

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, June 14, 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. June
2. July (*draft*)
3. Work plan schedule of meetings

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1. May 10, 2017 draft meeting minutes
2. SSAB Chairs Recommendation on EM's Cleanup Performance Road Map and Communication Strategy
3. SSAB Chairs Recommendation on Above-Ground Storage at the DOE Waste Isolation Pilot Plant

REPORTS & MEMOS

1. Trip Report: Belinda Price – Spring EM SSAB Chairs Meeting
2. Trip Report: Dave Hemelright – Spring EM SSAB Chairs Meeting
3. Trip Report: Pete Osborne – Spring EM SSAB Chairs Meeting
4. Trip Report: Chris Beatty – 2017 Waste Management Symposium
5. EM Projects Update
6. Abbreviations/Acronym List for EM Projects Update
7. Travel Opportunities for FY 2017

AGENDA



Oak Ridge Site Specific Advisory Board
Wednesday, June 14, 2017, 6:00 p.m.
DOE Information Center
1 Science.gov Way, Oak Ridge, Tenn. 37831

AGENDA

- I. Welcome and Announcements (B. Price) 6:00–6:10
 - A. July 12 & 15—New Member Training Meetings
 - B. August 19—Annual Planning Meeting, 9:00 a.m.–2:30 p.m., Tremont Lodge, Townsend, TN
 - C. Introduction of New Student Representative (J. Mullis)
 - D. Presentation of Service Awards to Outgoing Members (J. Mullis)

- II. Comments from the Deputy Designated Federal Officer, and EPA and TDEC Liaisons (J. Mullis, C. Jones, K. Czartoryski)..... 6:10–6:15

- III. Public Comment Period (D. Wilson) 6:15–6:25

- IV. Presentation: The Federal Advisory Committee Act (D. Borak) 6:25–7:25
Question and Answer Period 7:25–7:40

- V. Call for Additions/Approval of Agenda (B. Price)..... 7:40

- VI. Motions 7:40–7:55
 - A. May 10, 2017, Meeting Minutes (D. Hemelright)
 - B. SSAB Chairs Recommendation on EM’s Cleanup Performance Road Map and Communication Strategy (B. Price)
 - C. SSAB Chairs Recommendation on Above-Ground Storage at the DOE Waste Isolation Pilot Plant (B. Price)
 - D. Election of Nominating Committee (D. Hemelright)
 - E. Second Consecutive Absence: Rosario Gonzalez (D. Hemelright)

- VII. Responses to Recommendations & Alternate DDFO’s Report (M. Noe) 7:55–8:00

- VIII. Committee Reports..... 8:00–8:05
 - A. EM/Stewardship (F. Swindler)
 - B. Executive (B. Price)
 - 1. Annual Meeting—Saturday, August 19

- IX. Additions to Agenda & Open Discussion..... 8:05–8:15

- X. Adjourn 8:15

PRESENTATION MATERIALS

Presentation to be
distributed at or prior
to meeting

CALENDARS



Oak Ridge Site Specific Advisory Board

June 2017

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

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

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, June 26, 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 July 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 Independence Day Holiday DOE/Staff Holiday	5	6	7	8
9	10	11	12 New Member Training 8:30 a.m.- 12:30 p.m. Y-12 New Hope Auditorium	13	14	15 New Member Training 8:30 a.m.- 12:30 p.m. Y-12 New Hope Auditorium
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

No ORSSAB meetings scheduled for July.

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Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Sundays at 8 p.m. (new time)
Lenoir City: Charter Cable Channel 193	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Monday, July 24, 7 p.m.
Oak Ridge: Channel 15	Monday, Wednesday, Friday, 8 a.m. & noon
YouTube	http://www.youtube.com/user/ORSSAB

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
JUNE					
Wed., 6/7	Executive	Annual meeting planning			DOEIC
Wed., 6/14	Monthly meeting	Federal Advisory Committee Act	Borak (HQ)	<i>None required</i>	DOEIC
	Site tour	<i>(No site tour)</i>			
Wed., 6/28	EM/Stewardship	Discussion of FY19 budget priorities recommendation		Hemelright Paulus Price Trujillo Wilson	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., 8/19	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 ETTP, 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 ETTP 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 May 10, 2017, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, May 10, 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
Christopher Beatty
Richard Burroughs
Martha Deaderick
Eddie Holden
Greg Paulus
Deni Sobek
Fred Swindler
Venita Thomas
Ed Trujillo, presiding

Rudy Weigel
Phil Yager

Members Absent

Kathryn Bales
Mike Ford¹
Rosario Gonzalez¹
David Hemelright, Secretary
Howard Holmes
Belinda Price, Chair
Mary Smalling¹
Dennis Wilson, Vice Chair

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)
Connie Jones, Environmental Protection Agency (EPA), via telephone hookup
Jay Mullis, Acting Manager DOE-OREM and ORSSAB DDFO
Melyssa Noe, ORSSAB Alternate DDFO, DOE-OREM

Others Present

Brian DeMonia, DOE
Luther Gibson
Spencer Gross, ORSSAB Support Office
Lara Manning, Oak Ridge High School
Gabrielle McAllister, Hardin Valley Academy
Bill McMillan, DOE
Chloe Nussbaum, Oak Ridge High School

Eleven members of the public were present.

Liaison Comments

Mr. Mullis – Congress has approved the FY 2017 federal budget and Mr. Mullis said OREM received increases in some key areas such as transuranic (TRU) waste and uranium-233 disposition. He said OREM received about \$20 million more to address excess facilities at Y-12 National Security Complex.

He said he can provide more details on budget appropriations at a subsequent meeting.

Mr. Adler – no comments

Mr. Czartoryski – no comments.

Ms. Jones – EPA’s delegation of authority manual has been revised by the new EPA administrator E. Scott Pruett. Ms. Jones said that change will impact the remedial decision for the proposed Environmental Management Disposal Facility, because the record of decision (ROD) for the facility will not be signed at the regional level, but by Mr. Pruett at EPA headquarters. This is a change from previous procedures, but Ms. Jones said it is not unusual for a new administration to change procedures. Mr. Trujillo asked if the change would affect the schedule for building the new disposal facility. Ms. Jones said it would have some impact in terms of time to get an agreed upon ROD to EPA headquarters and answer any questions headquarters may have. Ms. Jones explained that the regional administrator can approve any remedial work up to \$50 million but anything more than that must be signed by the EPA administrator.

Mr. Mullis said OREM had just learned of this change and will have to see what impact it will have on the schedule for the proposed facility.

Public Comment

Mr. Gibson was an ORSSAB member from 1999 to 2005. He has recently retired from Y-12 and hopes to attend more board meetings.

Presentation

Two presentations on key material disposition were given. Mr. DeMonia presented first on Progress in Oak Ridge Key Material Disposition. The main points of his presentation are in Attachment 1.

At the beginning of fiscal year (FY) 2012 there were eight waste streams that had no path to disposal. All but one have been addressed (Attachment 1, page 2). In addition to the eight there were several others that were either too expensive or too difficult to address.

One of the no-path-to-disposal waste streams was legacy mercury waste. It had been previously treated by vacuum-assisted thermal absorption (Attachment 1, page 3). In 2012 UCOR, OREM’s waste management contractor, solicited a bid to re-treat the material. Only one offer was submitted for \$4.7 million. DOE petitioned EPA for a variance for treatment standards. The proposal was to macroencapsulate six containers that had heavy metals and to direct dispose the remaining 28 containers offsite in Nevada. EPA agreed to the proposals and OREM was able to dispose of the material for \$160,000.

Another waste stream was 4,000 cubic yards of PCB contaminated soil that was generated from a remedial action in 1987 (Attachment 1, page 4). The soil did not meet the waste acceptance criteria (WAC) for disposal in the onsite disposal facility, the Environmental Management Waste Management Facility (EMWMF). The only option at the time was to treat the soil and dispose offsite. OREM decided to resample the soils to see if the waste no longer contained solvents that prevented onsite disposal. The results were presented to TDEC and EPA, which agreed with OREM’s petition for a ‘no longer contains’ designation and that the soils now meet EMWMF’s WAC. The original estimate to treat and dispose the soil offsite was \$121 million. The new estimate to dispose at EMWMF is \$3 million. Mr. DeMonia said this project was originally designated as too expensive/too difficult to address, but he said with additional funding the soil should be disposed in EMWMF in the near future.

The last no-path-to-disposal waste was 60 containers of dioxin/furan that could not be disposed in EMWMF. Mr. DeMonia said OREM decided to research the original documents to validate the original waste codes. He said that research determined that 34 containers of the material could be incinerated. DOE EM headquarters sponsored a treatability study for the remaining 26 containers. Mr. DeMonia said nine drums that contained solid waste could be sent out west for disposal. OREM contacted some local vendors about incinerating 17 containers that contained aqueous waste. DSSI, a local incineration firm, agreed to incinerate the contents of the remaining 17 drums, which will eliminate the last no-path-to-disposal waste.

Mr. DeMonia said recycling of scrap metal is a waste stream that had been designated as too expensive/too difficult to do (Attachment 1, page 6). He said it is difficult to declare scrap metal as having no radioactive contamination. Because scrap metal is generated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) offsite facilities must have authorization from EPA to receive CERCLA waste and the waste must be uncontaminated. The strategy to dispose of scrap metal was to allow for recycling without need for CERCLA authority, which allows for offsite recycling. Mr. DeMonia said OREM negotiated with TDEC and EPA to take the scrap metal out of the CERCLA program. As a result more than 5,200 cubic yards of scrap metal have been recycled.

Mr. DeMonia said OREM has dispositioned all but two legacy mixed waste streams, but he said there now is a disposal path for them (Attachment 1, page 7). He said all legacy mixed waste streams should be addressed by this time next year. He said success of the program was possible because of the partnership among OREM, EPA, TDEC, and UCOR. Mr. DeMonia said OREM's policy of disposing when generated will prevent future accumulation of waste.

After Mr. DeMonia's presentation, some questions were asked. Following are abridged questions and answers.

Mr. Beatty – On slide 3 you said the original estimate for retreatment was \$4.7 million and the new strategy estimate was \$160,000. That's pretty amazing. What changed? Were the original requirements for retreatment so unknown that you really didn't understand it at first? Mr. DeMonia – The regulations required that the waste be retreated unless we petitioned EPA for release from that regulation. To retreat would have resulted in a 300 percent increase in volume of waste. We had to convince EPA that it didn't make sense to do that and they agreed with us.

Mr. Czartoryski – What we have to focus on is this was a very difficult waste stream. It contained mercury and PCBs. The treatment standards were not established for this type of complicated waste. It required some alternative thinking and approaches, and I would like to recognize DOE and Mr. DeMonia for marshalling this process and being able to get this waste out of Oak Ridge to safe disposal at the Nevada National Security Site (NNSS).

Mr. Trujillo – Regarding the chart on page 2, the first three are listed as classified waste. Were they disposed as non-classified? Mr. DeMonia – It was blended so it could be shipped. Mr. Trujillo – What about all the money that was saved? Mr. Mullis – Much of this waste was not in the original UCOR contract for disposition. It was stored because there was no path. Much of the funding used for this came from projects that were completed under budget. When we received some increases in appropriations we were able to use some of that additional money for these projects.

The second presentation of the meeting was a Transuranic Waste Update provided by Mr. McMillan. The main points of his presentation are in Attachment 2.

The TRU Waste Processing Center (TWPC) was built in the early 2000s to process TRU debris and liquids (Attachment 2, page 2). It was built near the Melton Valley Storage Tanks, which holds about

2,000 cubic meters of TRU sludge. It came from operations at Oak Ridge National Lab from the liquid low level waste treatment system. The first mission of TWPC was to process the supernate of the liquid low level waste. Supernate is the headwater in a waste container after the solid material has settled. TWPC processed the supernate as a low level waste stream in 2004 and shipped it to NNSS. The original plan was to process the remaining sludge and ship it to the Waste Isolation Pilot Plant (WIPP) in New Mexico, but WIPP was not ready at the time to receive remote-handled (RH) TRU waste. TWPC decided to focus on debris waste streams of contact-handled (CH) and RH waste. Mr. McMillan said TWPC will be finished with TRU debris processing in two or three years.

TRU debris processing at TWPC is done by Northwind Solutions. The certification of the waste to ensure it is processed and packaged properly before shipping to WIPP is done by the Nuclear Waste Partnership, LLC Central Characterization Program, managed by the DOE Carlsbad Field Office.

Mr. McMillan explained that TRU waste is long-lived radioactive waste that must be disposed in a deep geologic repository (WIPP). He said most of the wastes processed in Oak Ridge are things like contaminated clothes, rags, tools, glassware, and other trash. Oftentimes as the waste is characterized it is determined that it is no longer considered transuranic and can be disposed as low level waste at NNSS.

Significant progress has been made in processing and disposing of TRU waste in Oak Ridge (Attachment 2, page 4). Of the original CH inventory of about 1,580 cubic meters, 95 percent has been processed and 66 percent has been shipped. Mr. McMillan said most of the waste shipped was actually low level waste sent to NNSS.

Of the RH inventory of about 670 cubic meters, 85 percent has been processed and 26 percent has been shipped. Mr. McMillan said some of that waste was determined to be CH or low level. The remaining inventory includes a small volume of waste streams that are difficult to process (Attachment 2, page 4). Mr. McMillan said some techniques had to be developed to deal with some of these wastes.

In 2014 WIPP was shut down because of a couple incidents, and it has just recently reopened. TWPC continued to process TRU during the shutdown that has resulted in a significant backlog of waste that is ready to ship (Attachment 2, page 5). TWPC had processed 3,177 drums of CH waste under WIPP's WAC Revision 7. In addition, TWPC has processed 2,754 drums of CH waste under WAC Revision 8 that is ready to ship.

On the RH side, TWPC processed 58 drums under WAC Revision 7, and 101 under WAC Revision 8.

During the WIPP shutdown TWPC continued to process CH TRU waste and the waste has been stored at TWPC and nearby UCOR facilities (Attachment 2, page 6). The configuration of TWPC only allows storage of 19 canisters of RH waste. To solve the storage problem OREM developed remote handled overpack containers (ROPs). The canisters holding RH waste are placed in the shielded ROPs, which can be directly handled and taken to a UCOR facility for storage until shipments resume to WIPP. When ready for RH waste shipment, the ROPs can be brought back to TWPC, the canisters removed and placed in a shipping container for WIPP.

Mr. McMillan said OREM expects to be finished with TRU debris processing in 2019. CH shipments to WIPP are expected to resume in summer 2017. Mr. McMillan said OREM has some soils waste in storage that WIPP needs to balance some of the debris shipments it is getting from other sites. The soils waste will be the first shipped from Oak Ridge.

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

Ms. Sobek – When the waste gets to WIPP does it stay in the containers? Mr. McMillan – Yes. Packs of drums of waste go into TRUPACT containers, which are placed on trucks to WIPP. When a truck arrives the packs are removed and go into the underground mine at WIPP. Mr. Sobek – If it's packaged like that how do they use that to balance the other debris they need the soils for. Mr. McMillan – In the rooms they call panels at WIPP there must be a certain ratio of debris waste that is higher activity versus soil waste of lower activity. These packs of waste are placed with other waste streams in the correct configuration within the panels.

Mr. Holden – How long will it take to transport all of the TRU waste out of Oak Ridge? Mr. McMillan – It will probably take four to five years. Mr. Mullis – After the accidents at WIPP they had to throttle back the ventilation. As a result there can't be as much equipment underground. But as ventilation is upgraded we hope the shipping rate will go up. Right now it will be about one shipment a week from Oak Ridge. It used to be four or five. Mr. McMillan – Prior to the accident WIPP used to receive 20-25 shipments a week from sites across the complex. Right now they are targeting five.

Mr. Paulus – Will the ROPs be contaminated after you use them? Mr. McMillan – The canisters holding radioactive material are clean on the outside so they won't contaminate the ROPs.

Mr. Swindler – Is there any applicability of the vitrification program at Hanford that would apply to any of the things you're doing here? Mr. McMillan – I'm not aware of any connection of TRU waste to vitrification.

Mr. Holden – How long will it take to transport all of the TRU waste out of Oak Ridge? Mr. McMillan – It will probably take four to five years. Mr. Mullis – After the accidents at WIPP they had to throttle back the ventilation. As a result there can't be as much equipment underground. But as ventilation is upgraded we hope the shipping rate will go up. Right now it will be about one shipment a week from Oak Ridge. It used to be four or five. Mr. McMillan – Prior to the accident WIPP used to receive 20-25 shipments a week from sites across the complex. Right now they are targeting five.

Mr. Czartoryski – DOE is not taking full credit for the tremendous job that its contractors are doing on this job. The certification requirements are the most stringent in the world to get waste to WIPP. We're talking about waste that accumulated for many years. Some of the drums are coming from storage and some are bulging and have to be vented. You have to prevent some pyrophoric incidents. You have a lot of unknowns. There are some heavy boxes that must be broken apart. Some of it has to be manipulated in glove boxes. This is an important project. This is some of the most dangerous waste we have on the Oak Ridge Reservation and we are making tremendous progress in dispositioning this inventory. Mr. McMillan – As an example we used to super-compact waste and we had drums that had metal pucks that were mashed together in a dense block. Requirements changed, resulting in the elimination of the acceptability of super-compacted waste at WIPP. We had to develop methods in the box breakdown area where workers cut through these metal blocks of waste with saws. Managing transuranic waste with saws and working in bubble suits - it's probably one of the most hazardous operations in Oak Ridge.

Committee Reports

EM & Stewardship – Mr. Trujillo said the committee discussed and agreed to send to the board for approval the two recommendations that were approved at this meeting.

The committee also had a preliminary discussion about a recommendation to OREM on its 2019 budget request to DOE Headquarters. Ms. Noe said OREM is interested in the board's priorities for cleanup and could move forward on putting together a recommendation based on those priorities.

Mr. Trujillo said Roger Petrie with RSI distributed a four-page color publication "Groundwater Activities on the Oak Ridge Reservation" at the meeting. Mr. Trujillo encouraged members to read the publication

(staff distributed the publication via email to board and committee members after the April 26 meeting. It is also available at the DOE Information Center).

Executive – Mr. Trujillo said the committee reviewed the recommendations that were approved at this meeting and approved them to go on the agenda for full board approval.

The committee also discussed plans for the annual planning meeting and new member applications that have been submitted to headquarters for approval.

Open Discussion

None.

Announcements and Other Board Business

ORSSAB's next meeting is Wednesday, June 14. The topic will be on the Federal Advisory Committee Act. The speaker will be the EM SSAB Designated Federal Officer David Borak.

Mr. Mullis recognized outgoing student representatives Lara Manning and Gabrielle McAllister for their service to the board by presenting them with appreciation plaques. Mr. Trujillo also thanked them for their service. They received thank you letters from ORSSAB Chair Belinda Price.

Mr. Mullis introduced new student representative from Oak Ridge High School Chloe Nussbaum to the board.

Alternate DDFO Report

Ms. Noe said the new member membership package is being vetted at DOE Headquarters. She said it will be a few weeks before the appointees are approved.

David Borak, the Designated Federal Officer for the EM SSAB, will be giving the presentation at next month's meeting on the Federal Advisory Committee Act, which is the legislation that establishes advisory boards like the EM SSAB and ORSSAB. He has told Ms. Noe he will need at least an hour to an hour and half on the topic so the June board meeting could go until 8 p.m.

The ORSSAB annual planning meeting is scheduled for Saturday, August 19 in Townsend, Tenn. Staff will be contacting members to determine if they plan to attend so arrangements can be made for travel

and lodging. She said she is working with the Dancing Bear Lodge to arrange a Friday evening dinner that will be within the per diem allowed for meals.

Motions

5/10/17.1

Mr. Weigel moved to approve the minutes of the February 8, 2017, board meeting. Mr. Paulus seconded and the motion passed **unanimously**.

5/10/17.2

Mr. Paulus moved to approve the Recommendations on Biology Complex Facilities at the Y-12 National Security Complex (Attachment 3). Mr. Swindler seconded and the motion passed **unanimously** (Ms. Bales and Ms. Price voted *yea* via telephone).

5/10/17.3

Mr. Burroughs moved to approve the Recommendations on Groundwater Investigations at the DOE Oak Ridge Reservation (Attachment 4). Mr. Baker seconded and the motion passed **unanimously** (Ms. Bales and Ms. Price voted *yea* via telephone).

Action Items

None.

The meeting adjourned at 7:19 p.m.

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

I certify that these minutes are an accurate account of the May 10, 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

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

Hanford Idaho Nevada Northern New Mexico
Oak Ridge Paducah Portsmouth Savannah River

Recommendation: Cleanup Performance Road Map and Communication Strategy

The EM SSAB Chairs have been tasked with the development of a recommendation addressing DOE-EM's need to define communication and performance metrics that better identify project accomplishments, risks and challenges associated with cleanup activities to the public.

DOE-EM should revise metrics so the public can better understand the status of cleanup projects across the complex in the near-term. The intent is to quantify and build transparency into the status of specific projects as they move along the continuum of meeting agreements and legally binding dates for cleanup completion.

DOE-EM should utilize existing resources and simple, visual examples within the Department and other U.S. government agencies (e.g., U.S. Geological Survey, National Oceanic and Atmospheric Administration). DOE-EM should include DOE-EM complex-wide and individual site matrices information and success data.

There needs to be two clearly-described visual road maps:

- 1) A visual road map that depicts each site's schedule and key milestones
- 2) A visual road map that depicts DOE-EM's key milestones in totality.

As a complex-wide communication metric, we recommend DOE-EM identify successfully completed projects as benchmarks (e.g., Fernald and Rocky Flats cleanup sites) when developing performance metrics for similar remediation projects. These metrics might help the public to better understand the project lifecycles and the application of performance metrics used to measure successful project completion.

DOE-EM should communicate crucial, high level performance indicators that clearly show if schedules are being compromised. We suggest removing Safeguards and Securities and hotel costs from the budget bundle and giving them their own line items to clearly identify significant costs that are not actual cleanup actions.

DOE-EM should identify key project assumptions and project risks that are crucial to each individual project and the complex-wide schedule. DOE-EM should clearly identifying the challenges acknowledges realities that should be reflected. It can set up a healthy dynamic for DOE-EM to demonstrate and communicate that it understands and acknowledges the difficulties inherent to these complex cleanup missions.

Advisory boards at each site are tasked with providing project priorities on an annual basis. However, this tool allows stakeholders to see the DOE-EM mission in totality, provides a high-level overview of each project and allows advisory boards to have a more comprehensive view of DOE-EM's work.

Recommendation: Above Ground Storage at the Waste Isolation Pilot Project

Background:

A key component to successfully reducing risks to human health and the environment from legacy Transuranic Waste (TRU) located throughout the DOE-EM Complex is the ability to achieve final disposition in the Waste Isolation Pilot Plant (WIPP), located near Carlsbad, New Mexico. With the re-licensing of the WIPP site, we now see the extension of its operation for decades into the future. We champion the potential for expansion of the retrieve/treat/dispose efforts of the TRU program.

In past years, as individual sites queued up for removal, treatment and disposal of their respective TRU inventories, we saw a bottleneck in WIPP operations and TRU remediation efforts due to current capacity limits at WIPP for temporarily staging TRU drums in above ground, surface storage.

Maintenance shutdowns, lack of proximity of DOE-EM sites to the WIPP facility and inclement weather disrupting transportation all have impacted the efficiency of the WIPP program to meet its mandates. Concurrently, at individual sites, we have seen the extension of mortgage costs as sites package and then wait for shipping and disposition. In fact, multiple sites currently have a backlog of drums ready for shipment.

The EM SSAB Chairs believe that DOE's submittal of a modification to its Class 3 Hazardous Waste Disposal Permit with the New Mexico Department (NMED), proposing the construction of an above-ground storage facility at the WIPP site has the potential to be the right answer for addressing the current inefficiencies in operations.

The above ground storage facility proposed by WIPP has the potential to make the TRU waste disposal process more efficient. The permit modification submitted to the NMED contains a quite detailed description of this proposed addition to the WIPP facility. It is a fairly straightforward construction project and there is little reason to doubt, that if constructed to the proposed specifications, it would be capable of temporarily storing a large quantity of TRU waste. However, the permit modification provides no information on the cost of this facility, or the expected benefits to be derived from either in terms of the more efficient operation of the WIPP facility, or the reduction in risk around the DOE complex from the more efficient operations of WIPP and the TRU waste disposal process.

Recommendation:

- 1) The EM SSAB recommends seeking further efficiencies in the WIPP TRU program in order to streamline, expand and accelerate TRU waste disposition.
- 2) The EM SSAB recommends that DOE prepare for public review, information on the expected benefits and costs of this proposed addition to the WIPP facility in terms of more efficient operation of WIPP, an overall reduction of risk around the DOE complex from an increased rate of disposal of TRU waste, and the impact of the cost of this facility on other DOE facilities. Allowing nearly a one-year buffer of TRU waste inventory to be safely stored above ground at WIPP for a period of up to one year, seems to makes sense.

REPORTS & MEMOS



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** Belinda Price
- II. Date(s) of Travel:** May 9–10, 2017
- III. Location of Meeting:** Paducah, Kentucky
- IV. Name of Meeting:** SSAB Chairs Meeting
- V. Purpose of Travel:** To represent ORSSAB at the semi-annual meeting of the EM SSAB. Participate in discussions and contribute to joint EMSSAB recommendations
- VI. Discussion of Meeting:**

I attended the spring meeting of the EM SSAB, which gathers leadership from each of the eight Site Specific Advisory Boards (SSABs) organized under the EM SSAB to exchange ideas, share recent accomplishments and challenges, and participate in discussions of DOE's ongoing missions at its major cleanup sites across the nation.

Because of personal commitments I was only able to attend the meeting on Wednesday May 10th. The meeting was facilitated by Eric Roberts, who supports both the Paducah and Portsmouth SSABs. Other Oak Ridge attendees representing ORSSAB during the meeting included Dennis Wilson and Dave Hemelright. In addition, Pete Osborne, ORSSAB Administrator, and Ben Williams, Public Affairs Specialist with the DOE Oak Ridge Environmental Management (EM) program attended. Dave Borak, the EM SSAB Designated Federal Officer, presided.

The day I attended the meeting, there were presentations by Acting Assistant Secretary for EM Sue Cange; a round robin presentation of the eight SSABs' topics, activities, or accomplishments; a field operations update by Stacy Charboneau, Associate Principle Deputy Assistant Secretary for Field Operations; and a discussion of communicating EM progress and performance by Steve Trischman, Director of Budget and Planning, and Kristen Ellis, Director of the DOE Office of External Affairs.

With respect to the EM Program update, Ms. Cange spoke on a variety of topics, including EM progress and priorities, activities at the Waste Isolation Pilot Plant (WIPP), and the status of transition activities with the new administration. Ms. Cange proposed changes to the third "Charges for the Chairs" that were previously introduced to the chairs by then Principal Deputy Assistant Secretary for EM Mark Whitney (best practices for transitioning from a nuclear waste facility to community reuse or reindustrialization). Ms. Cange suggested broadening the first charge (Recommendations for EM's strategic planning and communication for future cleanup) to include a 5-year plan to inform outreach efforts across the complex and better communicate EM successes.

I gave the ORSSAB presentation under the Chairs Round Robin, focusing on four upcoming priorities for Oak Ridge Reservation cleanup that the board has identified: support for offsite groundwater monitoring, ensuring future waste disposal capacity, excess facilities disposition, and addressing mercury in East Fork Poplar Creek.

EM SSAB Product Development – The following three draft recommendations were discussed/revised (outcomes noted):

1. Above Ground Storage at WIPP – Approved by Chairs with revisions
2. National Transportation Study – Tabled by Chairs
3. Cleanup Performance Road Map and Communication Strategy – Approved by Chairs with revisions

VII. Significance to ORSSAB:

Understanding other boards' issues and maintaining working relationships with the other SSABs is invaluable to helping this board do its job. Working on joint recommendations provides added value for the meeting participants and DOE.

VIII. Names & Telephone Numbers of Significant Contacts:

A current list of EM SSAB contacts is available from the ORSSAB support office.

IX. Action Items:

1. The Fall Chairs meeting will be held in Hanford, Wash. ORSSAB members should be encouraged to participate in this and other available meetings that enhance their understanding of the DOE EM process and cleanup progress at other DOE sites. Further, participation in these types of meetings allows members to meet other SSAB members from around the DOE complex which is beneficial to the SSAB community.
2. Put the two approved chairs recommendations on the June 14 ORSSAB meeting agenda for consideration for approval.

X. Traveler's Signature & Date:



Signature:

Date: 5/31/17



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** David Hemelright
- II. Date(s) of Travel:** May 9–10, 2017
- III. Location of Meeting:** Paducah, Kentucky
- IV. Name of Meeting:** SSAB Chairs Meeting
- V. Purpose of Travel:** To represent ORSSAB at the semi-annual meeting of the EM SSAB. Participate in discussions and contribute to joint EMSSAB recommendations
- VI. Discussion of Meeting:**
See Belinda Price's report.

VII. Significance to ORSSAB:

Understanding other boards' issues and maintaining working relationships with the other SSABs is invaluable to helping this board do its job. Working on joint recommendations provides added value for the meeting participants and DOE.

VIII. Names & Telephone Numbers of Significant Contacts:

A current list of EM SSAB contacts is available from the ORSSAB support office.

IX. Action Items:

1. The Fall Chairs meeting will be held in Hanford, Wash. ORSSAB members should be encouraged to participate in this and other available meetings that enhance their understanding of the DOE EM process and cleanup progress at other DOE sites. Further, participation in these types of meetings allows members to meet other SSAB members from around the DOE complex which is beneficial to the SSAB community.
2. Put the two approved chairs recommendations on the June 14 ORSSAB meeting agenda for consideration for approval.

X. Traveler's Signature & Date:

David Hemelright

Signature:

Date: 5/31/17



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** Pete Osborne
- II. Date(s) of Travel:** May 9–11, 2017
- III. Location of Meeting:** Paducah, Kentucky
- IV. Name of Meeting:** SSAB Chairs Meeting
- V. Purpose of Travel:** To support ORSSAB participation in the meeting and gather information necessary to follow up on meeting actions and recommendations.
- VI. Discussion of Meeting:**

The meeting was held Wednesday, May 10, from 8:00 a.m. to 5:00 p.m., and Thursday, May 11, from 9:00 a.m. to 12:00 p.m. at the Luther F. Carson Four Rivers Center in Paducah. A tour of the DOE Paducah Gaseous Diffusion Plant preceded the meeting on Tuesday, May 9, from 7:00 a.m. to 11:30 a.m.

The meeting was facilitated by Eric Roberts, who supports both the Paducah and Portsmouth Site Specific Advisory Boards (SSABs). Oak Ridge attendees included Belinda Price, Dennis Wilson, and Dave Hemelright, who represented ORSSAB during the meeting discussions, and Ben Williams, Public Affairs Specialist with the DOE Oak Ridge Environmental Management (EM) program. EM SSAB Designated Federal Officer Dave Borak presided.

The agenda can be found in the notebook distributed at the meeting (Attachment 1). Copies of all meeting presentations are also available on the EM SSAB chairs website maintained by DOE-Headquarters at <https://energy.gov/em/services/communication-engagement/em-site-specific-advisory-board-em-ssab>. Minutes were taken during the meeting, and a transcript should be available from DOE in the near future.

The Paducah site and its SSAB did an outstanding job in setting up and running the meeting. The meeting materials were superior in every way—well designed, thorough, and easy to understand. The arrangements for the host hotel and the meeting space were excellent. And the SSAB in particular deserves praise for the hospitality shown to attendees during the meeting. The after-hours activities planned for attendees must have taken quite a lot of work to pull together, and I think everyone who attended would agree that they were all wonderful.

Wednesday, May 10

The first day of the meeting featured presentations by Acting Assistant Secretary for EM Sue Cange; a round robin presentation of the eight SSABs' topics, activities, or accomplishments; a field operations update by Stacy Charboneau, Associate Principle Deputy Assistant Secretary for Field Operations; and a discussion of communicating EM progress and performance by Steve Trischman, Director of Budget and Planning, and Kristen Ellis, Director of the DOE Office of External Affairs.

EM Program Update – Ms. Cange spoke on a variety of topics, including EM progress and priorities, activities at the Waste Isolation Pilot Plant (WIPP), and the status of transition activities with the new

administration. The discussion points were very high level and focused largely on previously disseminated information. Of particular importance, however, was the change Ms. Cange proposed to the “Charges for the Chairs” that were first introduced to the chairs by then Principal Deputy Assistant Secretary for EM Mark Whitney. The three charges he issued to the chairs at the April 2016 chairs meeting in Oak Ridge were to come up with:

1. Recommendations for EM’s strategic planning and communication for future cleanup
2. A statement on EM SSAB priorities and values for the next administration
3. Best practices for transitioning from a nuclear waste facility to community reuse or reindustrialization

Ms. Cange felt that the third charge would be difficult for the chairs since many of their sites are decades away from reindustrialization, and some are not even considering it. She thought it better instead to broaden the first charge to include a 5-year plan to inform outreach efforts across the complex and better communicate EM successes. Discussion of the charge was handled during the “Communicating EM Progress and Performance” session after lunch.

Chairs’ Round Robin – Each board was given a few minutes to talk about their site-specific topics, accomplishments, or recent activities. Ms. Price gave the ORSSAB presentation, which focused on the four upcoming priorities for Oak Ridge Reservation cleanup that the board has identified: support for offsite groundwater monitoring, ensuring future waste disposal capacity, excess facilities disposition, and addressing mercury in East Fork Poplar Creek.

Communicating EM Progress and Performance – Steve Trischman and Kristen Ellis discussed Ms. Cange’s charge to the chairs, first by focusing on the audiences for outreach. These could be Congress, and local and state governments that can influence EM budget allocations. They can also be local stakeholders, reporters, and other individuals.

Ms. Price noted that for the chairs to take on the challenge, they need to know the scope of what’s already being done by EM, both at the local and national levels. The chairs also need complete information. The eight “By the Numbers” fact sheets developed by EM to highlight site cleanup achievements are nice, but



the public also needs to know what cleanup challenges remain and where we are in the grand scheme of things. Context is important to understanding the big picture.

Field Operations Update – Stacy Charboneau remarked that EM Headquarters is in the process of delegating more authority to the sites to enable them to make better site-specific decisions about cleanup. It’s a recognition that the sites are very diverse, and one-size-fits-all decision-making may not be the best process across the complex.

But in addition to pushing authority and responsibility to the sites, Headquarters is ramping up its support for the sites via a new collaboration among the national laboratories led by the Savannah River National Laboratory. It will help ensure that all sites have access to the expertise needed for specific problems like technetium and mercury remediation. Headquarters will still have an oversight role and retain ultimate approval authority.

EM SSAB Product Development – Participants at the meeting discussed three draft recommendations:

1. Above Ground Storage at WIPP

2. National Transportation Study
3. Cleanup Performance Road Map and Communication Strategy

Discussion on each of the recommendations was lengthy, so for the sake of brevity, I will simply state the outcomes.

1. Above Ground Storage at WIPP—The recommendation was approved by the chairs and will be distributed to the individual boards to put forth to their membership for approval.
2. National Transportation Study—Mr. Borak said he spoke with the packaging and transportation group at Headquarters, and they thought the study would have little chance of winning the funding necessary to go forward with it. They also said that little had changed since the last study, so the recommendation was largely unnecessary. The chairs concurred with the assessment, and the recommendation was tabled.
3. Cleanup Performance Road Map and Communication Strategy—Shelley Cimon and Susan Leckband of the Hanford Advisory Board had provided a first draft of this recommendation prior to the meeting. Following discussion by the chairs, Mr. Trischman, and Ms. Ellis on day 1 of the meeting, a working group met that evening and produced a revised draft that was approved by the chairs on day 2. That draft will be distributed to the individual boards for approval.

It was agreed that the individual boards could submit supplemental materials illustrating ideas and examples that Headquarters can use as direction in addressing the recommendation. These will not be included in the recommendation.

Thursday, May 11

The second day of the meeting offered a shorter agenda of presentations and discussions.

DOE-HQ News and Views – Mr. Borak mentioned that there will be another EM SSAB session at the 2018 Waste Management Symposium in Phoenix. He encouraged the chairs to consider participating.

The next chairs meeting will be hosted by the Hanford site on October 17–19, 2017.

Waste Disposition Update – Douglas Tonkay, Director for Waste Disposal, provided a very comprehensive discussion that focused on low-level waste, greater-than-Class C waste, WIPP, and transportation.

VII. Significance to ORSSAB:

Understanding other boards' issues and maintaining working relationships with the other SSABs is invaluable to helping this board do its job. Working on joint recommendations provides added value for the meeting participants and DOE.


VIII. Names & Telephone Numbers of Significant Contacts:

A current list of EM SSAB contacts is available from the ORSSAB support office.

IX. Action Items:

1. Put the two approved chairs recommendations on the June 14 ORSSAB meeting agenda for consideration for approval.
2. Poll Executive Committee members to see if they want to provide examples to supplement the Cleanup Performance Road Map and Communication Strategy recommendation.

X. Traveler's Signature & Date:

Signature:  _____

Date: 5/18/17



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler: Christopher Beatty**
- II. Date(s) of Travel: March 5 - March 9 2017**
- III. Location of Meeting: Phoenix, Arizona**
- IV. Name of Meeting: Waste Management**
- V. Purpose of Travel: Attend Waste Management Symposia**

VI. Discussion of Meeting:

I attended the 2017 Waste Management Symposia in Phoenix, Arizona. I attended a number of technical sessions including oral presentations, posters, and discussion panels. There were several sessions discussing Japanese nuclear waste management and the cleanup in Fukushima. There were also several sessions hosted by the DOE including one titled Hot Topics in DOE Environmental Management.

Some of the topics discussed were leveraging capabilities among the state EM offices so that they do not need to maintain some capabilities locally. This session highlighted the move to allow more autonomy to local DOE EM offices.

I was also very interested in a poster session hosted by Fredrick Gary Dolislager from the Institute for Environmental Modeling at the University of Tennessee. The title of his poster was Radon Vapor Intrusion Screening Level Calculator. He discussed a web based calculator to calculate the cancer risk from radon. I was interested in the fact that he has a method to calculate cancer risk from radon emitting from the soil and other places and making it available to the public. I inquired about making an application for some of the hazards that the ORSSAB deals with. We discussed the possibility of him making a presentation to the ORSSAB about his web-based calculator and its capabilities. He said he has presented to the board before and would like to return to give the board an update.

VII. Significance to ORSSAB:

This trip was important to me because it helped enhance my understanding of the cleanup efforts of EM at the Oak Ridge Reservation and increased my knowledge of the technology and the vendors using these technologies in the cleanup effort. I was also able to learn about challenges of the Fukushima cleanup and the similarity to the challenges we face with the clean-up of the facilities here in Oak Ridge.

VIII. Names & Telephone Numbers of Significant Contacts:

Fredrick Gary Dolislager University of Tennessee (865)804-2683

Action Items:

ORSSAB should continue to support this meeting and send board members in the future. This was a very informative meeting.

IX. Traveler's Signature & Date:

Signature: *Christopher A. Beatty* Date: June 2, 2017

EM Project Update

ETTP	April	May
Zone 1 Interim ROD	Preparation of the EU Z1-50 PCCR was initiated.	The Draft EU Z1-50 PCCR was completed.
	Preparation of three PCCRs is proceeding to support the Zone 1 Final Soil ROD.	Preparation of three PCCRs is proceeding to support the Zone 1 Final Soil ROD.
Sitewide ROD	Characterization work continued to support the insitu pilot study at the K-1401 site. Activities included drilling, testing for Dense Non-Aqueous Phase Liquids, and reconfiguration of existing Ph. 1 investigation wells.	Characterization work continued to support the insitu pilot study at the K-1401 site. Work included drilling, geophysical logging, transmissivity testing, and installation of groundwater monitoring wells.
	Agreement was reached with the regulators to proceed with resampling existing groundwater monitoring wells. Initiated a work plan addendum for this work.	The Supplemental Sampling & Analysis Plan for sampling of selected existing monitoring wells for ETTP was submitted to the regulators for review.
Zone 2 Soil ROD	Began remediation of PCB Area 2 in EU Z2-22.	Critical Decision (CD)-2, Performance Baseline and CD-3, Start of Construction/Execution were approved for the Poplar Creek Area Demolition Project.
		The Characterization Start milestone for Poplar Creek Area EUs 11,12,13,14,&15 was completed.
K-25/K-27 D&D	K-27 Project Completion was achieved on April 27th, which was six months ahead of the baseline schedule and approximately \$12.4 million under budget.	Began Zone 2 ROD soil characterization in the footprint of the former gaseous diffusion process building and it is approximately 23 percent complete.
	The removal of the K-27 Building slab is 68 percent complete and shipping of size-reduced concrete to the EMWMF is 62 percent complete.	The removal of the K-27 Building slab is 89 percent complete and shipping of size-reduced concrete to the EMWMF is 83 percent complete.
	The historic preservation and EM project teams met with representatives of the National Park Service. The purpose of the meeting was to communicate the current condition of the K-25 slab and planned characterization and remediation activities, as well as input regarding the safe end-state and long-term maintenance considerations for the slab.	
Central Neutralization Facility(CNF) Demolition		Critical Decisions 1, 2, and 3 were approved for the CNF Demolition Project. Characterization will be completed in May, followed by deactivation.
Remaining Facilities		The final Historic American Engineering Record (HAER) documentation for Building K-1037 was accepted by the National Park Service (NPS) and will be transmitted to the Library of Congress in September.
		The PCCR for K-33/K-31 Process Tie-Line Demolition was approved by the regulators.
ORNL	April	May
U-233 Disposition	Completed the replacement of the K-2 Ventilation Control Panel in Building 2026.	The Occurrence Reporting and Processing System Quarterly Performance Analysis was submitted to DOE.

EM Project Update

	Completed the Implementation Validation Review (IVR) of Building 2026 S&M Safety Basis Documents.	Completed an in-depth engineering structural evaluation of the settling of the slab in Building 3017. Staff was relocated due to issues caused by foundation settling.
	The Memorandum of Agreement was approved to transfer Building 2026 (Radioactive Materials Analytical Lab) from the Office of Science to Environmental Management.	
Molten Salt Reactor Experiment (MSRE)	Shipped four of the six thermal probes from the MSRE for disposal, demonstrating significant progress towards meeting regulatory milestones for waste disposal from MSRE in FY 2017.	
	The FY 2016 PCCR was approved by the regulators.	
Homogeneous Reactor Experiment Facility (HRE)	Mobilized on asbestos work at Building 7500. Materials were moved to the area for asbestos work use, and the generator was inspected and certified for use. The initial entry into the building was made for building condition inspection and for work package planning.	
ORNL S&M	The S&M PCCR for FY 2016 was approved by the regulators.	
Y-12	April	May
BCV Interim ROD	The Technical Memorandum Characterization of the Soils at the Disposal Area Remedial Action (DARA) Solids Storage Facility was submitted to the regulators for review.	The Technical Memorandum Characterization of the Soils at the Disposal Area Remedial Action (DARA) Solids Storage Facility was approved by the regulators.
		A Non-Significant Change to the BCV ROD, Phase I, was submitted to the regulators for review. This change is necessary to allow on-site disposal of the majority of waste from the DARA Storage Facility.
Outfall 200 Mercury Treatment Facility	The Independent Final Design Review is being finalized. Also providing documents and participating in weekly phone calls to support Independent Cost Estimate for MTF Early Site Preparation CD-3A.	A notice of intent to award a sole source contract action for the secant pile wall portion of the early site preparation work was posted.
Y-12 Facilities D&D	Despite schedule impacts, approximately 1,500 ft. (of total estimated 8,000 ft.) of piping was cleared, drained, and/or removed from the West Colex.	To date, more than 1,100 lbs. of mercury have been removed from the COLEX equipment, significantly reducing risk associated with the equipment.
		The COLEX project has cleared 2,524 ft. of piping, and drained transformers and motors. Mechanical isolations are 50 percent complete.
Off-Site Cleanup/Waste Management	April	May
TRU Waste Processing Center (TWPC)	A partnering meeting was held between DOE and NorthWind senior managers to discuss project activities and partnering opportunities.	The contractor Readiness Assessment was completed, which addressed loading of the TRUPACT-II casks in preparation for resumption of CH shipments to WIPP. The project received official notice from TDEC that there were no violations.

EM Project Update

	The project underwent an Implementation Verification Review associated with Revision 36 to the Documented Safety Analysis, which addresses loading of the TRUPACT-II casks.	
Sludge Test Area Characterization	The Chief Engineer for HQ Environmental Management, John Marra, visited the site and was briefed on the status of the project and received a tour of the Sludge Test Area.	
EMWMF	Finalizing the OREM approach for the Focused Feasibility Study radiological discharge limits, before it is presented to EPA and TDEC.	A White Paper was sent to EM Headquarters for review that captures the final position of OREM on radiological discharge limits for operational discharges of landfill water from EMWMF and EMDF.
		An Addendum to the Remedial Design Report to update the final cover design was submitted to EPA and TDEC for their review.
WRRP	Comments were received on the Offsite Groundwater Assessment Remedial Site Evaluation (RSE) report.	After evaluation of TDEC comments on the Offsite Groundwater Assessment RSE, DOE requested a 155-day extension to address comments and meet with regulators. The lengthy extension request was due to regulator meeting coordination and the magnitude of comments.
	Several comment resolution meetings were held on the Five-Year Review.	DOE and EPA disagree on 3 protectiveness determinations. Both parties acknowledge the disagreement. One issue on LEFPC is still being addressed by the regulators. Resolution of these issues has caused the Five-Year Review D2 version to be extended into September, at the earliest.
	The regulators met to discuss the FCAP Five-Year Review issues. It was agreed that the work would be captured in an Action Plan.	The ORR Groundwater Flow Model Report was reviewed by subject matter experts and their comments were addressed.
	Melton Valley/Bethel Valley Exit Pathway is the next Groundwater project. As requested by EPA, the hydrofracture plume will not be addressed.	The Sampling & Analysis Plan for the Melton Valley/Bethel Valley Exit Pathway was submitted to the regulators for their 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

FCAP - Facilities Capability Assurance Program

FFA – Federal Facility Agreement

FFS – Focused Feasibility Study

FPD – federal project director

FY – fiscal year

GIS – geographical information system

GW – groundwater

GWTS – groundwater treatability study

HQ – Headquarters

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 2017						
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 (Attendees: Hemelright, Price, Wilson)	May 9-11, 2017	Paducah, KY	none	http://events.r20.constantcontact.com/register/event?oeidk=a07edr9rgegad93e54f&llr=cf5k6kyab	N/A	4/5/17
RadWaste Summit (Pending requests: <i>none</i>)	Sept. 5-7, 2017	Summerlin, Nevada	\$525	http://www.exchangemonitor.com/forums/annual-radwaste-summit/	3/1/17	2/1/17
DOE National Cleanup Workshop (Pending requests: Price)	Sept. 13-14, 2017	Alexandria, VA	\$425	https://energy.gov/em/national-cleanup-workshops	5/11/17 (1)	4/5/17
2017 U.S. EPA Community Involvement Training Conference (Pending requests: _____)	Mid-August 2017- <i>Postponed</i>	Kansas City, MO	none	https://www.epa.gov/superfund/2017-community-involvement-training-program	N/A	TBD

Travel Opportunities

Meeting/Event	Dates	Location	Reg. Cost	Website	Conference Lock Date; # Allocated Attendees	Deadline to Submit Requests
FY 2018						
2017 Fall Chairs Meeting (Pending requests: _____)	Oct. 17-19, 2017	Hanford, WA	none		N/A	9/6/17
EPA National Brownfields Conference (Pending requests: _____)	December 5-7, 2017	Pittsburgh	TBD	https://www.epa.gov/brownfields/2017-national-brownfields-training-conference	N/A	
Waste Management Symposium (Pending requests: _____)	March 18-22, 2018	Phoenix		www.wmsym.org	10/2/17 (TBD)	9/6/17
Perma-Fix Nuclear Waste Management Forum (Pending requests: _____)	Nov. 27-29, 2017	Nashville			7/18/17 (TBD)	7/5/17

Shaded trips are closed