025. Mr. Petrie spoke for DOE, Mr. Czartoryski spoke for TDEC, and Ms. Urquhart-Foster spoke for EPA (See attachments 1, 2 & 3).

Board members asked the following questions:

- Ms. McCurdy asked Ms. Urquhart-Foster if EPA has set up criteria for other DOE sites for water discharges.
 - o Ms. Urquhart-Foster said there are national standards for safe drinking water.

- Ms. McCurdy asked about how DOE prevents ambient water from spreading materials.
 - o Mr. Petrie said DOE typically leaves the concrete pads for buildings in place during teardowns in order to prevent rainfall from permeating the footprint of where the building was, and when the building has basements instead of concrete pads, the basement is filled with grout.
- Mr. Bartholomew asked if the real constraints on getting work done is always funding.
 - o Mr. Mullis said work at Y-12 and ORNL are constrained because of topography and site operations, and he described some of the specific examples.

Public Comment

• Public Comment #1 – Mr. Luther Gibson shared suggested FY 2025 ORSSAB topics and comments. (See attached)

Board Business/Motions

Ms. Jones asked members if they have any requests for topics to be discussed in FY 2025.

Ms. Butler said she would like to see something on the topic of Waste with No Path to Disposal that is a compilation of various items (specified below) in one presentation to the board. This presentation would include information on: What they are; what's being done to protect the public; who's responsible for which wastes; what TDEC's and EPA's perspectives are on these wastes; what research has been done to find paths to disposal. She listed specific areas of interest as TRU sludge, the Molten Salt Reactor Experiment (MSRE), the Bear Creek Valley dump site, what's behind the dams, such as at Melton Hill Dam and White Oak Lake, and PFAs.

Ms. Noe also gave members an overview of ORSSAB's work planning process and the role of issue groups.

Board members were unable to vote on the June 12, 2024 meeting minutes due to the lack of a quorum present.

Ms. Jones told members that officer elections would be held October. She listed the members currently running and asked members to contact staff if they are interested in running.

Responses to Recommendations & DDFO Report

Ms. Noe thanked those who participated in person and online.

Committee Reports

Executive – None.

EM & Stewardship – Ms. Butler said the next EM & Stewardship committee meeting will be held in

October and members would include the election of the FY 2025 EM & Stewardship Committee Chair and Co-chair.

Additions to the Agenda & Open Discussion

Ms. Jones and Ms. Butler described the value of attending the EM SSAB Chairs Meeting and encouraged members to attend the meeting being hosted in Oak Ridge on September 25 & 26.

Action Items

None

The meeting adjourned at 7:36 p.m.

I certify that these minutes are an accurate account of the August 14, 2024, meeting of the Oak Ridge Site Specific Advisory Board.

Amy Jones, Chair

Harriett McCurdy, Secretary

October 9, 2024

Oak Ridge Site Specific Advisory Board

AJ/sbm

Department of Energy



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

July 16, 2024

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

Dear Ms. Jones:

FISCAL YEAR 2025 TOPICS FOR THE OAK RIDGE SITE SPECIFIC ADVISORY BOARD

Reference: Letter from Amy Jones to John Mullis, Request for FY 2025 Topics for the Oak Ridge Site Specific Advisory Board, dated June 27, 2024

Thank you for your recent letter requesting suggestions for topics on which to focus the resources of the Oak Ridge Site Specific Advisory Board (ORSSAB) during Fiscal Year (FY) 2025. The ORSSAB input on the following program areas in FY 2025 would be most appreciated:

1. Natural Resource Damage Assessment (NRDA)

The goal of the NRDA process is to restore natural resources equivalent to what was lost. The U.S. Department of Energy (DOE) historic operations had adverse impacts on areas of the 30,000 acre Oak Ridge Reservation. The Oak Ridge Office of Environmental Management would like to brief the ORSSAB on activities related to the NRDA.

2. Processing of Uranium-233 (U-233) Material

DOE is continuing with the disposal of U-233 material at the Oak Ridge National Laboratory (ORNL). Ultimately, elimination of the U-233 stockpile within the ORNL Central Campus is key to downgrading security requirements for ORNL. We would like to brief the ORSSAB on this activity.

3. Participation in Ongoing Efforts to Assure Sufficient Waste Disposal Capacity

Provision of additional disposal capacity continues to be of paramount importance to the Oak Ridge cleanup program, so we can transition from the cleanup of the East Tennessee Technology Park to the Y-12 National Security Complex and ORNL without interruption. The ORSSAB continued input on this project is requested.

4. Provision of Input into the FY 2027 Budget Development Effort

The ORSSAB annual participation in this effort remains important, particularly with a focus on establishing program priorities. The ORSSAB continued input on project prioritization is requested.

5. Excess Facilities Risk Reduction of Activities at ORNL and the Y-12 National Security Complex

DOE is working to address many deteriorating "excess" or unused buildings that pose environmental hazards, impact worker safety, and hinder mission progress at DOE sites in Oak Ridge. The ORSSAB continued awareness on this project is requested.

FISCAL YEAR 2025 TOPICS FOR THE OAK RIDGE SITE SPECIFIC ADVISORY BOARD

6. East Tennessee Technology Park Main Plant Groundwater Remedy Selections

The ORSSAB continued input on this important decision is requested. We would like to brief the ORSSAB on activities related to the groundwater remedy selections.

We look forward to providing additional information concerning these topics during the ORSSAB annual planning meeting in August 2024.

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 MULLIS Digitally signed by JOHN MULLIS Date: 2024.07.15 15:22:31 -04'00'

John A. Mullis II Manager

cc:

Samantha Urquhart-Foster, EPA Region 4 Kristof Czartoryski, TDEC, Oak Ridge **ORSSAB** Leah Alexander, EM-942 Morgan Carden, EM-921 Steve Clemons, EM-921 Laura Hedrick, EM-921 Abby Hill, EM-942 Mike Koentop, EM-90 Dennis Mayton, EM-921 Melyssa Noe, EM-942 Erik Olds, EM-90 Roger Petrie, EM-942 Sam Scheffler, EM-942 Erin Sutton, EM-94 Karen Thompson, EM-922



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Remediation - Oak Ridge 761 Emory Valley Road Oak Ridge, Tennessee 37830

August 14, 2024

Ms. Amy Jones Chair Oak Ridge Site Specific Advisory Board P.O. Box 2001 Oak Ridge, Tennessee 37831

Dear Ms. Jones

Fiscal Year 2025 Topics for the Oak Ridge Site Specific Advisory Board

Thank you for your request for input from the Tennessee Department of Environment and Conservation (TDEC) on high priority topics issues for the Oak Ridge Site Specific Advisory Board (ORSSAB) to consider during Fiscal Year (FY) 2025. The TDEC Division of Remediation, Oak Ridge Office recommends the following program areas where stakeholder comments and recommendations would be most beneficial:

1. Future disposal of waste generated during cleanup of the Oak Ridge Reservation.

TDEC continues to work with the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) to establish protective wastewater discharge limits for the Environmental Management Waste Management Facility (EMWMF). The EPA Administrator issued a decision in 2020 to guide this effort. TDEC advocates for timely implementation of these protections.

TDEC:remains committed to ensuring the Environmental Management Disposal Facility (EMDF) is constructed to prevent waste disposed at the landfill from being released into the surrounding environment. The protectiveness of the EMDF depends on the design and on the long-term stewardship necessary to safely contain mercury and radioactive contaminants that will remain a potential threat to public health and the environment forever.

ORSSAB can play an important role in supporting the Federal Facility Agreement (FFA) parties (EPA, DOE, and TDEC) in providing input and sharing with public information pertaining to the landfill. This includes contingencies for final design details if planned

groundwater studies indicate the water table is higher than anticipated. Long-term protectiveness also depends on establishing the amount of material such as depleted uranium that can be disposed of without posing unacceptable risk to public health and the environment.

2. The East Tennessee Technology (ETTP) Park Main Plant Groundwater Remedy Selections.

TDEC is working with DOE and EPA on the path forward to eventually return usable groundwaters to their beneficial uses wherever practicable, within a time frame that is reasonable given the particular circumstances of the site.

The interim remedial action objective at ETTP Main Plant Area is to substantially reduce chlorinated volatile organic compound (CVOC) contaminant mass in six areas of groundwater contamination. While this interim action concentrates on CVOCs and Technetium-99, agencies realize that more work is needed to address remaining groundwater plumes and contaminants like inorganics, metals, polychlorinated biphenyls (PCBs), and other radionuclides.

ORSSAB engagement will increase public awareness of the magnitude of the groundwater cleanup needs, including additional groundwater characterization efforts to delineate the extent (lateral and vertical) of contamination and the prevention and/or minimization of further migration of the contaminated groundwater plumes.

3. Excess Facilities Risk Reduction and Decontamination and Decommissioning (D&D) at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex – Mercury Treatment and Disposition

Releases of mercury from the Y-12 National Security Complex continue to exceed State of Tennessee and EPA water quality criteria. The FFA parties (EPA, DOE and TDEC) agreed that the Outfall 200 water treatment plant needs to be operating prior to the commencement of the D&D of Beta 4, Alpha 5, and Alpha 4 in an order to capture as much mercury discharge from those sites as possible.

While removal of the many deteriorating buildings removes the risk these structures pose, the planning and execution of this process is critical in preventing further unmitigated releases of mercury to the East Fork Poplar Creek from the spills and soils that will be exposed.

This work is currently done by DOE under the Removal Action process that provides regulators (EPA and TDEC) an opportunity to comment on plans and documents but does not provide them with an ability to approve or disapprove DOE actions.

ORSSAB participation and awareness of strategies for buildings D&D, mercury waste remediation and management would increase public awareness of the nature of the environmental risks associated with the environmental cleanup at Y-12 National Security Complex.

4. Processing and disposition of Transuranic (TRU) waste.

TDEC has conditionally approved the FY2024 Annual Update to the Site Treatment Plan (STP) that included the path forward to disposition transuranic sludge stored in Melton Valley Storage Tanks. This approval includes moving the target date of the preliminary (60%) design for the full-scale sludge processing facility by six years (6) to September 30, 2032. TDEC will issue final determination on this revision to the STP, subject to the results of public comment and consultation with effected states and EPA.

Though currently stable and safely stored, this waste stream represents one of the highest levels of risk to the public and the environment. The successful design and construction of the sludge treatment facility requires a steady fiscal environment.

Input from ORSSAB on these matters will increase public awareness of transuranic wastes in need of disposition.

5. Meaningful collaboration around cleanup project (and budget) prioritization and the DOE Budget Development Effort

DOE headquarters issues an annual guidance letter to sites on the need for budget prioritization and consultation process with states, tribes, and stakeholders. However, implementation of this process varies from site to site.

The ORSSAB input on project prioritization process could increase awareness and assist in formulation of budget priorities.

6. Emerging contaminants: per- and polyfluoroalkyl substances – known as PFAs.

There are thousands of PFAs chemicals, and they are found in many different consumer, commercial, and industrial products. PFAs are found in water, air, fish, and soil at locations across the nation and at some locations on the Oak Ridge Reservation. They have widespread use and are persistent in the environment. Scientific studies have shown that exposure to some PFAs may be linked to harmful health effects in humans and animals.

ORSSAB participation and engagement will increase public awareness of emerging regulatory requirements that may affect cleanup of the Oak Ridge Reservation.

TDEC will be glad to discuss these issues in further detail, and we look forward to the ORSSAB annual planning meeting. If you have any questions, please contact me at (865) 250-9705, or our TDEC-Division of Remediation office at (865) 481-0995.

Sincerely

Kristof W. Czartoryski TDEC ORSSAB Liaison

ec:

Jay Mullis, DOE

Erik Olds, DOE

Mike Koentop, DOE

Melyssa Noe, DOE

Roger Petrie, DOE

Samantha Urquhart-Foster, EPA

Colby Morgan, TDEC

Chris Thompson, TDEC

Dana Casey, TDEC

Terry Frank, ORRCA

ORSSAB

OREM Mailroom

From: Urguhart-Foster, Samantha Kimel, Shelley (CONTR); ORSSAB To:

Noe, Melyssa P; Petrie, Roger; Czartoryski, Kristof; Young, Randall C; OROEMMailroom Cc:

[EXTERNAL] RE: ORSSAB Request for Topics for the 2024 Annual Meeting Subject:

Date: Thursday, August 15, 2024 12:56:54 PM

Attachments: image005.png

image006.png

I would like to retract the letter that I sent yesterday to ORSSAB. Please delete all copies of it, as I was recently informed that it included some inaccurate information.

Thank you

Samantha Urquhart-Foster | Federal Facility Agreement Project Manager for the Oak Ridge Reservation Superfund & Emergency Management Division | Federal Facilities Branch | DOE Section U.S. Environmental Protection Agency



Mobile: 404-909-0839 | 🔯 urquhart-foster.samantha@epa.gov

From: Urguhart-Foster, Samantha

Sent: Wednesday, August 14, 2024 5:02 PM

To: Kimel, Shelley (CONTR) < Shelley.Kimel@orem.doe.gov>; ORSSAB < ORSSAB@orem.doe.gov> **Cc:** Melyssa Noe <Melyssa.Noe@orem.doe.gov>; Roger Petrie <Roger.Petrie@orem.doe.gov>;

Czartoryski, Kristof <Kristof.Czartoryski@tn.gov>; Randy Young <randy.young@tn.gov>;

OROEMMailroom <oroemmailroom@orem.doe.gov>

Subject: RE: ORSSAB Request for Topics for the 2024 Annual Meeting

Please see the attached response.

Samantha Urquhart-Foster | Federal Facility Agreement Project Manager for the Oak Ridge Reservation Superfund & Emergency Management Division | Federal Facilities Branch | DOE Section U.S. Environmental Protection Agency



Mobile: 404-909-0839 | 🖭 <u>urquhart-foster.samantha@epa.gov</u>

From: Kimel, Shelley (CONTR) < Shelley.Kimel@orem.doe.gov>

Sent: Thursday, June 27, 2024 3:47 PM

To: DOCSSP-EM < DOCSSP-EM@orem.doe.gov>

Cc: Urguhart-Foster, Samantha < <u>Urguhart-Foster.Samantha@epa.gov</u>>

Subject: ORSSAB Request for Topics for the 2024 Annual Meeting

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Hello all,

Attached is outgoing correspondence from ORSSAB Chair Amy Jones requesting DOE's input on topics for the board to include on its FY 2025 Work Plan.

Thank you,
Shelley Kimel
Public Affairs Specialist
Oak Ridge Site Specific Advisory Board
Office: 865-241-4584

P.O. Box 2001, EM-942 200 Administration Road, Room G049-6 Oak Ridge, TN 37831

Street Legal Industries, contractor for the U.S. Department of Energy Oak Ridge Office of Environmental Management

This message does not originate from a known Department of Energy email system. Use caution if this message contains attachments, links or requests for information.



August 14, 2024

Ms. Amy Jones
Chair
Oak Ridge Site Specific Advisory Board
P.O. Box 2001
Oak Ridge, Tennessee 37831

Dear Ms. Jones:

Thank you for your June 27, 2024, letter requesting Fiscal Year (FY) 2025 Topics for the Oak Ridge Site Specific Advisory Board (ORSSAB). Your letter requested for the U.S. Environmental Protection Agency (EPA) to identify two high priority topics concerning the Oak Ridge Environmental Management (EM) Program for the ORSSAB to consider.

1. Improved communication and coordination between EM, Oak Ridge National Laboratory (ORNL), National Nuclear Security Administration (NNSA) and Consolidated Nuclear Security (CNS).

Background

During FY 2024, construction work began at the Y-12 National Security Complex for a Lithium Processing Facility at the location of the former Biology Complex. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) interim Record of Decision (IROD) required excavation of contamination in the top two feet of soil and implementation of institutional controls protect people from contamination at greater depths. The EPA expected that any plans to dig beneath two feet would require permission from the three CERCLA Federal Facility Agreement (FFA) for the Oak Ridge Reservation (ORR) parties: U.S. Department of Energy (DOE), EPA and the Tennessee Department of Environmental Conservation (TDEC). The FFA also required DOE to notify the EPA and TDEC if additional contamination was identified.

During preparation for construction of the LPF, contractor(s) excavated below the two-feet limit and found additional contamination. The EPA and EM found out about this from TDEC. This generated attention up to the top levels of the tri-parties' management due to the failure to seek permission to excavate below two feet and to notify EPA and TDEC if additional contamination is identified. It is imperative that EM more frequently communicate and coordinate with ORNL and Y-12 offices to prevent a similar event from occurring in the future.

2. Protecting surface waters by establishing discharge requirements for all contaminants in wastewater that will be treated and discharged into adjacent surface water bodies.

Background

Remediation activities generate wastewater which has been treated by a variety of water treatment plants. DOE's current plans include treating water at the Liquid and Gaseous Waste Operations (LGWO) plant located at ORNL. The LGWO had a water discharge permit from TDEC which has lapsed. That permit did not include discharge limits for some of the hazardous contaminants identified at the ORR. In particular, it did not have discharge limits for mercury or radionuclides. The LGWO continues to operate even though they have not received a new permit. As building demolition and soil cleanup has begun shifting from the East Tennessee Technology Park (ETTP) to ORNL and Y-12, the EPA has concerns regarding setting discharge limits for mercury, radiation, and all other contaminants in wastewater. A recent review of surface water data from the receiving creek has indicated concentrations of mercury that exceed Ambient Water Quality Criteria.

Thank you for the opportunity to provide ORSSAB with the EPA's current high priority topics. If you have any questions I can be reached at (404) 909-0839 or URQUHART-FOSTER.SAMANTHA@EPA.GOV.

Sincerely,

SAMANTHA
Digitally signed by SAMANTHA
URQUHART-FOSTER
Date: 2024.08.14 16:59:25 -04'00'

Samantha Urquhart-Foster
FFA Project Manager
Superfund & Emergency Management Division

cc: Melyssa Noe, DOE
Roger Petrie, DOE
Kristof Czartoryski, TDEC
Randy Young, TDEC
OREM Mailroom



August 7, 2024

Ms. Amy Jones, Chair Oak Ridge Site Specific Advisory Board PO Box 2001 Oak Ridge, TN 37831

Dear Ms. Jones:

Fiscal Year 2025 Issues and Input for the Oak Ridge Site Specific Advisory Board

The following input on the operation of the Oak Ridge Site Specific Advisory Board (ORSSAB) and issues that should be studied or tracked is offered and intended to be constructive.

At one time the Annual Planning Meeting was conducted so that ORSSAB members could get to know each other, express their interests and expectations, receive training and orientation for a better technical and regulatory knowledge foundation, and divide the planned workload based on different but complementary interests. Board officers were elected at the Annual Meeting. Committees would meet as soon as possible after the Annual Planning Meeting to select their leaders and to develop work plans that flowed upward into the Board work plan. The present model of focusing the entire Board on a single topic with follow-up discussion at a meeting of a committee of the whole is in contrast. The situation is further complicated by the scope and content of the presentation on a given topic not being known in advance of the Board meeting. Ideally a committee would take ownership of an issue and collaborate with Department of Energy (DOE) and contractor subject matter experts on an outcome. If given an option, current ORSSAB member interests might conceivably fall into three committees. The Environmental Management (EM) & Stewardship Committee might become separated again, and a third committee could be more attractive to those more interested in board process and public outreach types of efforts. In absence of a committee restructuring, the EM & Stewardship Committee should consider a standing agenda item taking a few minutes for identification and simple status tracking of important issues that are beyond that month's work plan.

A review of meeting materials from the other EM SSABs indicates that some receive presentations on more and varied issues than ORSSAB and that their agency liaisons have updates with more content presented in a more formally documented manner. The issues on which other EM SSABs are receiving presentations should be considered as issues of potential interest to ORSSAB, tailored with local information. Some of the presentations are by DOE Headquarters personnel and of the same type of content presented at EM SSAB Chairs meetings. DOE Headquarters personnel should be invited to make more presentations to the ORSSAB and

take questions from the public in attendance. With regard to EM SSAB Chairs meetings, those attending and representing Oak Ridge should solicit as much input as possible prior to the meetings on issues that are anticipated or should be raised.

The issues below are recommended for study or at least status tracking in FY 2025.

Budget Prioritization Input

Oak Ridge Environmental Management (OREM) will most certainly request input on FY 2027 OREM program budget priorities. The recommendation should reflect more than the effectiveness of OREM's messaging on its priorities. The initial engagement from the OREM subject matter expert on planning and execution has been good but diminished by uncertainty about additional information that can be discussed, even information already publicly available. Ability to track changes in DOE's requests through the Congressional appropriations process is impeded by inability to cross-reference Project Baseline Summary numbers in DOE's request to items in appropriation committee reports.

Site Treatment Plan for Mixed Waste on the U.S. Department of Energy Oak Ridge Reservation

The Site Treatment Plan (STP) delineates how DOE will treat the site's mixed wastes or develop/modify technologies when necessary to address generated and stored mixed waste at the site. The plan addresses some waste streams that have been stored indefinitely and have milestones that have been rescheduled, perhaps most notably for transuranic (TRU) sludge stored in the Melton Valley Storage Tanks but also low-level reactive metal shields. ORSSAB should track annual updates and semiannual progress reports and make appropriate comments and recommendations to move along final disposition of the waste streams in the STP.

Excess Facilities Risk Reduction Activities at ORNL & Y-12

Reports on progress should also direct more attention to challenges such as the reactor facilities at Oak Ridge National Laboratory (ORNL) and potential need for long-term or perpetual surveillance. An example is ongoing enhanced surveillance and maintenance activities at the Molten Salt Reactor Experiment Facility to address issues with safety systems.

U-233 Disposition

Progress on dispositioning U-233 material should reported with, in addition to societal benefits of the project, emphasis on operational experience, nuclear facility safety issues that arose and were addressed, and what the status of facilities and the site will be upon completion of Isotek's contract.

Environmental Management Disposal Facility (EMDF)

In addition to reports on construction progress, issues related to waste acceptance criteria especially mercury and ambient water quality issues should be presented with more candor.

Mercury Treatment Facility (MTF)

Construction of the MTF and the EMDF are essential before any mercury-contaminated facilities can be demolished. The MTF project has had to request additional funding to pay for impacts from site conditions that are different than what was expected, the need to treat groundwater for contamination, and design changes which will be incorporated in an updated baseline that is in development. The task of completing the project was reassigned by OREM to United Cleanup Oak Ridge, LLC.

Ongoing Efforts to Assure Waste Disposal Capacity

This issue should encompass assurance of waste disposal capacity of all waste streams, not just those directed to on-site disposal facilities. It is only a piece of understanding the Interdependency of Department of Energy Sites.

Interdependency of Department of Energy Sites

This issue also covers assurance of disposal capacity for wastes generated by Oak Ridge facilities and awareness of where it is being dispositioned. There has been a historical interdependency of DOE sites for waste management and disposal and relocation of stored materials. The Toxic Substances Control Act Incinerator in Oak Ridge accepted PCBcontaminated, hazardous, radioactive waste from throughout the DOE Complex. Oak Ridge has sent depleted uranium hexafluoride to Portsmouth for conversion, spent nuclear fuel to Idaho for storage, mixed and low-level radioactive waste to Nevada and Utah for burial, and transuranic waste to Carlsbad for deep emplacement, as examples. Other DOE sites continue to ship waste for treatment to commercial facilities in our community with the impact on our local environment claimed insignificant as long as these facilities comply with permits. At times, regulators and other stakeholders have taken positions that impeded cooperation or shown hesitance to utilize on-site capacity for their own wastes. An update is appropriate to understand the current situation and to engage in more informed discussion with stakeholders in other DOE communities as occurs at EM SSAB Chairs meetings. ORSSAB should be supportive of keeping updates of the Waste Information Management System maintained by Florida International University for DOE as current as possible.

Groundwater

During FY 2024, emphasis was placed on East Tennessee Technology Park (ETTP) sub-units and status. A Record of Decision for K-31/K-33 and an Interim Record of Decision for the Main Plant Area were signed. The status and planning for ETTP Zone 1 and the remainder of the Oak Ridge Reservation need to be tracked as well as implementation of the ETTP decisions. ORSSAB should consider a recommendation on use and feasibility of maintaining the Tracking Restoration and Closure application developed at Pacific Northwest National Laboratory to communicate the status of groundwater contamination cleanup efforts at DOE-EM sites.

Natural Resource Damage Assessment Process

In December 2022, a Restoration and Compensation Determination Plan/Environmental Assessment was issued for the second phase of the Oak Ridge Reservation Natural Resource

Damage Assessment. Although there was public involvement in the process, there were indications that the process was not well understood, particularly how exactly the funds associated with the damage assessment will be spent. Specific projects could have very localized economic impact when implemented. Continued engagement of stakeholders during grant application, selection, and implementation of the projects is appropriate. Any subsequent phases of the Natural Resource Damage Assessment need to be understood.

Long-Term Management and Storage of Mercury

DOE Environmental Management has sought a Contractor to establish a DOE capability for the long-term management and storage of domestic elemental mercury waste to meet the requirements of the Mercury Export Ban Act. Siting of this storage capability raises stakeholder concerns. A decision selecting a facility at Andrews, Texas, for the long-term storage and management was rescinded, reopening the possibility that other facilities (including one in Kingston, Tennessee) that had vied for the long-term designation might still be used on an interim basis. Understanding the scope of mercury storage, recovery, and use in context with the management of mercury by other DOE Program Secretarial Offices and Defense stockpile organizations is appropriate. For example, mercury is used in targets at the Spallation Neutron Source and has been stored in large quantities at Y-12 Building 9720-26. The plume from a fire involving a large inventory of mercury could potentially have as a large of a consequence footprint as any other conceivable emergency event.

Emergency Management

DOE in Oak Ridge should maintain the highest level of public awareness of what to do in case of an emergency at any of its facilities that would require the public to take protective actions. Despite a formal chain to report the event and recommend appropriate pre-planned protective actions to local authorities, information is disseminated in other ways and causes public reactions. With the removal of DOE hazardous materials from ETTP, an accident requiring the public to take protective action for a DOE event at ETTP is no longer credible, and the Emergency Planning Zones for the Oak Ridge Reservation have been reduced. Some printed information in the public domain has not been updated. OREM facilities at Y-12 and ORNL may still have potential for classifiable operational emergencies. The study of this issue would involve participation in a public forum jointly sponsored by OREM and the other DOE Program Secretarial offices to update the public with information and demonstrate their capability along with that of other public responders to handle such emergencies. OREM could also update the ORSSAB on hazardous material inventories that it is currently managing in its buildings and facilities and reduction efforts.

Annual Site Environmental Report (ASER)

The ASER is prepared for DOE according to the requirements of DOE Order 231.1B, Environment, Safety, and Health Reporting. The ASER includes data on the environmental performance of each of the major contractors and describes significant accomplishments in pollution prevention and sustainability programs that reduce many types of waste and pollutant releases to the environment. DOE has published an annual environmental report with

consolidated data on overall performance and status since the mid-1970s. The ASER is a key component of DOE's effort to keep the public informed about environmental conditions. Although OREM is responsible for only a portion of the activity reported, the report provides context for its activities alongside ongoing operations. The study of this issue would involve OREM or the ORSSAB jointly sponsoring a public presentation associated with release of the ASER. It may be noted that, as late as for the 2009 ASER, a summary of the document was prepared by Karns High School students but was discontinued as a sponsored activity. Student ASERs have been prepared much more recently for the Portsmouth site. The Oak Ridge Reservation ASER has been a topic of ORSSAB presentations, and ORSSAB has even issued recommendations on making it more understandable to the general public.

Implementation of Long-Term Stewardship

The Public Involvement Plan for CERCLA Activities at the U.S. Department of Energy Oak Ridge Site states: "Today, the ORSSAB EM/Stewardship Committee continues to work on crucial long-term stewardship issues. Major areas of focus include integration of long-term stewardship with remediation decisions, application of the Long-Term Stewardship Strategic Plan, and the development of a Long-Term Stewardship Implementation Plan. The committee also serves informally as a Citizens Board for Stewardship and will continue to do so until the ORSSAB completes its mission and is disbanded. At that time, it is anticipated that a formal Citizens Board for Stewardship will be constituted." The study of this issue includes awareness of the annual Remediation Effectiveness Report and participation to the extent practical in understanding and verifying the maintenance of institutional controls. Many of the early stakeholders that envisioned long-term stewardship are no longer with us or able to follow up on their recommendations. The concept of a Citizens Board for Stewardship is somewhat nebulous as such has not implemented, at least formally, at sites where local SSABs have been disbanded due to completion of EM's work. The Office of Legacy Management (LM) does not have any Federal Advisory Committee Act chartered boards but does appear to effectively engage other types of stakeholder groups at least in some instances.

ETTP Transition to Office of Legacy Management

LM frequently updates its Site Management Guide. According to Update 32 (May 2024) ETTP is scheduled for transition in FY 2032, but in Update 30 (November 2023) the date was FY 2029. With building demolition virtually complete, soil remediation close to complete, and progress on groundwater decisions, such events should drive that schedule. LM says it conducts due diligence by working on sites as much as five years ahead of transition dates. ORSSAB needs to be engaged in understanding the planning for this process along with other public stakeholders.

Public Involvement Plan for CERCLA Activities at the U.S. Department of Energy Oak Ridge Site

The Public Involvement Plan (PIP) is scheduled for a triennial update in FY 2025. ORSSAB should review the current and any draft PIP revision to identify areas where it can strengthen its role in facilitating communications with the public. The PIP should encourage public involvement to the maximum extent possible and not attempt to justify instances of it not being

required. ORSSAB should consider reimplementing past activities such as providing formal input to fact sheets such as those explaining the issues requiring an Explanation of Significant Differences for a CERCLA decision document.

Impact of Remediation on End-State Development of ETTP and Vice Versa

Parcels of land at ETTP have become owned by entities other than the DOE. OREM will have to coordinate remediation and monitoring with entities that own the parcels of land. Timely updates are appropriate on status, negotiations, and even decisions to change remedy selections (e.g. K-1007-P1 Pond fill-in to accommodate airport construction).

Terminal Management of Surplus and Recyclable Materials

DOE has been responsible for bulk and scrap materials such as steel, aluminum, and nickel. The materials may be surface or volumetrically contaminated or contain activation products. Statutory, regulatory, and DOE Secretarial policy considerations constrain or have prevented final disposition. There are instances where initiatives to disposition materials were not concluded, and the materials ended up in indefinite storage. Of late, there has been renewed interest in addressing surface contaminated recyclable nickel. A status update is appropriate. Potential constructive stakeholder input could come from Oak Ridge even for materials being stored at other sites.

White Wing Scrap Yard

A Remedial Investigation Work Plan for White Wing Scrap Yard (Waste Area Grouping 11), Oak Ridge Reservation, Oak Ridge, Tennessee, was issued in February 2024 (DOE/OR/01-2970&D1), indicating initiation of unpublicized planning for the project, which has been deferred except for surveillance and maintenance since above ground removal actions were conducted in the 1990s.

Uranium Discharges in Bear Creek Valley

An Engineering Evaluation/Cost Analysis for North Tributary-8 at the Y-12 National Security Complex Bear Creek Burial Grounds, Oak Ridge, Tennessee, was issued in June 2024 (DOE/OR/01-2957&D2), indicating an urgency that has not arisen to adequate public awareness.

Radiation Exposure Compensation Act

The Radiation Exposure Compensation Act (RECA) was initially implemented in 1990 to provide claims for compassionate payments for injuries due to exposure to radiation from nuclear testing. It expired in 2024 when Congress failed to extend it. Legislation that would have extended and amended RECA proposed to expand coverage to claims involving public exposure to Manhattan Project Waste in and around Oak Ridge. If this legislation were to be revived and passed into law, an understanding of previous public health assessments and conclusions for this area would be prudent along with appropriate activities to address reasonable awakened public concerns.

Aquatic Ecology Research and Technology Development

ORSSAB should remain updated on this topic and the work of Oak Ridge National Laboratory researchers with particular attention to the role of ecological management and enhancement in remedy selections.

Processing and Disposition of Transuranic Waste

This issue covers the path forward to disposition of TRU sludge stored in the Melton Valley Storage Tanks and more broadly continued assured access to the Waste Isolation Pilot Plan (WIPP) for disposal of Oak Ridge TRU waste, including any that could be impacted intentionally or non-intentionally by a new definition for legacy TRU and TRU mixed wastes. ORSSAB should skeptically monitor public policy discussions and developments surrounding the New Mexico state regulation of WIPP and the priority other sites are receiving for shipments and not be hesitant on issuing comments and recommendations even though not requested by DOE. Awareness of the content of the Annual Transuranic Waste Inventory Report and proposed modifications to WIPP's Hazardous Waste Facility Permit is essential.

Per- and Polyfluoroalkyl Substances (PFAS)

ORSSAB should remain informed of this issue from a local as well as complex-wide perspective.

Thank you for your attention to this input even though some of it may not be accepted.

Sincerely,

Luther V. Gibson, Jr.

Luther V. Libson, gr.

About the Author

Luther Gibson served on the ORSSAB and its Executive Committee from 1999-2005. He served as ORSSAB Chair from August 2000 until August 2002, during which 36 recommendations and comments were delivered to agency officials. During his tenure on ORSSAB, he also served on an Environmental Management Advisory Board Alternative Technologies to Incineration Committee. He authored a report that the DOE Assistant Secretary for Environmental Management directed local EM managers to consider in making technology selection decisions. He retired from Consolidated Nuclear Security Y-12 in 2017 after a 40-year career with DOE Oak Ridge prime contractors at Paducah Gaseous Diffusion Plant, K-25, and Y-12. He holds B.S. and M.S. degrees in Chemical Engineering from the University of Kentucky. He worked in the areas of environmental technology development, operations research, environmental compliance, nuclear facility safety, and emergency management technical basis. He is a member of the American Institute of Chemical Engineers and the Air & Waste Management Association. He is currently a Vice-President of the Coalition of Oak Ridge Retired Employees (CORRE). He chairs CORRE's Planning Committee and its Pension Fund Analysis Committee. He is also a member of CORRE's Other DOE Sites Committee and Contractor Contact Team with Consolidated Nuclear Security.

DRAFT FY 2025 ORSSAB Work Plan/Schedule

Executive meeting Monthly meeting	Site tour	EM/Stewardship meeting
-----------------------------------	-----------	------------------------

Date Event		Topic	Recommendation Required	Presenter	Issue Group	Location
			OCTOBER 2024		_	
Wed., 10/2	Executive	General Business				DOEIC
Wed., 10/9	•	Natural Resource Damage Assessment (NRDA)	Optional	Petrie/Duren		DOEIC
	Site Tour	(No site tour)				
Wed., 10/23		Natural Resource Damage Assessment (NRDA)		Petrie/Duren		DOEIC
			NOVEMBER 2024			
Wed., 11/6	Executive	General Business				DOEIC
Wed., 11/13	Monthly meeting	Processing of U-233 Material	Optional	Schafer/ Clemons		DOEIC
TBD	Site tour	(No site tour)				
Wed., 11/27	EM/Stewardship	(TBD - Thanksgiving?) If needed		Schafer/ Clemons		DOEIC
			DECEMBER 2024			
Wed., 12/4	Executive	(No meeting)				
Wed., 12/11	Monthly meeting	(No meeting)				
	Site tour	(No site tour)				
Wed., 12/25	EM/Stewardship	(No meeting)				
			JANUARY 2025			
Wed., 1/1	Executive	(No meeting)				
Wed., 1/8	Monthly meeting	(No meeting)				
	Site tour	(No site tour)				
Wed., 1/22	EM/Stewardship	(No meeting)				
			FEBRUARY 2025			
Wed., 2/5	Executive	General Business				DOEIC
TBD	Member Training	New Member Training	N/A	Noe/Petrie/ Hill		Virtual
TBD		Educate new members & tour of sites; current members welcome. (half-day)		Petrie/ Williams/ Hill	TBD	Member training
Wed., 2/26	EM/Stewardship	(No meeting)				

DRAFT FY 2025 ORSSAB Work Plan/Schedule

Date	Event	Topic	Recommendation Required	Presenter	Issue Group	Location
			MARCH 2025			
Wed., 3/5	Executive	General Business				DOEIC
Wed. 3/12	Monthly meeting	Ongoing Efforts to Assure Waste Disposal Capacity	Optional	Mayton		DOEIC
	Site tour	(No site tour)				
Wed., 3/26	EM/Stewardship	Continued Discussion on Ongoing Efforts to Assure Waste Disposal Capacity		Mayton		
			APRIL 2025			
	Executive	General Business				DOEIC
Wed., 4/9	Monthly meeting	FY 2027 Budget Development/prioritization input	Yes	Stokes/ Thompson		DOEIC
TBD	Site tour	(No site tour)				
Wed., 4/23		Continued discussions on FY 2027 Budget Development/prioritization input		Thompson		DOEIC
			MAY 2025			
Wed., 5/7	Executive	General Business				DOEIC
Wed., 5/14	Monthly meeting	Excess Facilities Risk Reduction of Activities at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex	Optional	Carden/ Hedrick		DOEIC
TBD	Site tour	On-site tour/Q&A		Petrie/ Carden/ Hedrick		
Wed., 5/28	,	Continued Discussion on Excess Facilities Risk Reduction of Activities at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex		Carden/ Hedrick		DOEIC
			JUNE 2025			
Wed., 6/4	Executive	General Business				DOEIC
Wed., 6/11	Monthly meeting	East Tennessee Technology Park Main Plant Groundwater Remedy Selections	Optional	Scheffler		DOEIC
TBD	Site tour	On-site tour/Q&A		Petrie/ Scheffler		
Wed., 6/25	EM/Stewardship	Continued Discussion on East Tennessee Technology Park Main Plant Groundwater Remedy Selections		Scheffler		DOEIC
			JULY 2025			
Wed., 7/2	Executive	(No meeting)				DOEIC
Wed., 7/9	Monthly meeting	(No meeting)				

DRAFT FY 2025 ORSSAB Work Plan/Schedule

Date	Event	Topic	Recommendation Required	Presenter	Issue Group	Location
	Site tour	(No site tour)				
Wed., 7/23	EM/Stewardship	(No meeting)				DOEIC
			AUGUST 2025			
Wed., 8/6	Executive	Annual Planning Meeting				DOEIC
Wed., 8/13		(In lieu of ORSSAB monthly meeting) FY2025 review and planning for FY2026		DOE/EPA/ TDEC liaisons		DOEIC
	Site tour	(No site tour)				
Wed., 8/28	EM/Stewardship	(No meeting)				
			SEPTEMBER 2025			
Wed., 9/3	Executive	General Business				DOEIC
	Monthly meeting	TBD				DOEIC
TBD	Site tour	TBD				
Wed., 9/24	EM/Stewardship	TBD				DOEIC

FY 2025 Issue Groups Sign-Ups

Member		Oct - NRDA	Nov - U-233	DEC. / JAN. / FEB. NO MTG	March - Waste Disposal	April - Budget	April - Aquatic Ecology R&D*	May - Excess Facilities	June - Groundw ater	July - NA	Aug NA (Ann ual Mtg)	Sept TBD
Kris	Bartholomew					Χ		Χ	Х			
Raiyan	Bhuiyan											
Mary	Butler				Х	Х	Х	X	Х			
Harold	Conner					Х		X				
Paul	Dill				Х	Х						
Rosario	Gonzalez											
Amy	Jones				х	х	Х	Х	х			
Noah	Keebler											
Mike	Mark						Х					
Thomas	McCormick								Х			
Harriett	McCurdy				х	х	Х	Х	Х			
Christine	Michaels				Х		Х	Х	Х			
Charles	Moore					Х						
Tonya	Shannon											
Michael	Sharpe				х		Х	Х	х			
Tom	Tuck				Х	Х						

Members incoming in December

Otto	Merz						
Melanie	Rogers						
Kelli	Thompson						



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
165	7/16/2024	Jones, A., ORSSAB	Mullis, DOE	Fiscal Year 2025 Topics for the Oak Ridge Site Specific Advisory Board	DOEIC, Notified board officers of receipt
166	8/1/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA Response to DOE Regarding Compliance with ORR FFA	DOEIC, Notified board officers of receipt
167	8/6/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA Comments RE: ORR 2024 Remediation Effectiveness Report (DOE/OR/01-2960&D1)	DOEIC, Notified board officers of receipt
168	8/9/2024	Urquhart- Foster, EPA; Young, TDEC	Hardin, Petrie, DOE	Federal Facility Agreement Milestone Extension Request for the Remedial Investigation Work Plan for White Wing Scrap Yard (Waste Area Grouping 11), Oak Ridge Reservation	DOEIC, Notified board officers of receipt
169	8/13/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA Approval of ID 12367 FINAL Submittal of Proposed Changes to the Federal Facility Agreement En- forceable Appendix E Milestones	DOEIC, Notified board officers of receipt
170	8/13/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA's approval of the Proposed Changes to The Federal Facility Agreement Enforceable Appendix J Milestones. The DOE transmitted this request [ID 12369] to the EPA and the Tennessee Department of Environment and Conservation (TDEC) on August 1, 2024	DOEIC, Notified board officers of receipt
171	8/14/2024	Petrie, DOE	Young, TDEC	TDEC Comments RE: Transmittal of the Addendum to Phased Construction Completion Report for Liquid and Gaseous Waste Operations at the Oak Ridge National Laboratory, Oak Ridge, Tennessee: Facility and Equipment Pre-Demolition/Small-Scale Demolition (DOE/OR/01-2875&D1/A1)	DOEIC, Notified board officers of receipt
172	8/14/2024	Jones, A., ORSSAB	Czartoryski, TDEC	TDEC Fiscal Year 2025 Topics for the Oak Ridge Site Specific Advisory Board	DOEIC, Notified board officers of receipt
173	8/14/2024	Jones, A., ORSSAB	Urquhart- Foster, EPA	EPA Response to ORSSAB Request for Topics for the 2024 Annual Meeting *NOTE: Sender attempted recall due to inaccuracies*	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
174	8/15/2024	Petrie, DOE	Young, TDEC	TDEC Comments: Re DOE Submittal of Proposed Changes to the FFA Enforceable Appendix E Milestones (dtd August 1, 2024)	DOEIC, Notified board officers of receipt
175	8/16/2024	Petrie, DOE	Young, TDEC	TDEC Comments Re: Federal Facility Agreement Extension Request for the Remedial Investigation Work Plan for White Wing Scrap Yard (Waste Area Grouping 11), Oak Ridge, Tennessee (DOE/OR/01- 2970&D2)	DOEIC, Notified board officers of receipt
176	8/19/2024	Petrie, DOE	Young, TDEC	NSC to the ROD for the Disposal of ORR CERCLA Waste, Oak Ridge, Tennessee (DOE-OR-01-1791&D3)	DOEIC, Notified board officers of receipt
177	8/19/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA Approval letter regarding a Federal Facility Agreement Milestone Extension Request for the Reme-dial Investigation Work Plan for White Wing Scrap Yard (Waste Area Grouping 11), Oak Ridge Reserva- tion, Oak Ridge, Tennessee (DOE/OR/01-2970&D2)	DOEIC, Notified board officers of receipt
178	8/19/2024	Urquhart- Foster, EPA; Young, TDEC	Hardin, Petrie, DOE	Transmittal of Addendum 3 (Exposure Unit Z2-38) to the Fiscal Year 2009 Phased Construction Completion Report fir Zone 2 Exposure Units	DOEIC, Notified board officers of receipt
179	8/21/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA recommends review of the DOE August 2, 2024, Record of Decision for Final Soil actions in Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-2711&D4) (Zone 1 Final Soils ROD)	DOEIC, Notified board officers of receipt
180	8/22/2024	Petrie, DOE	Young, TDEC	Extension Request to Complete Review of the ROD for Final Soil Actions in Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE-OR-01-2711&D4)	DOEIC, Notified board officers of receipt
181	8/26/2024	Petrie, DOE	Richards, EPA	EPA Comments on the Waste Handling Plan for the Demolition of Building 9720-17 (DOE-OR/01- 2961&D1) at the Y-12 National Security Complex, Oak Ridge, Tennessee, May 2024	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
182	8/26/2024	Petrie, DOE	Urquhart- Foster, EPA	EPA response to Zone 1 Final Soils ROD D4 submittal - follow-up (OU-15)	DOEIC, Notified board officers of receipt
183	8/27/2024	Sutton, DOE	Morgan, TDEC	Reference: Email Letter from Talia Burchfield 12418 Final Grant Number DE-EM0005291, Tennessee De- partment of Environment and Conservation (TDEC) - Federal Facility Agreement (FFA) Grant	DOEIC, Notified board officers of receipt
184	8/28/2024	Petrie, DOE	Young, TDEC	TDEC Approval Letter Waste Handling Plan for the Demolition of Building 9720-17 at the Y-12 National Security Complex (DOE-OR-01- 2961&D1)	DOEIC, Notified board officers of receipt
185	8/29/2024	Urquhart- Foster, EPA; Young, TDEC	Henry, Petrie, DOE	Transmittal of the Explanation of Significant Differences for the Record of Decision for Phase II Inter-im Remedial Actions for Contaminated Soils and Scrapyard in Upper East Fork Poplar Creek, Oak Ridge, Tennessee Addition of Exposure Units 15 (DOE/OR/01-2961&D1)	DOEIC, Notified board officers of receipt
186	9/5/2024	Urquhart- Foster, EPA; Young, TDEC	Mayton & Petrie, DOE	Transmittal of the Remedial Action Work Plan for the Disposal of OR CERCLA Waste (DOE-OR-01-1874&D5)	DOEIC, Notified board officers of receipt
187	9/5/2024	Urquhart- Foster, EPA; Young, TDEC	Hardin, Petrie, DOE	U.S. Department of Energy Approval of Extension Requests Regarding the Record of Decision for Final Soil Actions in Zone 1, ETTP (DOE/OR/01-2711&D4)	DOEIC, Notified board officers of receipt
188	9/6/2024	Urquhart- Foster, EPA; Young, TDEC	Mayton & Petrie, DOE	Transmittal of the Bear Creek Valley Mercury Sources Remedial Site Evaluation for the DOE ORR (DOE/OR/01-2977&D1)	DOEIC, Notified board officers of receipt
189	9/6/2024	Petrie, DOE	Poe, EPA	EPA Comments on the Technical Review of the Waste Handling Plan for the Demolition of the Beta-1 Complex at ETTP	DOEIC, Notified board officers of receipt
190	9/10/2024	Petrie, DOE	Young, TDEC	TDEC Comments Re: DOE's Submittal of Proposed Changes to the Federal Facility Agreement Appendix J Milestones	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
191	9/11/2024	Petrie, DOE	Young, TDEC	Non-Significant Change to the Record of Decision for the Phase I Activities in Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee DOE-OR-01-1750&D4	DOEIC, Notified board officers of receipt
192	9/13/2024	Petrie, DOE	Young, TDEC	TDEC Comments Re: Transmittal of the Phased Construction Completion Report for Remaining Pre-Demolition Activ-ities and Demolition of Building 3005, the Low Intensity Test Reactor at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/OR/01-2963&D1)	DOEIC, Notified board officers of receipt
193	9/13/2024	Petrie, DOE	Sayer, EPA	EPA Approval of the Memorandum to file, Non-Significant Change to the Record of Decision ROD for the Phase I Activities in Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee (DOE/OR/01-1750&D4)	DOEIC, Notified board officers of receipt
194	9/13/2024	Petrie, DOE	Young, TDEC	TDEC Response Letter for Addendum to the Zone 1 Groundwater Plumes Remedial Investigation Work Plan (RIWP) for the K-1085 Old Firehouse Burn Area, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-2903&D2/A2)	DOEIC, Notified board officers of receipt
195	9/16/2024	Urquhart- Foster, EPA; Young, TDEC	Henry, Petrie, DOE	Transmittal of the Addendum to the Removal Action Work Plan for the Y- 12 Facilities Deactivation-Demolition Project, Oak Ridge, Tennessee A15- Demolition Of Steam Plant Complex Ancillary Facility 9616-9 (DOE/OR/01- 2479&D1/A15/R1)	DOEIC, Notified board officers of receipt
196	9/16/2024	Urquhart- Foster, EPA; Young, TDEC	Petrie, DOE	Appendix E Fiscal Year + 2 Milestone Notification	DOEIC, Notified board officers of receipt
197	9/17/2024	Urquhart- Foster, EPA; Young, TDEC	Henry, Petrie, DOE	Transmittal of The Action Memorandum for North Tributary-8 at the Y-12 National Security Complex Bear Creek Burial Grounds, Oak Ridge, Tennessee (DOE/OR/01- 2986&D1)	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
198	9/18/2024	Urquhart- Foster, EPA; Young, TDEC	Mayton & Petrie, DOE	Submittal of the Remedial Design Work Plan for the Environmental Management Disposal Facility, Oak Ridge, Tennessee (DOE/OR/01- 2971&D2)	DOEIC, Notified board officers of receipt
199	9/18/2024	Urquhart- Foster, EPA; Young, TDEC	McIntosh & Petrie, DOE	Transmittal of the Phased Construction Completion Report for Exposure Unit Z2-13 in Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE-OR-01- 2983&D1)	DOEIC, Notified board officers of receipt
200	9/19/2024	Petrie, DOE	Begley, EPA	EPA Comments: Addendum to the Zone 1 Groundwater Plumes Remedial Investigation Work Plan for the K-1085 Old Firehouse Burn Area, ETTP, Oak Ridge, Tennessee (DOE/OR/01-2903&D2/A2)	DOEIC, Notified board officers of receipt
201	9/20/2024	Petrie, DOE	Jones, EPA	EPA Comments on Addendum 3 (EU Z2-38) to the Fiscal Year 2009 Phased Construction Completion Report	DOEIC, Notified board officers of receipt
202	9/25/2024	Petrie, DOE	Young, TDEC	TDEC Approval: Remedial Design Work Plan (RDWP) for the Environmental Management Dis- posal Facility (EMDF), Oak Ridge, Tennessee (DOE/OR/01-2971&D2)	DOEIC, Notified board officers of receipt
203	9/25/2024	Urquhart- Foster, EPA; Young, TDEC	Springmeier & Petrie, DOE	Transmittal of The Addendum 6 (Attachment H-1 – Exposure Unit-4a Data Quality Objective Scop-ing Package) 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&D5/A6)	DOEIC, Notified board officers of receipt
204	9/27/2024	Urquhart- Foster, EPA; Young, TDEC	Hardin, Petrie, DOE	Federal Facility Agreement Milestone Extension Request for Addendum to The Final Zone 1 Re-medial Investigation and Feasibility Study for a Supplemental Ecological Evaluation at The East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-2561&D3/A1/R1)	DOEIC, Notified board officers of receipt



#	Date	То	From	Description	DOEIC, Notified board officers of receipt
205	9/27/2024	Urquhart- Foster, EPA; Young, TDEC	Henry, Petrie, DOE	Submittal of the Addendum to the Remedial Design Report for The Construction of the East Tennes-see Technology Park to Environmental Management Waste Management Facility ETTP EMWMF Haul Road on the Oak Ridge Reservation, Oak Ridge, Tennessee Haul Road Reroute (DOE/OR/01-2228&D1/A2)	DOEIC, Notified board officers of receipt
206	9/30/2024	Urquhart- Foster, EPA; Young, TDEC	Hardin, Petrie, DOE	Federal Facility Agreement Milestone Extension Request for the Remedial Investigation Work Plan for White Wing Scrap Yard Waste Area Grouping 11, Oak Ridge Reservation, Oak Ridge, Tennessee DOE-OR-01- 2970&D2	DOEIC, Notified board officers of receipt
207	9/30/2024	Urquhart- Foster, EPA; Young, TDEC	Petrie, DOE	Submittal of the Proposed Changes to The Federal Facility Agreement for The Oak Ridge Reser-vation: Appendix C, Oak Ridge Remediation Sites, and Appendix B, Oak Ridge Site Description	DOEIC, Notified board officers of receipt
208	9/30/2024	Urquhart- Foster, EPA; Young, TDEC	Springmeier & Petrie, DOE	Transmittal of Addendum to the Remedial Design Report-Remedial Action Work Plan for the Decon- tamination and Decommissioning of Non-Reactor Facilities in Bethel Valley	DOEIC, Notified board officers of receipt
209	9/30/2024	Petrie, DOE	Young, TDEC	TDEC Comments: Transmittal of the Waste Handling Plan for the Demolition of the Beta-1 Complex Located at the Y-12 National Security Complex, Oak Ridge, Tennessee (DOE/OR/01-2883&01)	DOEIC, Notified board officers of receipt

Travel Opportunities

Meeting/Event	Dates	Location	Cost	Additional Info
FY 2024				
Waste Management Symposium Requests: Bartholomew, Jones, Bhuiyan	March 10-14	Phoenix, AZ	\$1,780	www.wmsym.org_
RadWaste Summit Requests: Jones, Michaels	June 3-5	Louisville, KY	875 (March 22 reg)	https://www.exchangemonitor.com/g o/radwaste-summit-2024/
DOE National Cleanup Workshop Requests: Anzelotti*, Dill*, Moore Bartholomew^, Jones^	Sept. 16-18	Arlintgon, VA	\$675 (July 9 reg)	www.cleanupworkshop.com
2024 Fall Chairs Meeting Board officers preferred Requests: NA all invited	September 24-26	Oak Ridge	NA	
FY 2025				
Waste Management Symposium Requests: Bhuiyan*, Moore, Bartholomew^, Jones ^	March 9-13	Phoenix, AZ	\$1490 by 12/31	www.wmsym.org
National Environmental Justice Conference & Training Requests: Conner, McCurdy, Moore	March 25-27	Washington, D.C.	NA for gov't	http://thenejc.org
2025 Spring Chairs Meeting Board officers preferred Requests: Jones, Bartholomew, Moore	Week of April 21	Hanford, WA	NA	
RadWaste Summit Requests: Moore, Jones^,	June 10-12	Savannah, GA	\$775	https://www.exchangemonitor.com/g o/radwaste-summit-2025/
EPA National Brownfields Conference Requests: Moore	August 5-8	Chicago, IL		https://gobrownfields.org/
DOE National Cleanup Workshop Requests: Moore	TBD September			
2025 Fall Chairs Meeting Board officers preferred Requests: Moore	Week of Nov. 3	Las Vegas, NV		
Shaded trips are closed	Due to the complexity of arranging government travel, please indicate your interest as soon as possible. Some events may book up to a year in advance. If more members request to travel than an event will allow, the Executive Committee will choose attendees.			

^{*}Requested previously, could not attend due to space available ^Defer to new attendees if space is limited

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

Hanford Idaho Nevada Northern New Mexico

Oak Ridge Paducah Portsmouth Savannah River

September 19, 2024

Kelly K. Snyder
Designated Federal Officer
U.S. Department of Energy (DOE) Office of Environmental Management (EM)
1000 Independence Avenue, SW
Washington, DC 20585

Dear Ms. Snyder:

Justification: As DOE Headquarters endeavors to update its website, the EM Site Specific Advisory Board (SSAB) has been requested to provide input for the EM SSAB website and its content.

In order to educate and inform future board members, interested community groups, and the public in general, we want to maintain a detailed archive of board activities that is easily accessible from the website.

Recommendation: The board recommends that the EM SSAB website maintain and keep documents related to board activities in perpetuity. The documents shall be in a searchable archival online location available to the public. These documents include, but are not limited to, recommendations, responses, and minutes.

Who We Are

The EM SSAB is the DOE EM's most effective vehicle for fostering two-way communication between DOE EM and the communities it serves. The EM program is the world's largest environmental cleanup program, and the EM SSAB its only citizen advisory board. For more than 20 years, the volunteer citizens of the EM SSAB have partnered with EM officials at both the local and national levels to ensure that the public has a meaningful voice in cleanup decisions.

Public participation is required/recommended as part of a number of environmental regulations. It is also good business practice, resulting in better decisions that often result in improved cleanup. Since 1994, EM SSAB members have volunteered thousands of hours of their time and submitted to EM officials over 1700 recommendations, 85% of which have been fully or partially implemented, resulting in improved cleanup decisions.

The EM SSAB comprises approximately 200 people from communities in Georgia, Idaho, Kentucky, Nevada, New Mexico, Ohio, Oregon, South Carolina, Tennessee and Washington. The Board is cumulatively representative of a stakeholder population totaling millions of people who are affected by generator sites, transportation routes and disposal sites. As we move forward, the EM SSAB welcomes the opportunity to highlight the value of this unique volunteer board and discuss its priorities during the months and years ahead.

Susan Coleman, Chair Hanford Advisory Board

Sind Ca

Teri Ehresman, Chair Idaho Cleanup Project CAB

Teri Thresman

Anthony Graham, Chair Nevada SSAB

Patricio Pacheco, Chair Northern New Mexico CAB

Amy Jones, Chair Oak Ridge SSAB Don Barger, Chair Paducah CAB

Don P Bayer

Jody Crabtree, Chair Portsmouth SSAB Phylis Far ce Bn X Phyllis Britt, Chair Savannah River Site CAB

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

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. Anzelotti 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 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.