



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

Approved 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
Harold Conner, Jr.
Paul Dill
Rosario Gonzalez
Amy Jones
Noah Keebler

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

Members Absent

Atilio Anzellotti
Candace Atkinson¹
Raiyan Bhuiyan

Mike Mark
Thomas McCormick
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 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:

- Ms. Michaels asked what alpha activity means.
 - Mr. Petrie said alpha activity is radiation related to uranium products.
- Ms. Butler said she thought the ROD was approved last year.
 - Mr. Scheffler said it was not final last fall.
- 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.
- 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, roto sonic 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.
- 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.
- 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

Executive – 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

October 9, 2024

Oak Ridge Site Specific Advisory Board

AJ/sbm