Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, January 13, 2016 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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AGENDA

PRESENTATION MATERIALS – to be distributed prior to or at the meeting.

CALENDARS

- 1. January
- 2. February (*draft*)
- 3. Work plan schedule of meetings

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

- 1. October 14, 2015 draft meeting minutes
- 2. November 10, 2015 draft meeting minutes
- 3. Recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park

REPORTS & MEMOS

- 1. Recommendation Tracking Chart
- 2. EM Project Update
- 3. Abbreviations/Acronyms for EM Projects Update
- 4. Travel Opportunities for FY 2016

AGENDA



AGENDA

I.	Welcome and Announcements (B. Price)	. 6:00–6:05
	A. February 10 Presentation Topic: Groundwater Monitoring Program	
	B. Presentation of Service Awards to Outgoing Members Hagy, Staley (S. Cange)	
II.	Comments from the Deputy Designated Federal Officer, and EPA and TDEC Liaisons	
	(S. Cange, C. Jones, K. Czartoryski)	. 6:05–6:15
III.	Public Comment Period (S. Cui)	. 6:15–6:25
IV.	Presentation: Oak Ridge Environmental Management Waste Management	
	(Brian DeMonia/Bill McMillan/Brian Henry)	
	Question and Answer Period	. 6:50-7:05
V.	Call for Additions/Approval of Agenda	
VI.	Motions	. 7:05-7:10
	A. November 10, 2015, Meeting Minutes (D. Hemelright)	
	B. Recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park (A. Cook)	
	D. Second Consecutive Absence—Ford, Holmes, Kasten, Stout (D. Hemelright)	
VII.	Responses to Recommendations & Comments (D. Adler)	. 7:10–7:15
VII	I. Committee Reports	. 7:15-7:20
	A. EM/Stewardship (B. Hatcher, E. Trujillo)	
	B. Executive (B. Price)	
	 Planning for the Spring Chairs Meeting (B. Price) Center for Oak Ridge Oral History (M. Deaderick) 	
IX.	Alternate DDFO's Report (M. Noe)	. 7:20–7:25
X.	Additions to Agenda & Open Discussion	.7:25-7:30
XI.	Adjourn	

PRESENTATION MATERIALS

Presentation to be distributed at or prior to meeting

CALENDARS

Oak Ridge Site Specific Advisory Board January 2016							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday 1	Saturday 2	
					I New Year's Day DOE/Staff holiday	2	
3	4	5	6 Executive Committee meeting 6 p.m.	7	8	9	
10	11	12	13 Monthly SSAB meeting 6 p.m.	14	15	16	
17	18 Martin Luther King, Jr. Day DOE/Staff holiday	19	20	21	22	23	
24	25	26	27 Environmental Management & Stewardship	28	29	30	
31			Committee meeting 6 p.m.				

All meetings will be held at the DOE Information Center unless noted otherwise.ORSSAB Support Office: (865) 241-4583 or 241-4584DOE Information Center: (865) 241-4780

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Board meetings on cable TV and YouTube				
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, January 24 and 31 at 10 p.m.			
Lenoir City: Charter Cable Channel 193	Wednesdays, 4 p.m.			
Oak Ridge: Channel 12	Monday, January 25, 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 February 2016								
Sunday	Monday 1	Tuesday	Wednesday	Thursday	Friday	Saturday		
		2	3 Executive Committee meeting 6 p.m.	4	5	6		
7	8	9	10 Monthly SSAB meeting 6 p.m.	11	12	13		
14	15 President's Day DOE/Staff holiday	16	17	18	19	20		
21	22	23	24 Environmental Management & Stewardship Committee meeting 6 p.m.	25	26	27		
28	29							

All meetings will be held at the DOE Information Center unless noted otherwise.ORSSAB Support Office: (865) 241-4583 or 241-4584DOE Information Center: (865) 241-4780

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Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sunday, February 21 and 28 at 10 p.m.
Lenoir City: Charter Cable Channel 193	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, February 22, 7 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB

FY 2016 ORSSAB Work Plan/Schedule

Date	Event	Торіс	Presenter	Location
		OCTOBER 2015		
Wed., 10/7	Executive	Work plan rollout		DOEIC
Wed., 10/14	Monthly meeting	Progress at ETTP	Cain	DOEIC
TBD	Site tour	On-site tour Q&A		ETTP
Wed., 10/28	EM/Stewardship	Work plan rollout; ETTP Zone 1 Proposed Plan detailed discussion		DOEIC
		NOVEMBER		
Wed., 11/4	Executive	General business		
Tues., 11/10	Monthly meeting	The Federal Oversight Model- Ensuring a Safe Work Environment (Meeting date changed due to Veteran's Day on 11/11)	Armstrong	Dinner meeting- location TBD
	Site tour	(No site tour)		
Wed., 11/25	EM/Stewardship	(No meeting-due to upcoming Thanksgiving holiday)		
		DECEMBER		
Wed., 12/2	Executive	(No meeting)		
Wed., 12/9	Monthly meeting	(No meeting)		
	Site tour	(no site tour)		
Wed., 12/23	EM/Stewardship	(No meeting-due to holidays)		
		JANUARY 2016		
Wed., 1/6	Executive	General business		DOEIC
Wed., 1/13	Monthly meeting	Waste Management	McMillan/Henry/DeMonia	DOEIC
TBD	Site tour	On-site tour/Q&A		TWPC
Wed., 1/27	EM/Stewardship	Waste Management detailed discussion		DOEIC
		FEBRUARY		
Wed., 2/3	Executive	General business		DOEIC
Wed., 2/10	Monthly meeting	Groundwater Monitoring Program	McMillan	DOEIC
TBD	Site tour	On-site tour/Q&A		ORR
Wed., 2/24	EM/Stewardship	Groundwater Monitoring Program presentation detailed discussion		DOEIC

Date	Event	Торіс	Presenter	Location
		MARCH		
Wed., 3/2	Executive	General business		DOEIC
Wed., 3/9	Monthly meeting	FY 2018 Budget Formulation and Prioritization of Projects	Stokes	DOEIC
	Site tour	(No site tour)		
Wed., 3/23 EM/Stewardship		FY 2018 Budget Formulation and Prioritization of Projects detailed discussion		DOEIC
Wed., 4/6	Executive	APRIL General business		DOEIC
Wed.,4/13				
Tues., 4/19	Chairs meeting tour	Chairs meeting tour		ORR
Wed., 4/20 Thurs., 4/21	Chairs meeting	Chairs meeting		DoubleTree, Oak Ridge
TBD	Community budget Community Budget Workshop community Budget Workshop		TBD	
Wed., 4/27	EM/Stewardship	Community budget workshop detailed discussion		DOEIC
		MAY		
Wed., 5/4	Executive	General business		DOEIC
Wed., 5/11	Monthly meeting	EM Disposal Facility (EMDF)	Wilkerson/Henry	DOEIC
TBD	Site tour	On-site tour Q&A		EMDF/EMWMF
Wed., 5/25	EM/Stewardship	EMDF detailed discussion		DOEIC
		JUNE		
Wed., 6/1	Executive	General business		DOEIC
Wed., 6/8		Technology Development to Support Mercury Cleanup Strategy	Wilkerson/Darby/Peterson	DOEIC
TBD	Site tour	On-site tour Q&A		
Wed., 6/22	EM/Stewardship	Technology Development to Support Mercury Cleanup Strategy detailed discussion		DOEIC
		JULY		
Wed., 7/6	Executive	Annual meeting planning		DOEIC
Wed., 7/13	New member training	(No ORSSAB monthly meeting)	Adler	DOEIC
TBD	Site tour	New Member Tour	Adler	ORR
Wed., 7/27	EM/Stewardship	(No meeting)		DOEIC

Date	Event	Торіс	Presenter	Location
		AUGUST		
Wed., 8/3	Executive	Annual meeting planning		DOEIC
Wed,, 8/10	Monthly meeting	(No ORSSAB monthly meeting due to Annual meeting)		
Sat., 8/13	Annual meeting	Annual meeting		TBD
	Site tour	(No site tour)		
Wed., 8/24	EM/Stewardship	(No meeting)		
		SEPTEMBER		
Wed., 9/7	Executive	General business		DOEIC
Wed., 9/14	Monthly meeting	Vision 2020-Planning for the Future of ETTP including Reuse, Historic Preservation and Stewardship	Cain/Adler/Cooke	DOEIC
TBD	Site tour	On-site tour/Q&A		ETTP
Wed., 9/28 EM/Stewardship		Vision 2020-Planning for the Future of ETTP including Reuse, Historic Preservation and Stewardship detailed discussion		DOEIC

BOARD MINUTES/ RECOMMENDATIONS

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Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved October 14, 2015 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, October 14, 2015, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn., beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting the ORSSAB support offices at (865) 241-4583 or 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 Richard Burroughs Martha Deaderick Bob Hatcher Lisa Hagy

Members Absent

Alfreda Cook, Vice Chair Mike Ford Howard Holmes Jennifer Kasten Coralie Staley Scott Stout Dennis Wilson David Hemelright, Secretary Donald Mei Greg Paulus Belinda Price, Chair Mary Smalling, by phone Ed Trujillo Wangfang Zhou

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Dave Adler, ORSSAB Alternate Deputy Designated Federal Officer (DDFO)
 Susan Cange, Manager for Department of Energy (DOE) Oak Ridge Environmental Management (EM) and ORSSAB DDFO
 Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC)
 Connie Jones, Environmental Protection Agency (EPA) Region 4.

Others Present

Wendy Cain, DOE Sophia Cui, Student Representative Spencer Gross, ORSSAB Support Office Alana Joldersma, Student Representative Pete Osborne, ORSSAB Support Office

Five members of the public were present.

Liaison Comments

Ms. Cange – Ms. Cange reported on a number of off-site conferences and meetings that board members may attend and she encouraged them to take advantage of those opportunities. Attendance would give members a better understanding of the DOE EM complex nationwide.

Upcoming meetings include the National Cleanup Workshop in Washington, D.C., next August-September. November 18-20 will be the annual DOE Intergovernmental Meeting in New Orleans. This is an annual meeting sponsored by all of the various intergovernmental groups that interact with DOE at their cleanup sites including the Energy Communities Alliance, the Environmental Council of States, the National Association of Attorneys General, the National Conference of State Legislators, the National Governors Association, and the State and Tribal Government Working Group.

Another conference is the Waste Management Symposium the week of March 7 in Phoenix, Ariz. Oak Ridge will be the featured site at the conference. A full day will be dedicated to the Oak Ridge site on March 8.

Board members interested in attending any of these conferences can contact the ORSSAB Federal Coordinator Melyssa Noe or ORSSAB staff.

Mr. Adler – no comments.

Ms. Jones – no comments.

Mr. Czartoryski – Steve Goins is now the new director at TDEC's Division of Remediation. Former director Andy Binford was appointed as an Environmental Fellow in the Division of Remediation.

Public Comment

None.

Presentation

Ms. Cain's presentation was on progress that has been made at East Tennessee Technology Park (ETTP) and work that remains. The main points of her presentation are in Attachment 1.

The end state for ETTP is a commercial industrial park. There remains some building demolition and soils cleanup and groundwater remediation. Work will continue to make land available for industrial reuse and commitments are to be fulfilled for historic preservation of parts of the site.

The near-term vision for ETTP (Vision 2016) is completion of demolition of all the gaseous diffusion (GDP) plant buildings by 2016. Four of the five GDPs have been demolished; only K-27 remains and it is almost ready for demolition. Vision 2020 is to complete all of ETTP cleanup and reindustrialization. Vision 2024 is to have all work completed at ETTP and focus cleanup work at Y-12 National Security Complex and Oak Ridge National Lab.

Page 4 of Attachment 1 shows all of the buildings at ETTP that have been demolished, prepared for demolition, slated for demolition, or have been transferred to other owners.

Page 5 of Attachment 1 indicates when demolition of the four GDPs was completed. Ms. Cain said demolition of K-31 was completed earlier that originally planned due to efficiencies and money saved in demolishing K-25. K-27 is being prepared for demolition and should be ready for demolition by the end of 2015.

Ms. Cain said even when all of the GDPs are gone there are still several hundred smaller support structures that need to be demolished. Plans are being made to address those facilities so work can begin right away on the support structures when K-27 is finished.

Ms. Cain then discussed remedial actions to be done at ETTP. The site is divided into two sections – Zones 1 and 2 (Attachment 1, page 6). Zone 1 is about 1,400 acres that surrounds the main industrial part of ETTP, Zone 2, where gaseous diffusion activities were done.

An Interim Record of Decision (ROD) for soils in Zone 1 was approved in 2002. A ROD for soils, buried waste and subsurface structures was signed in 2005. A final ROD for soils in Zone 1 is being developed. Still to come is a final ETTP sitewide ROD that will address groundwater and other media.

Ms. Cain talked more about the Interim ROD that was signed in 2002 (Attachment 1, page 7). That ROD established soil cleanup for worker and groundwater protection. It established unrestricted industrial use in the upper 10 feet of soil and identified and sought to remove sources of groundwater contamination. Interim ROD goals were met in most areas, however, Ms. Cain said there were some areas where goals were not met (Attachment 1, page 8). Those not meeting Interim ROD goals were deferred to a final Zone 1 ROD for soils, which is currently being worked.

A remedial investigation/feasibility study for Zone 1 soils remediation has been completed and approved by EPA and TDEC. The next step is development of a proposed plan for soils remediation. Ms. Cain said several iterations of a proposed plan have been done and she said a final proposed plan should be issued for public comment in November or December. The draft proposed plan has several alternatives. The main points of the preferred alternative are noted on page 10 of Attachment 1.

The steps for a final Zone 1 ROD for Soils are noted on page 11 of Attachment 1. The ROD will be completed after the public comment period and any comments received will be evaluated for possible incorporation into the ROD.

Ms. Cain noted a number of accomplishments that have been made in working toward the end state of ETTP as a commercial industrial park (Attachment 1, page 12).

The last element of the DOE EM program at ETTP is historic preservation (Attachment 1, page 13). In 2005 a memorandum of agreement (MOA) was signed providing for a number of elements of historic preservation at ETTP. Since then the MOA has been revised and a final MOA was signed in 2012 that established several elements of historic preservation of the K-25 site. The historic preservation of the K-25 site is independent of the recent establishment of the Manhattan Project National Historical Park that includes ETTP, Y-12, and Oak Ridge National Lab.

A professional design team and museum professional are working to design an equipment building that partially replicates the K-25 Building, a viewing tower, and a history center that will be located on the second floor of the ETTP fire station. The conceptual design has been completed and comments on the design have been received by the MOA signatory and consulting parties. A virtual museum is being developed as well. Ms. Cain said she expects the virtual museum to be ready for use within a few weeks.

Ms. Cain finished her presentation by noting some challenges in finishing the work at ETTP (Attachment 1, page 14). Lessons learned in demolishing the K-25 Building will be useful in demolishing K-27 because of similarities they share. The K-1037 Building has minimal contamination issues, but has classification concerns.

There are challenges related to safely deactivating and demolishing deteriorating facilities. There has not been an active mission at ETTP since 1987. While some of the buildings have been maintained there have been no upgrades. Some facilities to be demolished need work done to make them safe for workers.

Balancing the budget while maintaining a qualified workforce will be a challenge. Ms. Cain said the objective is keep as many of the experienced workers employed to achieve Vision 2020 and 2024.

After Ms. Cain's presentation a number of questions were asked. Following are abridged questions and answers.

<u>Mr. Hemelright</u> – Can you talk about the airport? (An airstrip has been proposed for ETTP running parallel to Highway 58.) <u>Mr. Adler</u> – The Metropolitan Knoxville Airport Authority is still working on the construction of an airport. DOE has completed an environmental assessment to look at the implications of transferring the land for use as an airport. We have a received a number of comments. Some are supportive; others resist the idea of an airport primarily because of potential noise impacts. Our analysis indicates there aren't significant impacts related to noise. We'll evaluate all the comments, but we will likely move toward transferring the property to the Metropolitan Knoxville Airport Authority. The authority has been investing some of their own money. They've done some drilling to better understand the depth of bedrock and what cut and fill would be required for construction. They are identifying potential funding sources to minimize what would be asked of the Federal Aviation Administration. Over the next few months we'll probably see more progress toward building an airport. It's land that probably can't be used for much else. Studies indicate there will be a need over the next 10 years for a general aviation airport. It would have a 5,000-foot runway, which could land small jets. It would be used for commercial cargo and charter flights.

<u>Mr. Paulus</u> – Approximately where will the airport be? <u>Mr. Adler</u> – Mr. Adler pointed out the location of the airport on the map on page 12. The runway would parallel Highway 58 on the front of ETTP. He noted that Blair Road would likely be routed through the center of ETTP to Highway 58 or use Perimeter Road that borders ETTP on the west

<u>Mr. Hatcher</u> – When you finish a project under budget and ahead of schedule does money carry over to the next budget or does it have to be used during the budget year? <u>Ms. Cain</u> – It carries over for use on-site. That's why we stay ahead and try to have projects ready to go. <u>Mr. Hatcher</u> – When you talk about a stand-alone park for industrial development and you want to turn over the land for industrial use how are you going to maintain the 10-foot upper soil use? Users may accidentally or surreptitiously excavate below 10 feet. <u>Mr. Adler</u> – What we've determined across most of the site is that there is no reason to assume there is a problem below 10 feet. We likely will be able to lift the 10-foot restriction but we'll have to do that working with EPA and TDEC. For the areas where the restriction needs to be in place to ensure our public health objectives are met, we will place in the deeds a prohibition on use below 10 feet unless an excavation/penetration permit is received. DOE is ultimately responsible for the safe use of land below 10 feet. In addition, the Remediation Effectiveness Report and the Five-year Review processes involve going out and checking on the remedies that have been put in place to make sure people aren't straying from the institutional requirements.

<u>Ms. Jones</u> – There are some areas that still need environmental assessments and Comprehensive Environmental Restoration Compensation and Liability Act remedial actions implemented. We do not know the extent of those remedial actions near the proposed airport. Will there be evaluations of the potential impact on these areas in the operation of the airport or impact on implementing remedial action? <u>Ms. Cain</u> – All of the exposure units that are of interest to the airport have been

cleared. We wouldn't have been able to get through the transfer process otherwise. <u>Mr. Adler</u> – The area where the airport will be has gone through the clean bill of health process. There are areas perhaps a few thousand feet away to the north that have not gone through the process. We looked at those areas to see if any DOE missions would be disrupted by the construction of an airport and we concluded that it would not.

<u>Mr. Trujillo</u> – Is the final ROD for soils in Zone 1 part of the vision schedule you mentioned? <u>Ms.</u> <u>Cain</u> – That is part of our Vision 2020 and some of the work we need to do to complete all of the ETTP cleanup scope. I've capture the next steps on page 7 [of Attachment 1]. This will be the last piece of the interim ROD where we were not able to meet all of our objectives.

<u>Mr. Tewes</u> – You have two organizations working on historical preservation. Can you comment on that? <u>Ms. Cain</u> – Our historic preservation commitments at ETTP are independent of the National Park Service work on the Manhattan Project National Historical Park. In communications with the Department of Interior they have been very interested in our efforts at ETTP. <u>Ms. Cange</u> – We are working closely with the National Park Service to make sure everything we do can be incorporated into the Manhattan Project National Historical Park. They are a consulting party in our MOA.

Committee Reports

EM & Stewardship – Mr. Hatcher reported that the committee met on September 16 and had a follow-on discussion to the September 9 ORSSAB presentation on the preferred alternative for a water treatment plant to remove mercury from Upper East Fork Poplar Creek at Y-12. That discussion led to approval of the draft recommendation on the proposed plan that was approved at this meeting (see Motions 10/14/15.2 and Attachment 2).

The committee will meet on Wednesday, October 28 at the DOEIC and will discuss a draft recommendation on the proposed plan for soils remediation in Zone 1 at ETTP.

Executive – Ms. Price reported that the board's work plan has been reviewed by EM Headquarters and approved by Ms. Cange. The date of the March meeting could change as it is the same date as the Waste Management Symposium in Arizona.

The committee discussed a white paper on 'Best Practices for Informed Budget Recommendations' (Attachment 2). The paper was presented at the Fall EM SSAB Chairs' meeting. ORSSAB Vice-chair Alfreda Cook co-authored the paper with Steve Hudson, chair of the Hanford Citizens' Advisory Board.

Mr. Hemelright said he believed ORSSAB and DOE Oak Ridge EM were well ahead of other sites in getting timely, accurate information regarding development of the Oak Ridge EM budget requests to DOE EM Headquarters. For years ORSSAB has provided input on the Oak Ridge EM FY +2 budget requests. Other SSABs are not always involved in providing input on their local DOE EM office budget requests.

The budgeting process was a topic of discussion at the Spring 2015 EM SSAB Chairs' meeting. As a result of that discussion Ms. Cook drafted the white paper, which was submitted at the Fall Chairs' meeting. Mr. Hemelright said the original intent was for it to be a recommendation to DOE EM, but it was decided that since each SSAB operates differently a recommendation was not appropriate.

Mr. Hemelright said the white paper outlines what other SSABs need to consider and ask of DOE prior to making a recommendation on site specific EM budget requests.

Ms. Price said the white paper was for information purposes and if any board member had questions or comments to submit them to the Executive Committee.

The next Executive Committee meeting will be Wednesday, November 4 at 6 p.m. at the DOEIC.

Ms. Price reminded the board that the November board meeting will meet on Tuesday, November 10. The normal meeting day is the second Wednesday, but that day falls on Veteran's Day, a federal holiday.

Ms. Price asked if there was desire by the board to put a break back in the meeting agenda. The consensus was not to put a break back in the agenda.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Tuesday, November 10 at 6 p.m. at Chuy's Restaurant, 9235 Kingston Pike in Knoxville, Tenn. The topic will be the 'Federal Oversight Model – Ensuring a Safe Work Environment.'

The minutes of the September 9 meeting were approved.

The Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex was approved (Attachment 3).

The EM SSAB recommendation on Supplemental Environmental Projects was approved (Attachment 4).

Federal Coordinator Report

No report. The Federal Coordinator Melyssa Noe was not present

Motions

10/14/15.1

Mr. Hemelright moved to approve the minutes of the September 9 meeting. Mr. Trujillo seconded and motion passed **unanimously.**

<u>10/14/15.2</u>

Mr. Hatcher moved to approve the Recommendation on the Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex (Attachment 3). Mr. Paulus seconded and the motion passed **unanimously.**

10/14/15.3

Mr. Hemelright moved to approve the EM SSAB recommendation on Supplemental Environmental Projects (Attachment 4). Mr. Trujillo seconded and the motion passed **unanimously.**

Action items

None.

The meeting adjourned at 7:33 p.m.

Attachments (4) to these minutes are available on request from the ORSSAB support office.

I certify that these minutes are an accurate account of the October 14, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

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

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Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Unapproved November 10, 2015 Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Tuesday, November 10, 2015, at Chuy's Restaurant meeting room, 9235 Kingston Pike, Knoxville, Tenn., beginning at 6 p.m.

Members Present

Leon Baker Alfreda Cook, Vice Chair David Hemelright, Secretary

Members Absent

Richard Burroughs Martha Deaderick Mike Ford¹ Lisa Hagy Bob Hatcher Howard Holmes¹ Jennifer Kasten¹ Greg Paulus Coralie Staley¹ Scott Stout¹ Wanfang Zhou

¹Second consecutive absence.

Liaisons, Deputy Designated Federal Officer, and Federal Coordinator Present

Susan Cange, Manager for Department of Energy (DOE) Oak Ridge Environmental Management (EM) and ORSSAB Deputy Designated Federal Officer

Kristof Czartoryski, liaison, Tennessee Department of Environment and Conservation (TDEC) Melyssa Noe, ORSSAB Federal Coordinator

Others Present

Jason Armstrong, DOE Spencer Gross, ORSSAB Support Office Alana Joldersma, Student Representative Pete Osborne, ORSSAB Support Office

No members of the public were present.

Donald Mei Belinda Price, Chair Mary Smalling Ed Trujillo Dennis Wilson

Liaison Comments

Ms. Cange – Ms. Cange said that in January there will be several open seats on the board. There are some candidates, but more are needed. She encouraged board members to talk to people they know who might be interested in joining the board.

She encouraged members to consider attending off-site conferences. There are several requests to attend the Waste Management Symposium in March 2016 and there are other conferences available in 2016.

Preparations to demolish the K-27 Building at East Tennessee Technology Park (ETTP) are on schedule and demolition is expected to begin in January. A celebration is planned when K-27 demolition is complete marking the completion of the demolition of all five gaseous diffusion buildings at ETTP.

Ms. Cange said work will be done to reduce risk at other excess facilities at ETTP as funding becomes available. The government is operating under a continuing resolution based on FY 2015 funding. Ms. Cange said the continuing resolution expires on December 11 and the hope is an appropriation bill will be in place and funding for the excess facilities will be available.

Mr. Hemelright asked if a date has been set for completion of demolition of K-27. Ms. Cange did not have a definite date, but the goal is to have it finished by the end of calendar year 2016. She said progress will depend on a number of factors such as weather.

Ms. Cange said the virtual museum for historic preservation at ETTP was unveiled earlier in the day. The link to the virtual museum was sent to board members earlier in the day (www.k-25virtualmuseum.org).

Launching of the virtual museum was part of the events of the day where the Secretaries of Energy and the Interior signed a memorandum of agreement establishing the Manhattan Project National Park, which includes Oak Ridge, Los Alamos, N.M., and Hanford, Wash. There will be a celebration of the establishment of the park at 2 p.m. at Oak Ridge High School on Thursday, November 12 and then a dedication ceremony at 4 p.m. at Jackson Square in Oak Ridge.

Mr. Czartoryski – Related to Mr. Armstrong's presentation Mr. Czartoryski said he was impressed with the safety culture in the DOE Oak Ridge Environmental Management Program and understands all the hard work involved in making projects safe.

Public Comment

None.

Presentation

Mr. Armstrong is the Associate Director of the Operations Management Division for the Oak Ridge Office of Environmental Management. His presentation was on ensuring safe operations of work being done on the Oak Ridge Reservation (ORR).

He began by talking about the major activities underway on the ORR.

The Transuranic Waste Processing Center processes and packages transuranic waste for disposal at the Waste Isolation Pilot Plant in New Mexico. Its key hazards are radiological, chemical, electrical, and industrial. He said it's essential that materials are packaged properly and safely for transportation and disposal.

At ETTP the primary work is decontamination, decommissioning, and demolition of old buildings. Four of the five gaseous diffusion buildings have been demolished. The key hazards are criticality, chemical, industrial, and radiological. A lot of heavy equipment is used to take down buildings, which causes large pieces of building materials to fall.

Uranium-233 disposition is a project at Oak Ridge National Lab (ORNL) that involves criticality, radiological, chemical, and industrial hazards. It, too, requires safe, compliant packaging and transportation. Mr. Armstrong said things must be done correctly or it affects operations in Oak Ridge.

Surveillance and maintenance and waste disposition activities are conducted at ORNL and Y-12 National Security Complex. Those operations also include criticality, radiological, chemical, and industrial hazards. Mr. Armstrong said both sites have unused buildings that require monitoring and a certain amount of maintenance.

Waste management operations include transportation and disposition of waste from around the ORR, including classified and non-classified waste. Hazards are radiological, industrial, and security concerns.

The last major operation is liquid and gaseous waste. Maintenance of operations is a priority where the hazards are radiological, chemical, electrical, and industrial.

Mr. Armstrong said these operations have been and are being done safely. He said safety is embraced by DOE and its prime cleanup contractor UCOR. Everyone must be actively engaged in these projects to make sure things are done safe and compliant.

He said all involved have shared values of accountability, integrity, impact, and innovation.

Mr. Armstrong explained the operations management division. It consists of three branches:

- Facility Oversight Branch
- Safety, Security, and Waste Management Branch
- Engineering Branch.

The Facility Oversight Branch has 12 facility representatives who act as management's eyes and ears in the field monitoring what the contractor is doing. These individuals undergo about 18 months of training and testing. They are responsible for occurrence reporting and contractor performance monitoring.

The Safety, Security, and Waste Management Branch consists of 10 subject matter experts/program managers. They are certified safety professionals and engineers. They are responsible for overseeing contractor implementation of key safety management programs.

The Engineering Branch has 11 engineers and scientists who work on safety basis documents. They use their engineering expertise in nuclear, chemical, structural, environmental, and radiological areas and monitor conduct of operations and work planning and control.

All involved interface with project management and contract management teams through integrated project teams in bi-weekly facility operations conference meetings and monthly project review conferences. Each integrated project team has a project manager and the team works to understand what works and what doesn't.

Mr. Armstrong said the goal is to work toward perfection, understanding that perfection isn't always possible, to achieve excellence. He said "we hold each other to that standard. We want a lot of communication and feedback." He said partnerships are critical for safe operations.

After Mr. Armstrong's presentation a number of questions were asked. Following are abridged questions and answers.

<u>Mr. Hemelright</u> – Do you share lessons learned? <u>Mr. Armstrong</u> – Yes, each contractor has a lessons learned program. We did a lessons learned assessment early on. Oak Ridge was the first to do that. When an event happens the facility rep will ask if a lesson learned was available that wasn't followed.

<u>Mr. Trujillo</u> – Does DOE have a data bank that a project was implemented and is now at a certain point? <u>Mr. Armstrong</u> – Every quarter a trend analysis is done to determine which program is improving and which isn't. <u>Ms. Cange</u> – We have performance metrics that track lost time and performance objectives. It's part of the Integrated Safety Management System. We get performance objectives from the contractor. Our objective is to have zero accidents. We know that's not always feasible, but we do what we can to lessen severity when there is an accident.

<u>Ms. Price</u> – Do you look at near misses? <u>Mr. Armstrong</u> – Yes, they are recorded. We had to define what a near miss is. A near miss is a close call where no barrier is in place. We have operational calls every Tuesday and Thursday where managers provide briefings on projects that include any near misses.

<u>Ms. Cook</u> – Are they any penalties or incentives? <u>Mr. Armstrong</u> – On the contractor side there is the performance evaluation management plan. They earn fees based on what metrics are met. <u>Ms. Cange</u> – Providing an award fee is the strongest incentive. They recognize that a reward for good performance is a possibility for additional work. Assessments are done once a year that can be used for contract proposals.

<u>Mr. Wilson</u> – What about contractor systems in place to meet DOE standards? <u>Mr. Armstrong</u> – Those systems have to be approved by DOE. DOE looks at efficiencies. The facility reps have a list of things to watch for, for instance things that might be related to the season (structures behaving differently in hot or cold temperatures).

<u>Mr. Trujillo</u> – As time passes and a facility deteriorates do you forecast things differently? <u>Mr. Armstrong</u> – We have a matrix for our work; a schedule of how things should be planned. But there is only so much money available. So the matrix is based on risk and funding. <u>Ms. Cange</u> – One of the positive outcomes of the closure of the Waste Isolation Pilot Plant was all sites looked at what they do help prevent problems. In Oak Ridge we looked to see if deferred maintenance was leading to problems. We decided to do preventive maintenance to reduce risk. Our FY 2017 budget request includes funding for maintenance and repairs of some systems. However, that might lead to a loss of funding for demolition.

Ms. Cange concluded the session by saying she wanted Mr. Armstrong to talk to the board about a safe work environment because his program is critical to the success of the environmental cleanup in Oak Ridge. She said operational oversight activities are what make the various cleanup projects successful.

Committee Reports

None.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Wednesday, January 13, 2016, at 6 p.m. at the DOE Information Center, 1 Science.gov Way, Oak Ridge, Tenn.

Lacking a quorum no motions were made.

Federal Coordinator Report

No report.

Motions

None.

Action items

1. Lacking a quorum to vote on the draft recommendation on a Proposed Plan for Soils in Zone 1 at ETTP, Ms. Cook asked if there would be D4 version of the proposed plan coming out before the board meets again in January. Ms. Noe said she would check to see if a D4 is planned.

The meeting adjourned at 7:18 p.m.

I certify that these minutes are an accurate account of the November 10, 2015, meeting of the Oak Ridge Site Specific Advisory Board.

Dave Hemelright, Secretary

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



Checklist

Recommendations and Comments Consideration for Board Approval

- I. Title: : Recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park
- II. In response to (why necessary): To make recommendations on the proposed plan for soils remediation at ETTP
- III. Committee: Environmental Management & Stewardship
- IV. Date submitted: January 13, 2016
- V. Date by which action is requested or required: January 13, 2016
- VI. Previous considerations: None
- VII. White Paper (if applicable):
- VIII. References (if applicable):



DATE

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

Dear Ms. Cange:

Recommendation: Recommendation on the Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park

At our January 13, 2016, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation on the Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park.

We appreciate your consideration of our recommendation and look forward to receiving your response by March 14, 2016.

Sincerely,

Belinda Price, Chair BP/rsg

Enclosure

cc/enc: Dave Adler, DOE-ORO Dave Borak, DOE-HQ Kristof Czartoryski, TDEC Connie Jones, EPA Region 4 Terry Frank, Anderson County Mayor Melyssa Noe, DOE-ORO John Owsley, TDEC Mark Watson, Oak Ridge City Manager Ron Woody, Roane County Executive File Code 140



Oak Ridge Site Specific Advisory Board Recommendation: Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park, Oak Ridge, Tennessee

Background

The East Tennessee Technology Park (ETTP) – formerly known as the Oak Ridge Gaseous Diffusion Plant – was built in the 1940s as part of the Manhattan Project to enrich uranium for use in nuclear weapons. Over time, the mission of the facility changed to that of producing low enriched uranium to fuel commercial and research nuclear reactors and researching new technologies for uranium enrichment. Shut down of the facility began in 1987 followed by the start of environmental cleanup work in the mid-1990s to remove residual contamination from the site.

The ETTP site has been subdivided into two environmental cleanup areas: Zone 1 and Zone 2. The perimeter of the site, Zone 1, encompasses the area used historically for light industrial and waste management activities. Zone 2 includes the heavy industrial area concentrated near the center of the site. Residual low-level radioactive and chemical contaminants at levels that are hazardous to human health and the environment have been identified in the soil, surface and groundwater, sediments, and buildings.

Most of the cleanup that was approved under the Zone 1 Interim Record of Decision (ROD) in 2002 has been completed. However, the goal to make Zone 1 suitable for unrestricted industrial use was not met in all areas due to unforeseen levels of contamination in soils. The "Final Proposed Plan for Soils in Zone 1 at East Tennessee Technology Park" (DOE/OR/01-2648&D3) dated June 2015, identifies the remedial action objectives (RAOs) proposed by the DOE to complete the cleanup of soils.

The proposed RAOs are summarized as follows:

- Provide for the use of the majority of Zone 1 as a future industrial site,
- Protect local-level terrestrial wildlife receptor populations from contamination in surface soil,
- Protect underlying groundwater and nearby surface water from contamination in soil.

The Final Proposed Plan (PP) discusses four (4) soil remediation alternatives:

- 1. No action.
- 2. Remove small ecological risk areas (within Duct Island East/West and K-901 Drainage Area) and provide additional land use controls/cover for K-770, Contractor's Spoil Area, K-720, and Duct Bank areas.
- 3. Remove K-770 and small ecological risk areas (as previously noted), and provide additional land use controls/cover for Contractor's Spoil Area, K-720, and Duct Bank areas.
- 4. Remove K-770, K-720, and small ecological risk areas (as previously noted), and provide additional land use controls/cover for the Contractor's Spoil Area and Duct Bank areas.

Alternative 2 is the DOE preferred remedy.

Discussion

The ORSSAB Environmental Management/Stewardship (EM/S) Committee reviewed the Final PP, participated in a tour of Zone 1, and heard multiple presentations by project representatives regarding proposed soil remediation strategies and the expected outcome. The EM/S Committee interprets the information as follows:

- Approved remedies for Zone 1 soils will render the area protective of human health and the environment.
- Cleanup goals will support unrestricted industrial or recreational use in the majority of areas within Zone 1.
- In areas where unrestricted industrial or recreational use is not feasible, land use controls such as deed restrictions, excavation/penetration permits, physical access controls, posting of signs, and monitoring of surface/groundwater will be implemented. DOE will be responsible for maintaining these controls until contamination no longer exists.
- Contaminated soils will be removed unless removal poses a high risk of spreading contamination during the cleanup process or costs for removal are prohibitive. If soils cannot be removed, the area will be capped (i.e., stabilized) and undergo monitoring by DOE until contamination no longer exists.
- Capped soil areas will be inspected on a schedule as approved by regulators and immediately remediated as appropriate to prevent migration of contamination.
- Potentially contaminated soils beneath subsurface slabs that remain in place will be monitored in the same manner as capped soil areas.
- Cleanup of any area identified as contaminated after transfer from DOE control will remain the responsibility of DOE.

Recommendation

Based on the EM/S Committee review, the Oak Ridge Site Specific Advisory Board recommends approval of the DOE preferred Alternative 2 in the Final PP with inclusion of the following assurances:

- Final remediation of Zone 1 soils will meet environmental standards that support and promote economic development.
- Zone 1 soil areas identified in Alternative 2 will meet all interpretations noted in the "Discussion" section above.
- Final PP will include a concise description of "unrestricted industrial use" vs. "recreational use" such that the reader clearly understands what activities can/cannot be performed in the designated area.
- Summary of the Oak Ridge Reservation Land Use Control Assurance Plan (DOE 1999) will be included in the Final Proposed Plan to benefit readers when considering whether assurances are adequate.
- Development of a Land Use Control Implementation Plan (LUCIP) prior to approval of the Final Proposed Plan will be considered.

Although this recommendation supports DOE's preferred alternative, concern remains that the Final Proposed Plan for Soils may be premature since surface/groundwater remediation has been deferred and additional remediation of soils may be needed in the future.

REPORTS & MEMOS

Recommendation Response Tracking Chart for FY 2016

	Date	То	Recommendation	Originating Committee	Response Date	Response Status	Committee Review of Response
1.	10-14-15	Sue Cange	Recommendation 229 on Preferred Alternative for the Proposed Plan for Water Treatment at Outfall 200 at Y-12 National Security Complex	EM & Stewardship	11-13-15	Closed. The public comment period for the proposed plan is closed. DOE is working on finalizing a Record of Decision that will select the preferred alternative.	

EM Project Update

ETTP	November	December
Zone 1 Final Soils ROD	The D4 version of the Proposed Plan was submitted to the regulators.	TDEC has approved the D4 version of the Proposed Plan. The extension request for the Record of Decision and follow-on documents was approved by the regulators.
K-25/K-27 D&D	Overall K-27 deactivation is 96.2 percent complete. Project has completed all Non-Destructive Assay (NDA) of the fluorine exhaust header and must remove four small sections. Remainder will be vented and purged, foamed, and marked before Criticality Incredible is declared.	Overall K-27 deactivation is 97 percent complete. Project has completed all NDA inside the facility and thus the discovery phase is completed. The project has removed all of the interferences that restrict the tubing/duct removal.
	Transite panel removal is 80 percent complete. The Stormwater Pollution Prevention Plan implementation completed digging and pouring concrete on the east and west ends, grouting 85 percent of the sanitary sewer pipes, 82 percent of the storm sewers, 80 percent of the asbestos abatement, and 58 percent of the electrical vaults.	Transite panel removal is 84 percent complete. The Stormwater Pollution Prevention Plan implementation completed digging and pouring concrete on the east and west ends, grouting 92 percent of the sanitary sewer pipes and 95 percent of the asbestos abatement. All of the storm sewers and electrical vaults were completed.
		The fluorine exhaust header vent, purge, drain, and inspect was completed. NDA and exceedance piping removals are complete; foaming is 85 percent complete, and pipe marking has begun.
K-732 Switchyard Demolition	Removal of transite panels and asbestos on the grounding conduit is complete. Waste characterization sampling is complete.	Waste characterization is complete. The removal of bushings is 48 percent complete.
	Radioactive surveying and waste characterization is 75 percent complete. Began asbestos abatement and it was completed.	Radioactive surveying was completed. The disassembly of the buss work, structural stands, and fire suppression system is 13 percent complete.
	Removal of the oils from the switchyard equipment is 35 percent complete.	Phase one of the asset recovery is complete. Phase two of the asset recovery is 65 percent complete.
		Phase three of the asset recovery, the removal of fiberglass tanks, is complete. Phase four of the asset recovery is 42 percent complete.
Remaining Facilities		The Low Risk/Low Complexity PCCR for FY 2015 was submitted to the regulators.
ORNL	November	December
U-233 Disposition		Building 3019 roof replacement activities continue with approximately 60 percent of the penthouse reroof activity complete.
		Repair of diesel generator 3146 was completed and returned to operations.
		The Closure Facility Hazards and Closure Facility Controls at Buildings 3017 and 3019 were approved.

EM Project Update

ORNL	November	December
ORNL Sludge Facility	A Request for Proposal letter was issued to the three Blanket	
	Purchasing Agreement holders (Alliant, Summit, and Strata-G) for a	
	new task for the characterization of the proposed sludge facility.	
OR Research	Pool draining was completed and fogging activities were begun.	The project was completed and all waste was disposed.
Reactor Pool Seep	Also, final surveys got underway.	
Y-12 Site	November	December
Outfall 200 Mercury		The ROD Amendment for the Phase I Interim Source Controls
Treatment Facility		Actions in UEFPC was submitted to the regulators. This adds a
(MTF)		response action to treat surface water entering East Fork Poplar
		Creek at Outfall 200 to remove mercury.
Off-Site	November	December
Cleanup/Waste		
Management		
Environmental	Comment resolution continued on the RI/FS document.	The extension request for the Proposed Plan and follow-on
Management		documents was approved by the regulators. Comment resolution
Disposal Facility		continued on the RI/FS document.
(EMDF)		
TRU Waste	Contract transition activities continue. Facility walkdowns and	The Site Treatment Plan annual update was approved by TDEC.
Processing Center	property inventory walkdowns are complete.	This update identifies enforceable milestones for mixed low level
		waste streams and transuranic mixed waste streams at all three
		plants.
	North Wind presented its process and expectations for transition and	
	DOE presented their oversight process to validate that North Wind is	
	ready to assume operational responsibility at the end of transition.	
ORR Groundwater		Initial test runs of the regional groundwater flow model were
Strategy		completed and preparation for model calibration is underway.
Reindustrialization		Independent verification of the radiological condition of the K-33
		Area Parcel and the K-31 Area Parcel was completed. This cleared
		the last environmental review required for DOE to release the
		property. The property consists of approximately 185 acres.
Water Resources	Preparation of the 2016 Remediation Effectiveness Report is	Preparation of the 2016 Remediation Effectiveness Report is
Restoration Program	ongoing.	ongoing.

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
- 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
- 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 2	015			
Intergovernmental Meeting with DOE (Pending requests:)	November 18-20, 2015	New Orleans	none	http://www.cvent.com/d/hr <u>q66w</u>	N/A	10/7/15
Perma-Fix Nuclear Waste Management Forum (Bi-annual event) Attendees: Hemelright, Holmes)	Nov. 30 - Dec. 3, 2015	Nashville	\$500	http://events.constantcont act.com/register/event?llr= 8n5x6qkab&oeidk=a07eb edtkdrb8c2e800	9/24/2015	8/26/15
Waste Management Symposium Attendees: Hemelright, Price	March 6-10, 2016	Phoenix	\$1,090 (early registration rate, ends 12/31/15)	<u>www.wmsym.org</u>	11/1/2015 (2)	1/6/16
National Environmental Justice Conference & Training (Pending requests: Deaderick)	March 9-12, 2016	Washington, D.C.	none	http://thenejc.org	N/A	2/3/16
Ohio EPA National Brownfields Conference (Pending requests:)	April 6-7, 2016	Columbus, Ohio	\$125 (est.)	http://epa.ohio.gov/derr/Br ownfieldConference2016. aspx	N/A	3/2/16
RadWaste Summit (Pending requests:	September 7-9, 2016	Summerlin, Nevada	\$625 (through 4/29/16)	http://www.exchangemonit or.com/forums/annual- radwaste-summit/	TBD	TBD (based on lock date)
2016 Fall Chairs Meeting (Pending requests:)	TBD	Las Vegas	none		N/A	TBD
Western Waste Site Tour (Pending requests:)	Postponed pending resolution of issues at WIPP	Isolation Pilot Plant, Nevada Nat'l Security	none	none		

Shading indicates closed trips