

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, February 8, 2017

6 p.m., DOE Information Center
1 Science.gov Way
Oak Ridge, Tennessee

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.

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1. February
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BOARD MINUTES/RECOMMENDATIONS & MOTIONS

1. January 11, 2017 draft meeting minutes

REPORTS & MEMOS

1. EM Projects Update
2. Abbreviations/Acronym List for EM Projects Update
3. Travel Opportunities for FY 2017

AGENDA



Oak Ridge Site Specific Advisory Board
Wednesday, February 8, 2017, 6:00 p.m.
DOE Information Center
1 Science.gov Way, Oak Ridge, Tenn. 37831

AGENDA

- I. Welcome and Announcements (B. Price) 6:00–6:05
 - A. Next Meeting: Wed., March 8, 2017. Presentation Topic: FY19 Budget Formulation and Prioritization of Projects/Baseline
- II. Comments from the Deputy Designated Federal Officer, and EPA and TDEC Liaisons (J. Mullis, C. Jones, K. Czartoryski)..... 6:05–6:15
- III. Public Comment Period (G. McAllister)..... 6:15–6:25
- IV. Presentation: Waste Disposal Capacity (Brian Henry)
(Issue Group Members: Bales, Gonzalez, Holden, Paulus, Thomas, Trujillo)..... 6:25–6:50
Question and Answer Period 6:50–7:05
- V. Call for Additions/Approval of Agenda (B. Price)..... 7:05
- VI. Motions..... 7:05–7:10
 - A. January 11, 2017, Meeting Minutes (D. Hemelright)
 - B. Second Consecutive Absence—Burroughs, Ford, Thomas (D. Hemelright)
- VII. Responses to Recommendations & Alternate DDFO’s Report (M. Noe) 7:10–7:15
- VIII. Committee Reports 7:15–7:20
 - A. EM/Stewardship (E. Trujillo)
 - B. Executive (B. Price)
- IX. Additions to Agenda & Open Discussion 7:20–7:30
- X. Adjourn 7:30

PRESENTATION MATERIALS

Presentation to be
distributed at or prior
to meeting

CALENDARS



Oak Ridge Site Specific Advisory Board February 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Executive Committee Meeting 6:00-7:00 p.m.	2	3	4
5	6	7	8 ORSSAB Monthly Meeting 6:00-7:30 p.m.	9	10	11
12	13	14	15	16	17	18
19	20 Presidents' Day Holiday DOE/Staff Holiday	21	22 EM & Stewardship Committee Meeting 6:00-7:30 p.m.	23	24	25
26	27	28				

All meetings will be held at the DOE Information Center unless noted otherwise.

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

ORSSAB Conference Call Line: (866) 659-1011; enter the participant code when prompted: 3634371#

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sundays at 10 p.m.
Lenoir City: Charter Cable Channel 193	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, February 27, 7 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB



Oak Ridge Site Specific Advisory Board March 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Executive Committee Meeting 6:00-7:00 p.m.	2	3	4
5	6	7	8 ORSSAB Monthly Meeting 6:00-7:30 p.m.	9	10	11
12	13	14	15	16	17	18
19	20	21	22 EM & Stewardship Committee Meeting 6:00-7:30 p.m.	23	24	25
26	27	28	29	30	31	

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FY 2017 ORSSAB Work Plan/Schedule

Executive meeting	Monthly meeting	Site tour	EM/Stewardship meeting
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Date	Event	Topic	Presenter	Issue Group	Location
OCTOBER 2016					
Wed., 10/5	Executive	General business			DOEIC
Wed., 10/12	Monthly meeting	State of the Oak Ridge EM Program	Jay Mullis	Hemelright Trujillo Wilson	DOEIC
	Site tour	<i>(no site tour)</i>			
Wed., 10/26	EM/Stewardship	State of the Oak Ridge EM Program detailed discussion	McMillan/ Cain/Henry		DOEIC

NOVEMBER					
Wed., 11/2	Executive	General business			DOEIC
Wed., 11/9	Monthly meeting	Excess Contaminated Facilities	McMillan/ Henry	Beatty Ford Gonzalez Thomas Wilson	DOEIC
TBD	Site tour	On-site tour/Q&A	McMillan/ Henry		
Wed., 11/30	EM/Stewardship	Excess Contaminated Facilities detailed discussion	McMillan/ Henry		DOEIC

DECEMBER					
Wed., 12/7	Executive	<i>(No meeting)</i>			
Wed., 12/14	Monthly meeting	<i>(No meeting)</i>			
	Site tour	<i>(no site tour)</i>			
Wed., 12/28	EM/Stewardship	<i>(No meeting—due to holidays)</i>			

JANUARY 2017					
Wed., 1/4	Executive	General business			DOEIC
Wed., 1/11	Monthly meeting	Ongoing Groundwater Efforts	Mayton	Beatty Deaderick Price Sobek Trujillo	DOEIC
TBD	Site tour	On-site tour/Q&A	Mayton		
Wed., 1/25	EM/Stewardship	Ongoing Groundwater Efforts detailed discussion	Mayton		DOEIC

Date	Event	Topic	Presenter	Issue Group	Location
FEBRUARY					
Wed., 2/1	Executive	General business			DOEIC
Wed., 2/8	Monthly meeting	Waste Disposal Capacity	Henry	Bales Gonzalez Holden Paulus Thomas Trujillo	DOEIC
TBD	Site tour	On-site tour/Q&A	Henry		
Wed., 2/22	EM/Stewardship	Waste Disposal Capacity detailed discussion	Henry		

MARCH					
Wed., 3/1	Executive	General business			DOEIC
Wed., 3/8	Monthly meeting	FY19 Budget Formulation and Prioritization of Projects/Baseline	Stokes/ Thompson	Hemelright Paulus Price Trujillo Wilson	DOEIC
	Site tour	<i>(no site tour)</i>			
Wed., 3/22	EM/Stewardship	FY19 Budget Formulation and Prioritization of Projects/Baseline detailed discussion	Stokes/ Thompson		DOEIC

APRIL					
Wed., 4/5	Executive	General business			DOEIC
Wed., 4/12	Monthly meeting	(No ORSSAB monthly meeting due to Community Budget Workshop)			DOEIC
	Site tour	<i>(No site tour)</i>			
TBD	Community Budget Workshop				TBD
Wed., 4/26	EM/Stewardship	Continued discussion of FY 2019 budget formulation-recommendation if needed			DOEIC

MAY					
Wed., 5/3	Executive	General business			DOEIC
Wed., 5/10	Monthly meeting	Key Material Disposition Activities	McMillan/ DeMonia	Beatty Holden Swindler	DOEIC
TBD	Site tour	On-site tour/ Q&A	McMillan/ DeMonia		
Wed., 5/24	EM/Stewardship	Key Material Disposition Activities detailed discussion.	McMillan/ DeMonia		DOEIC

Date	Event	Topic	Presenter	Issue Group	Location
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JUNE					
Wed., 6/7	Executive	Annual meeting planning			DOEIC
Wed., 6/14	Monthly meeting	FACA Presentation	HQ	<i>None required</i>	DOEIC
	Site tour	<i>(No site tour)</i>			
Wed., 6/28	EM/Stewardship				DOEIC

JULY					
Wed., 7/5	Executive	<i>(No meeting)</i>			DOEIC
	New member training & tour				
Wed., 7/12	Monthly meeting	(No ORSSAB monthly meeting due to new member training)			
	Site tour	<i>(No site tour)</i>			
Wed., 7/26	EM/Stewardship	<i>(No meeting)</i>			DOEIC

AUGUST					
Wed., 8/2	Executive	Annual meeting planning			DOEIC
Sat., 8/_	Annual meeting	FY 2017 review and planning for FY 2018			
Wed., 8/9	Monthly meeting	(No ORSSAB monthly meeting due to Annual meeting)			
	Site tour	<i>(No site tour)</i>			
Wed., 8/23	EM/Stewardship	<i>(No meeting)</i>			

SEPTEMBER					
Wed., 9/6	Executive	General business			DOEIC
Wed., 9/13	Monthly meeting	Vision 2020-Planning for the Future of ETPP including Reuse, Historic Preservation and Stewardship	Cooke/Cain	Deaderick	
	Site tour	<i>(No site tour)</i>			
Wed., 9/27	EM/Stewardship	Vision 2020-Planning for the Future of ETPP including Reuse, Historic Preservation and Stewardship detailed discussion	Cooke/Cain		DOEIC

BOARD MINUTES/ RECOMMENDATIONS



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

Unapproved January 11, 2017, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, January 11, 2017, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tennessee, beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting ORSSAB support offices at (865) 241-4583 or (865) 241-4584. The presentation portion of the video is available on the board's YouTube site at www.youtube.com/user/ORSSAB/videos.

Members Present

Leon Baker
Kathryn Bales
Christopher Beatty
Martha Deaderick
David Hemelright
Eddie Holden
Greg Paulus
Belinda Price
Fred Swindler
Ed Trujillo

Rudy Weigel
Phil Yager
Dennis Wilson

Members Absent

Richard Burroughs¹
Mike Ford¹
Rosario Gonzalez
Howard Holmes
Elizabeth Ross
Mary Smalling¹
Deni Sobek
Venita Thomas¹

¹Second consecutive absence

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Dave Adler, ORSSAB Alternate Deputy Designated Federal Officer (DDFO), Department of Energy, Oak Ridge Office of Environmental Management (DOE-OREM)
Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC)
Jay Mullis, Deputy Manager for OREM and ORSSAB DDFO
Melyssa Noe, ORSSAB Alternate DDFO, DOE-OREM

Others Present

Kendall Brady
Spencer Gross, ORSSAB Support Office
Dick Ketelle, UCOR
Lara Manning, Student Representative
Dennis Mayton, DOE
Pete Osborne, ORSSAB Support Office
Emily Strasser

24 members of the public were present.

Liaison Comments

Mr. Mullis – Mr. Mullis said the presentation for the evening on groundwater will inform the board about what has been done and is being done to protect onsite and offsite groundwater. He said much money has been spent on those efforts. He hoped the presentation will help the board and the public provide feedback to DOE on its groundwater work.

Mr. Czartoryski – Mr. Czartoryski reminded the board that TDEC does sampling and evaluation of groundwater. He said he would answer any questions about TDEC's work after the presentation.

Public Comment

Kendall Brady – Mr. Brady said he is one of several residents who live on Tuskegee Drive in Oak Ridge near the Y-12 National Security Complex who get their water from deep water wells. Mr. Adler and Brian Henry (DOE) had met with the residents, which he described as a 'comforting' meeting where they explained what DOE is doing and plans to do regarding monitoring those wells. He also thanked TDEC for sampling their wells and preliminary reports indicate the wells are safe to use.

Emily Strasser – Ms. Strasser is working on a book about her grandfather's career at Y-12. He was involved in the lithium separation process that resulted in large releases of mercury into the environment. She asked that anyone who had information about that time to contact her to provide additional information for her book (emstrass@gmail.com, 404-513-2975).

Presentation

Mr. Mayton appeared before the board in February 2016 and provided an update on groundwater strategy for the Oak Ridge Reservation (ORR), an offsite groundwater assessment, and development of a regional groundwater flow model. He said he had more information to provide at this meeting. The main points of his presentation are in Attachment 1.

Groundwater investigations in and around the ORR have been underway since the 1980s. The main sources of groundwater contamination have come from waste burial grounds and industrial spills (Attachment 1, page 2). There are almost 2,000 monitoring wells on and near the reservation. Each year almost 2,500 water samples are taken and almost 1,500 groundwater elevation readings are taken and reported in the Remediation Effectiveness Report.

Page 3 of Attachment 1 is a map that shows contaminated groundwater plumes on the ORR and the nine collection and treatment systems. He briefly described some of the plumes and their causes at East Tennessee Technology Park (ETTP), Oak Ridge National Lab (ORNL), and Y-12. The cost to install the treatment systems was about \$33 million, not including the investigational costs prior to installation. Annual surveillance and maintenance is about \$3.5 million.

Mr. Mayton reviewed the history of the groundwater strategy (Attachment 1, page 4), which began in 2013 with the convening of several workshops with DOE, EPA and TDEC representatives to develop a strategy to deal with legacy groundwater problems. The teams discussed all the plumes and the issues associated with them and developed a hazard ranking system. The ranking system evaluated the size of the plumes, the concentration of contaminants, if a plume was migrating, and especially if it had the potential of migrating offsite. The projects were divided into investigations to identify data gaps and engineered restorations to remediate the groundwater. The list had about 36 projects to deal with 35 groundwater plumes and was included in a groundwater strategy document that was issued in 2014.

During development of the groundwater strategy one of the projects that was to begin immediately was to create a regional groundwater flow model. The draft report for the model has been completed and is being reviewed by a technical advisory group. The model will help determine how groundwater behaves in certain areas.

Another project recommended to begin immediately was developing an offsite groundwater assessment (Attachment 1, page 5). The work, which began in 2014, tests for more than 100 contaminants in 49 locations. The map on page 5 shows the locations where sampling was done.

When Mr. Mayton addressed the board in February 2016 three rounds of sampling had been done, but results were available only for the first two rounds. The first 43 sampling events were done in the second quarter of 2015. The results of that sampling are noted on page 6 of Attachment 1. Mr. Mayton noted that the exceedences of EPA Drinking Water Standards could be naturally occurring, but perhaps also because of high suspended solids in the samples. Later sampling of just water and not suspended solids did not show any exceedences.

The second sampling was done in August of 2015 at 48 locations, and the third sampling was done in February of 2016. No exceedences of drinking water standards were found in those two sampling events. There were low concentration detections of contaminants that were sporadic and discontinuous.

In November 2016 DOE submitted the Offsite Remedial Evaluation Report (Attachment 1, page 7) to EPA and TDEC. After comments are received DOE, EPA, and TDEC will discuss the comments and revise the document.

Mr. Mayton noted that DOE and TDEC have been doing some co-sampling offsite at locations as far away as Maynardville and Rocky Top. The results of that sampling are not yet available.

DOE, EPA, and TDEC will make the first large-scale groundwater decisions at ETTP (Attachment 1, page 8). The map on page 8 notes the groundwater plumes at the site. A remedial investigation/feasibility study was done in the mid-2000s that looked at alternatives to treat groundwater at ETTP. One of the alternatives was in-situ thermal treatment that potentially could be used in the presence of dense non-aqueous phase liquids (DNAPL). DNAPL sinks in water and follows fractures in bedrock making it difficult to detect in sampling. In 2008 DOE began characterization work to detect DNAPL at ETTP. Five plumes were suspected as having DNAPL. A second phase of characterization is set to begin in March 2017. If characterization indicates the presence of DNAPL a pilot project of in-situ thermal treatment could begin in two to three years.

To reach a final decision on groundwater at ETTP the remedial investigation/feasibility study must be updated, a proposed plan will be prepared, and a final site wide record of decision (ROD) submitted to address 11 plumes. The ROD is scheduled to be in place in 2023.

Mr. Mayton discussed some potential future groundwater projects for the ORR (Attachment 1, page 10). One is the Melton Valley/Bethel Valley Exit Pathway Investigation to fill data gaps on behavior of a hydrofracture site, waste burial grounds, and a site known as Corehole 8 in the central portion of ORNL. Another potential project is the 7000 Area Trichloroethylene Plume Remediation Project also at ORNL to restore groundwater.

The Exit Pathway Investigation would look at five plumes identified in the Groundwater Strategy to determine if the plumes are migrating offsite.

The 7000 Area project could build on a pilot study done earlier using bioremediation that has shown promising results. However, additional characterization of the area would be done to determine if other contaminants such as DNAPL are present that would render bioremediation ineffective.

Mr. Adler suggested the board and the EM & Stewardship Committee discuss how DOE should best use its resources for groundwater work.

After the presentation a number of questions were asked. Following are abridged questions and answers.

Mr. Hemelright – You mentioned some offsite work in Maynardville and Rocky Top. Could you elaborate? Mr. Mayton – Those are locations where we did some co-sampling with TDEC. These are background locations where we wouldn't expect to see groundwater flow coming from the area so they will provide some good representations for comparisons of results we got from the offsite groundwater assessment. Since we are sampling residential wells we don't know the depths so it is a bit difficult to compare because some of the wells may be at 200 feet and some may be 400 feet. If we start to see things at one location and not another it may be a good indication that some of the hits we saw during the offsite groundwater assessment were not related to flow off the reservation.

Mr. Wilson – Back on page 5 you show a shaded area near the Tennessee River. Could you explain more about that and do you plan to do any sampling there? Mr. Ketelle – That is an area where we had a couple of residential wells that were included in the offsite groundwater assessment project. We were looking for voluntary participation in the sampling campaign and some people that lived there volunteered.

Mr. Trujillo – Was any sampling done on the east side of the reservation (page 5 map)? Mr. Mayton – No, the study area was determined to be in area indicated. Mr. Trujillo – Was it because no progress of the plume that way? Mr. Mayton – (referencing map on page 10) We have some wells that we sample on a regular basis in the east end of the reservation as part of the collection system for the east end volatile organic compounds (VOCs). Mr. Adler – Most of the burial grounds are on the west side of the reservation and the groundwater generally flows west from there. The focus was on whether that westward flow presented any public health problems off the reservation. The plume that heads east from the Y-12 Plant was one of the earliest projects we focused on and resulted in the installation of some containment wells that we set up to try to make the plume behave. We thought while we couldn't restore it we could keep it from migrating offsite. Some of the wells Mr. Mayton mentioned before are well to the east and north. Those are wells that we hope are so far away from the site and so far up gradient that they couldn't have possibly been impacted by operations on the ORR. To the west we've been seeing inconsistent, sporadic and very low concentration detections of contamination. We've wrestled with whether that is true contamination and a consequence of migration from the reservation or if there is some other phenomena that might explain it. We are at low measurement levels that it is possible that some of these levels could be explained by things like laboratory error or atmospheric fallout. We trying to sort that out. If we see similar patterns 10-12 miles up gradient from the reservation that lends some credence to the notion that indications to the west can be explained by something other than ORR activities.

Mr. Trujillo – Are there VOCs in that area? Mr. Adler – We have found them in many locations. The VOCs we're finding are very common solvents. If you sample 100 wells in a populated area you'll find trace levels of VOCs. But DNAPLs occur when you dispose of large volumes of dense solvents in one location that flow into the ground and into groundwater. But we have not had DNAPL concentrations in offsite monitoring wells.

Mr. Trujillo – When we do these future projects related to groundwater, it will follow the groundwater strategy, correct? Mr. Mayton – The strategy has a ranking system but some of the rankings pertain to investigation-type projects and some pertain to remediation projects. The top priority is to deal with

anything that impacts offsite of the reservation. Mr. Adler – In addition to how to prioritize groundwater work you have to think about groundwater within the larger context of the whole cleanup program. We are in the process of building a mercury treatment plant for surface water that we know that carries contaminants and flows off the reservation. We are dealing with contaminated buildings above ground that are in the midst of our population. When we decide what to do with money we get from Congress we're not just thinking about how the highest priority groundwater project but how much we allocate to groundwater versus building demolition versus uranium materials and so on.

Mr. Weigel – Has the pump and treat plant at the east end of Y-12 reduced the amount of VOCs migrating offsite? Mr. Mayton – Yes, we have seen reductions of concentrations offsite. Mr. Weigel – There was another project at Solid Waste Storage Area 4 at ORNL to reduce groundwater and storm water infiltration in the storage area. Has that project reduced contamination? Mr. Mayton – Yes, that project was to draw the water down and we've seen good reduction in groundwater levels under the burial grounds in that area. Mr. Adler – That project is unique. Rather than trying to pull up contaminated groundwater and treat it, we're trying to get the water out of the waste. In that project we're trying to depress the water table and minimize the infiltration of water through the waste. It's been a very successful project. The isolation of waste from the water has resulted in significant reductions of strontium and cesium in the water in down gradient areas.

Mr. Czartoryski – I compliment DOE in its offsite groundwater monitoring efforts. Did you say this project is complete? Mr. Mayton – The report is complete; that is not to say there won't be some follow-up work based on evaluation in the report. The work plan identified that we'd do three sampling events and those events are complete. When we submitted the report one of the recommendations was that we'd sample a smaller number of wells for the next three years to have a comparison to these results. Mr. Czartoryski – I'd like to clarify the statement about the groundwater flow model. My understanding is the model is still undergoing development. Is the development dealing with improvements in predictions, data, etc? So far my understanding is this is a static model and is not ready yet to predict any flow and concentrations downstream. Mr. Mayton – The draft report is being reviewed by the technical advisory group, and they will determine if any changes need to be made. But it will need to be developed more as we get into individual areas.

Mr. Hatcher – Regarding thermal remediation do we know how efficient this process is in highly fractured rock? Mr. Mayton – Work has been done in a few places in Kentucky and Tennessee. There haven't been a lot of results but there are places where it has been effective. It depends a lot on geology. That goes back to why we want to do a lot of tests. One thing that can make it difficult to do thermal treatment is if you have an influx of water, which makes it almost impossible to heat up. There's a chance it won't work. That's why we want to do a study first.

Ms. Strasser – Will the results be available to the public on the three sampling events? Mr. Mayton – The report will be available at the DOE Information Center.

Mr. Brady – We on Tuskegee Drive occasionally see people sampling Mill Branch. Is that part of what you are doing? Mr. Kettle – Mill Branch is being sampled as part of the Lower East Fork Mercury Investigations by the ORNL Environmental Sciences Division. Mr. Czartoryski – TDEC also has a presence in sampling those streams.

Ms. Price advised board members to review the Groundwater Strategy Document prior to the EM & Stewardship Committee meeting on January 25 when this topic will be discussed in more detail.

Committee Reports

EM & Stewardship

Mr. Trujillo reported that the committee discussed excess facilities at the November meeting. He said the related site tour was excellent and complimented DOE and UCOR for doing a good job with tours. He said the issue managers for the topic will work on ideas about a possible recommendation on excess facilities.

Executive

Mr. Wilson said the committee reviewed the agenda for this meeting and received a report from Mr. Trujillo on the excess facilities topic.

Mr. Wilson said he learned how correspondence is received and archived and how correspondence on various issues is available for board members to review.

The Spring 2017 EM SSAB Chairs' meeting is scheduled for May 9-11 in Paducah, Ky. Ms. Price reminded members that if they have any topics or issues they would like for the EM SSAB to consider as a possible recommendation to DOE to let her know.

Open Discussion

Mr. Weigel suggested a presentation to the board about the successes that DOE has had regarding environmental cleanup. Ms. Price said that was a previous topic of discussion at an EM SSAB Chairs' meeting about how to communicate success stories not only to the EM SSAB, but to the general public. She said that may be a topic of discussion again at the May meeting. Mr. Paulus noted that Mr. Adler had done a review of all the work being done at EM SSAB sites around the country. He suggested a presentation on successes at those sites. Mr. Trujillo noted that board members receive the 'Tuesday Newsday' that reports on activities around the DOE complex. He thought perhaps it could be expanded to include more news about Oak Ridge.

Ms. Price suggested an update about what's happening at DOE Headquarters. Mr. Mullis said it would be a few weeks before more is known about assignments and confirmations.

Mr. Hemelright asked about the status of the Waste Isolation Pilot Plant in New Mexico that has been closed since February 2014. OREM had been sending some transuranic (TRU) waste to the facility before it was closed as a result of a couple of incidents. Mr. Mullis said the first new waste since closure has been placed. A TRU Corporate Board meeting will be held soon that will discuss the schedule for resuming shipments. There is some waste that needs to be placed first before Oak Ridge can resume shipments.

Announcements and Other Board Business

ORSSAB's next meeting will be Wednesday, February 8, 2017, at 6 p.m. at the DOE Information Center.

Alternate DDFO Report

Ms. Noe said OREM has responded to the board's Recommendation 233: Recommendations on the Proposed Environmental Management Disposal Facility. The response was provided to the board earlier and is on the EM & Stewardship Committee agenda for January 25 to review for acceptance.

No other recommendations are outstanding.

A recruitment campaign is underway for new members. Ms. Noe asked members to think about people they know who may be interested in becoming a member and have them contact her or staff for an

application. Applications are also online at <https://www.energy.gov/oreem/downloads/orssab-membership-application-form>.

Ms. Price asked about a tour related to this evening's groundwater presentation. Ms. Noe said Mr. Mayton and Mr. Adler will discuss possible dates and sites and advise members. The tour will be scheduled prior to the EM & Stewardship Committee meeting on January 25.

Motions

1/11/17.1

Mr. Hemelright moved to approve the minutes of the November 9, 2016, board meeting. Mr. Paulus seconded and the motion passed **unanimously**.

Action Items

Open Action Items

None.

The meeting adjourned at 7:23 p.m.

Attachments (1) to these minutes are available upon request from the ORSSAB support office.

I certify that these minutes are an accurate account of the January 11, 2017, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Secretary

Belinda Price, Chair
Oak Ridge Site Specific Advisory Board
BP/rsg

DATE

REPORTS & MEMOS

EM Project Update

ETTP	December	January
Zone 1 Interim ROD		The PCCR Addendum 2 for the Zone 1 Duct Island Area and K-901 Area was submitted to the regulators. This documented a No Further Action recommendation in EUs Z1-51 and Z1-52.
Zone 1 Final Soils ROD	Supplemental EPA comments on the D1 ROD received. A conference call was conducted to discuss these comments.	An 60-day extension request for the D2 ROD was submitted to the regulators.
		Site preparation and planning activities to support the treatability study continued.
Zone 2 Soil ROD	Remediation of the K-1407-C Pond continued.	Excavation and hauling of contaminated soil from the K-1407-C Pond to EMWMF is 70 percent complete. Backfill with clean soils is 65 percent complete.
Sitewide ROD	Sitewide Groundwater Treatability Study pad constructed.	
K-25/K-27 D&D	Removal of the Building K-27 slab was initiated.	
Remaining Facilities	Overall, the K-731 building demolition project is 86 percent complete. Demolition of the building structure is 96 percent complete.	Overall, the K-731 building demolition project is 91 percent complete. Demolition of the building structure is completed.
		Work crews have built a containment area to support removal of asbestos materials from a very large abatement area (Area 7) and abatement has begun.
ORNL	December	January
U-233 Disposition	The First Quarter Fiscal Year 2017 Startup Notification Report was approved. The new Conduct of Operations Matrix was submitted for review, which supports transition of Building 2026 from the stewardship of UT Battelle to Isotek.	The Quality Assurance Program Audit Review Plan was transmitted to the contractor and the audit was conducted in late January.
	The 2016 Security Plan for ORNL Building 3019 Complex was submitted for concurrence and approval.	The Building 3019 and Building 3017 Hazards Survey, Revision 6 was approved.
MSRE		The FY 2016 PCCR documenting waste disposal was completed and submitted to the regulators for review.
ORNL S&M	The water has been pumped from the interconnecting tunnel at Building 3026 between the hot cells, and permanent lighting and cameras are being procured for monitoring water intrusion.	
	NDA characterization results have been received on Building 3038 and are under evaluation. This information will be used to make decisions on additional cleanup actions.	
	Verification activities have been completed on Building 7500 for the removal of combustive materials and heat detection system deactivation. This completes the first phase of activities in this building.	

EM Project Update

Y-12	December	January
Outfall 200 MTF	Completed Phase 2 geotechnical work and began preparation of a final report. Continued Critical Decision 3A early site preparation activities.	The final Phase 2 Geotechnical Site Characterization Report was submitted to the regulators for approval.
	The final report for the Outfall 200 Site Environmental Characterization was submitted. The draft report for the Outfall 200 Phase 2 Geotechnical Site Characterization was submitted.	The internal final design report was completed and preparing for DOE-HQ reviews. Work began on the draft RDR/RAWP.
Y-12 Facilities D&D	Characterization of the Biology Complex buildings is now more than 80 percent complete.	The D2 Waste Handling Plan for the Biology Complex was transmitted to the regulators for approval.
	Cleaning and sealing of the pad under the COLEX equipment was completed, along with installation of handrails and grip-strut over second-level openings. Handrails and grip-strut are now being installed on the third level.	Project is establishing waste load out areas, receiving waste containers, and approving work control documents for the Colex area. Alpha 4 Colex West deactivation activities were begun.
	The Removal Action Work Plan was approved by the regulators.	
Mercury Technology Development		Options are being considered as to where to construct a Field Research Station for use by scientists to study mercury in Poplar Creek. A promising option being evaluated is to lease a portion of a planned private facility at the Horizon Center.
Off-Site Cleanup/Waste Management	December	January
TRU Waste Processing Center	The project continued preparations (procurement and installation of equipment) for the processing of SWSA 5 and Tank W1A waste.	The project is preparing for an Implementation Verification Review associated with Revision 35 of the DSA, which will primarily address processing of Tank W-1A soils and macroencapsulated waste
	The Waste Isolation Pilot Plant (WIPP) Mobile Loading Unit performed a mock-up to demonstrate facility accessibility of the transport vehicle.	
Sludge Test Area Characterization	A Design Authority (DA) Assessment was conducted for the SLPFB team by Savannah River National Laboratory.	
EMWMF and EMDF	Hosted three visitors from Japan were interested in learning about DOE's disposition of uranium-bearing waste. Presentations were given on the existing EMWMF, the process that was used to determine waste acceptance criteria (WAC), and our WAC attainment process.	Work is underway to finalize the D5 version of the EMDF RI/FS.
	Field work for the expansion of the classified industrial Landfill IV was completed. Work continued with EPA and TDEC on resolving comments on the EMDF RI/FS.	

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Off-Site Cleanup/Waste Management	December	January
ORR Groundwater	The Offsite Remedial Site Evaluation was submitted to the regulators for review.	
WRRP	The FY 2016 Remediation Effectiveness Report was approved by the regulators.	The Sampling & Analysis Plan/Quality Assurance Project Plan (SAP/QAPP) for EMWMF was submitted to the regulators for review.
		The ETTP Watershed Comprehensive Monitoring Plan for the RAR was approved by the regulators.
Reindustrialization	OREM and Community Reuse Organization of East Tennessee (CROET) hosted an event celebrating the 20th Anniversary of Oak Ridge's Reindustrialization Program.	The final Covenant Deferral Request for the proposed transfer of the K-1065 Area at ETTP was submitted to the regulators for approval.
	The Anniversary Event also featured a video that discussed the accomplishments of the program and the promising future and opportunities on the horizon.	Progress is being made on the design of facilities and exhibits that will tell the story of the former ORGDP. The final design for the K-25 History Center, the Equipment Building/Viewing Tower, and the K-25 Preservation Footprint, including the display of artifacts and other exhibits, was released for review.

Abbreviations/Acronyms List for Environmental Management Project Update

AM – action memorandum

ARRA – American Recovery and Reinvestment Act

BCV – Bear Creek Valley

BG – burial grounds

BV- Bethel Valley

CARAR – Capacity Assurance Remedial Action Report

CBFO – Carlsbad Field Office

CERCLA – Comprehensive Environmental Response, Compensation
and Liability Act

CEUSP – Consolidated Edison Uranium Solidification Project

CD – critical decision

CH – contact handled

CNF – Central Neutralization Facility

COLEX – column exchange

CS – construction start

CY – calendar year

D&D – decontamination and decommissioning

DOE – Department of Energy

DSA – documented safety analysis

DQO – data quality objective

EE/CA – engineering evaluation/cost analysis

EM – environmental management

EMDF – Environmental Management Disposal Facility

EMWMF – Environmental Management Waste Management Facility

EPA – Environmental Protection Agency

ETTP – East Tennessee Technology Park

EU – exposure unit

EV – earned value

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

IROD – Interim Record of Decision

LEFPC – Lower East Fork Poplar Creek

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

NPL – National Priorities List

NNSS – Nevada National Security Site (new name of Nevada Test Site)

NTS – Nevada Test Site

OR – Oak Ridge

ORGDP – Oak Ridge Gaseous Diffusion Plant

OREM – Oak Ridge Office of Environmental Management

ORNL – Oak Ridge National Laboratory

ORO – Oak Ridge Office

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

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

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

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

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

Y-12 – Y-12 National Security Complex

ZPR – Zero Power Reactor

Travel Opportunities

Meeting/Event	Dates	Location	Reg. Cost	Website	Conference Lock Date; # Allocated Attendees	Deadline to Submit Requests
FY 2015						
Perma-Fix Nuclear Waste Management Forum	Meeting canceled	Nashville				
Intergovernmental Meeting with DOE (Pending requests: <i>none</i>)	Nov. 16 - 18, 2016	New Orleans	none		7/30/16	7/30/16
Waste Management Symposium (Attendees: Beatty, Price)	March 5-9, 2017	Phoenix	\$1,145	www.wmsym.org	9/30/16 (2)	12/16/16
National Environmental Justice Conference & Training (Pending requests: <i>none</i>)	March 8-10, 2017	Washington, D.C.	none	http://thenejc.org	N/A	2/1/17
2017 Spring Chairs Meeting (Pending requests: Hemelright, Price, Wilson)	May 9-11, 2017	Paducah, KY	none		N/A	4/5/17
RadWaste Summit (Pending requests: ____)	Sept. 5-7, 2017	Summerlin, Nevada	\$525	http://www.exchangemonitor.com/forums/annual-radwaste-summit/	TBD	
DOE National Cleanup Workshop (Pending requests: ____)	Sept. 13-14, 2017	Alexandria, VA	none	https://energy.gov/em/national-cleanup-workshops	5/11/17 (1)	4/5/17
2017 Fall Chairs Meeting (Pending requests: ____)	TBD	TBD	none		N/A	
EPA National Brownfields Conference (Pending requests: _____)	December 5-7, 2017	Pittsburgh	TBD	https://www.epa.gov/brownfields/2017-national-brownfields-training-conference	N/A	

Shaded trips are closed