

Oak Ridge Site Specific Advisory Board Monthly Meeting



Wednesday, June 13, 2018, 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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CONTENTS

AGENDA

PRESENTATION MATERIALS — To be distributed prior to or at the meeting.

CALENDARS

1. May
2. June (*draft*)

BOARD MINUTES/RECOMMENDATIONS & MOTIONS

1. April 11, 2018 unapproved meeting minutes
2. EMSSAB Chairs Recommendation Regarding the Energy Communities Alliance Report on Waste Disposition
3. Selection of Nominating Committee

REPORTS & MEMOS

1. DOE Response to Request for Recycling Information
2. Trip Reports
 - a. National Environmental Justice Conference (L. Shields)
 - b. EMSSAB Spring Chairs Meeting (D. Wilson, B. Price, S. Kimel)
3. EM Project Update and Abbreviations
4. Travel Opportunities for FY 2018
5. Incoming Correspondence
6. Abbreviations

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Oak Ridge Site Specific Advisory Board
Wednesday, June 13, 2018, 6:00 p.m.
DOE Information Center
1 Science.gov Way, Oak Ridge, Tenn.

AGENDA

- I. Welcome and Announcements (D. Wilson) 6:00–6:10
 - A. July – New Member Training, date TBD
 - B. August 25 – Annual Planning Meeting, 9 a.m.-2:30 p.m., Black Bear Inn, Gatlinburg, TN
 - C. Presentation of Service Awards to Outgoing Members (J. Mullis)
 - D. Welcome New Student Representative (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 (B. Price)..... 6:15–6:20

- IV. Presentation: Update on the Mercury Treatment Facility (B. Henry) 6:20–6:40
(Issue Group Members: Burroughs, Lohmann, Price, Shields, Shoemaker, Swindler, Tapp, Wilson)
Question and Answer Period 6:40–6:55

- V. Call for Additions/Approval of Agenda (D. Wilson)..... 6:55

- VI. Motions 7:00–7:15
 - A. April 11, 2018, Meeting Minutes (R. Burroughs)
 - B. Election of Nominating Committee (R. Burroughs)
 - C. EMSSAB Chairs Recommendation Regarding the Energy Community Alliance Report on
Waste Disposition (D. Wilson)

- VII. Responses to Recommendations & Alternate DDFO’s Report (M. Noe)..... 7:15–7:20

- VIII. Committee Reports 7:20–7:25
 - A. EM/Stewardship (F. Swindler)
 - B. Executive (D. Wilson)
 - 1. Annual Meeting-Saturday, August 25
 - 2. Outreach Presentation

- IX. Additions to Agenda & Open Discussion 7:25–7:30

- X. Adjourn 7:30

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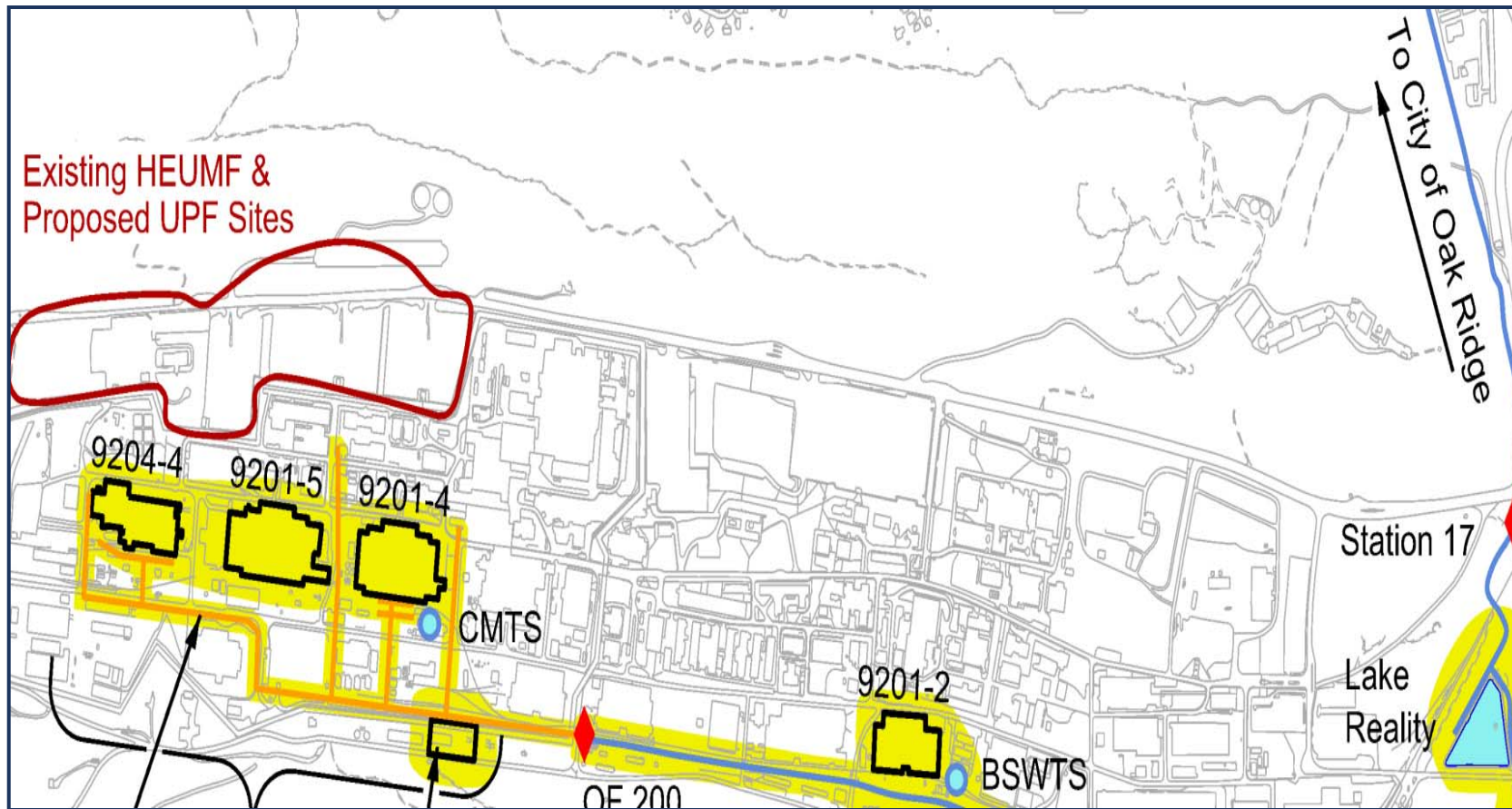
OF200 Mercury Treatment Facility Project Update

Brian Henry, Y-12 Portfolio Federal Project Director

Oak Ridge Office of Environmental Management

June 13, 2018

Outfall 200 is the discharge point for WEMA storm water



Mercury contamination originates in the West End Mercury Area, flows through storm drains, and enters Upper East Fork Poplar Creek at Outfall 200

The Mercury Treatment Facility is essential for large-scale demolition at Y-12



- It will reduce mercury releases into the East Fork Poplar Creek and provide a control mechanism for mercury disturbed during demolition in the West End Mercury Area
- The facility will treat up to 3,000 gallons per minute with 2 million gallon storage capacity for storm water
- Site preparation began in December 2017
- Contract award for Balance of Construction expected in Fall 2018

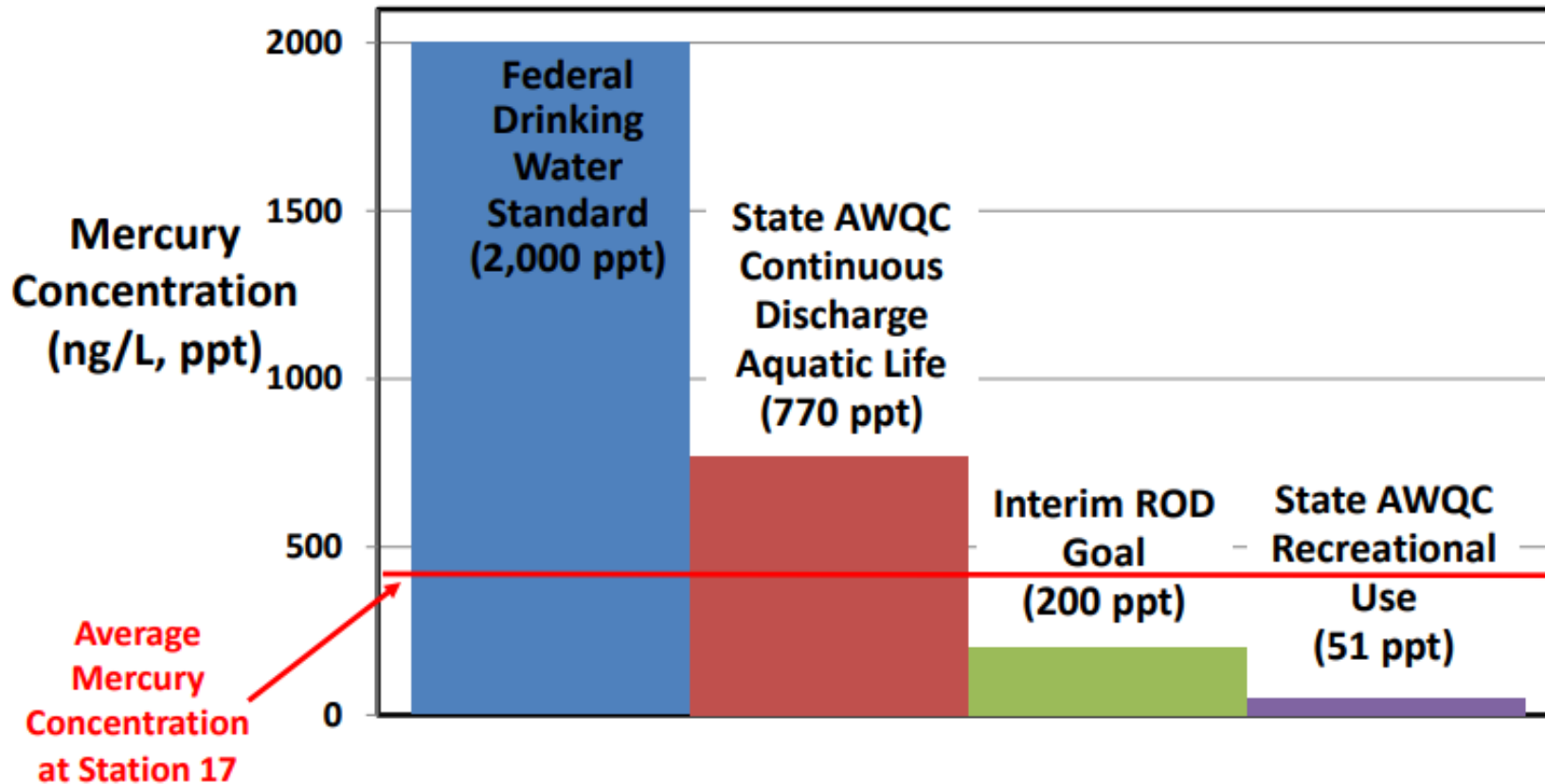


Artist Rendering of Headworks Facility



Artist Rendering of Mercury Treatment Plant

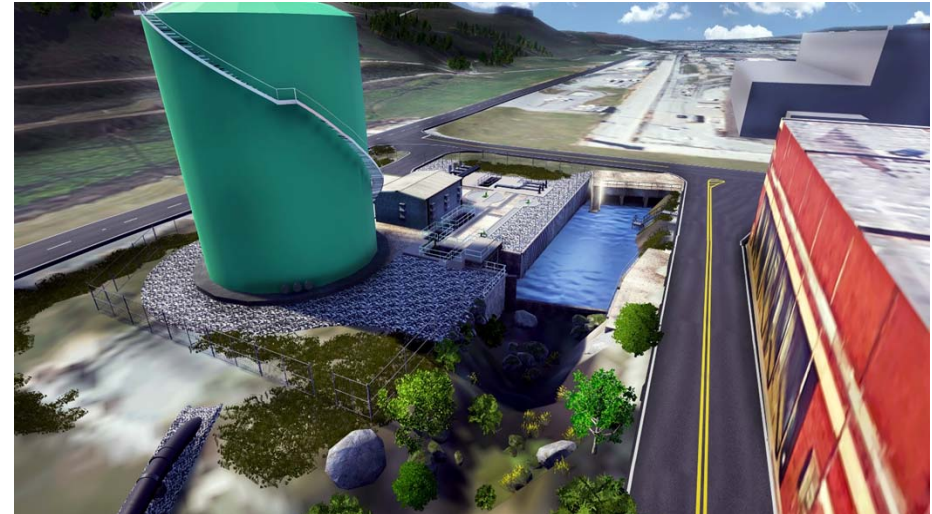
Safe concentrations of mercury depends on use



The project includes design/construction of headworks, treatment facility, and interconnecting pipeline



- Headworks area:
 - Collection and transfer components
 - Grit separation equipment
 - Stormwater storage tank
- Treatment facility:
 - Outdoor tanks, piping, and transfer and treatment equipment
 - Metal building (~22,000 ft²) to house weather-sensitive equipment and controls
 - Mercury removal unit operations:
 - Flow equalization
 - Chemical flocculation and precipitation
 - Clarification
 - Media filtration
- Utilities, foundations, parking, and fencing
- Total footprint ~74,000 ft²



Artistic Rendering of Headworks – Facing West



Artistic Rendering of Treatment Facility

Early Site Preparation Utilities Relocation

- Removed raw water piping and former Upper East Fork Poplar Creek flow augmentation structure
- Demolished abandoned utilities (including ACM insulated piping) and disposed at the ORR Landfills
- Completing water, storm drain, and electrical utility installations to the construction site boundary



Demolishing Existing Structures to Prepare for Headworks Construction



Constructing Secant Pile Wall to North and South of Headworks Area



OF200 MTF Headworks Artistic Rendering



OF200 MTF Treatment Plant Artistic Rendering



OF200 MTF Project Path Forward



- Contract requires construction completion within 4 years of award
- Facility is expected to be operational by FY24, or earlier depending on funding availability
- Facility operations are being included in OREM's follow-on clean-up contract for Y-12/ORNL
- Performance effectiveness will be monitored for an initial two-year period

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Oak Ridge Site Specific Advisory Board

June

2018

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3	4	5	6 Executive Committee Meeting 6-7pm	7	8	9
10	11	12	13 Board Meeting 6-7:30 p.m.	14	15	16
17	18	19	20	21	22	23
24	25	26	27 EM/Stewardship Committee Meeting 6-7:00 p.m.	28	29	30

Meetings are at the DOE Information Center, Office of Science and Technical Information, 1 Science.gov Way, Oak Ridge unless noted otherwise.

ORSSAB Support Office: (865) 241-4583 or 241-4584 **DOE Information Center:** (865) 241-4780
ORSSAB Conference Call Line: (866) 659-1011; enter the participant code when prompted: 3634371#

Board meetings on cable TV and YouTube	
Knoxville: Charter Channel 6, Comcast Channel 12	Thursdays at 9 p.m.
Lenoir City: Charter Cable Channel 193	Wednesdays, 4 p.m.
Oak Ridge: Channel 12	Fourth Mondays, 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

2018

No Meetings Due to New Member Tours – date TBD

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4 Independence Day Holiday. ORSSAB office Closed	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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YouTube	http://www.youtube.com/user/ORSSAB



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

Unapproved April 11, 2018, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, April 11, 2018, at the DOE Information Center, 1 Science.gov Way, Oak Ridge, beginning at 6 p.m. A video of the meeting was made and may be viewed by contacting ORSSAB support offices at (865) 241-4583 or (865) 241-4584. The presentation portion of the video is available on the board's YouTube site at www.youtube.com/user/ORSSAB/videos.

Members Present

Leon Baker
Kathryn Bales
Christopher Beatty
Leon Shields
Bonnie Shoemaker
John Tapp
Michelle Lohmann
Martha Deaderick

Rosario Gonzalez
Eddie Holden
Belinda Price, Vice Chair
Venita Thomas
Ed Trujillo
Fred Swindler
Rudy Weigel
Dennis Wilson, Chair

Richard Burroughs
David Branch

Members Absent

Deni Sobek¹

¹Second consecutive absence

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Dave Adler, Acting deputy manager and ORSSAB Alternate Deputy Designated Federal Officer (DDFO),
Department of Energy, Oak Ridge Office of Environmental Management (DOE-OREM)
Michael Higgins, Tennessee Department of Environment and Conservation (TDEC)
Connie Jones, U.S. Environmental Protection Agency (EPA)
Melyssa Noe, ORSSAB Alternate DDFO, DOE-OREM

Others Present

Brian Henry, DOE-OREM
Shelley Kimel, ORSSAB Support Office
Teresa Lamarche, ORSSAB Support Office
Cameron Neimeyer, Hardin Valley Academy

16 members of the public were present.

Dennis Wilson called the meeting to order by congratulating Pete Osborne for 20 years of service to the ORSSAB. Mr. Wilson reminded everyone that there is a tour of Y-12 scheduled on Wednesday, April 18 and that members need to let Shelley Kimel know if they will be attending. Mr. Wilson indicated that there will not be a May SSAB meeting and that the Community Budget Workshop would be held in place of the meeting, which members are encouraged to attend. The next board meeting will be June 13 with the topic of Ongoing Ground Water Efforts.

Liaison Comments

Mr. Adler presented a student plaque to Cameron Neimeyer from Hardin Valley Academy for his participation in the SSAB.

Mr. Adler then presented a plaque to Pete Osborne for his many years of service to the SSAB. Mr. Adler indicated that Mr. Mullis was not at the meeting tonight because he is at the Cleanup Caucus meetings in Washington D.C. He thanked everyone who came out tonight to discuss this topic because making sure that OREM has a place to take the less contaminated waste it generates is critical to the cleanup program. He noted OREM is at a critical time in the program; once the East Tennessee Technology Park (ETTP) cleanup is fulfilled, the organization will need to request different funding. The ETTP cleanup used a specific type of funding (D&D funding) that will no longer be accessible for other cleanup efforts.. In addition to beginning the new Environmental Management Disposal Facility (EMDF) landfill project, the 2018 budget of \$125 million will allow DOEM to begin tearing down the biology buildings at Y-12 National Security Complex (Y-12). Mr. Adler encouraged all SSAB members to attend the Community Budget Meeting on May 11.

Ms. Jones

Ms. Jones said water management is a big concern on the Oak Ridge Reservation (ORR). She wants the SSAB board to know that EPA is working diligently with DOE and the state to develop a strategy in regards to discharge of water at the ETTP site. Once this project is working, then we will come with a consensus approach to deal with the groundwater.

Michael Higgins - TDEC

Mr. Higgins indicated there are several issues at hand such as working on the new proposed waste disposal facility, which is a high priority for TDEC, EPA and OREM, and water discharge issues. All three entities are working together to address these issues. He went over several personal changes at TDEC that affect the work on the ORR: Commissioner Martineau is stepping down the end of April and Deputy Shari Meghrebain, PhD will be stepping into that role; Steve Goins, Director of the Division of Remediation in Nashville is retiring June 15 and Chris Thompson, who is currently the Deputy Director in Oak Ridge, will be replacing him; and Colby Morgan will be stepping in as the TDEC Oak Ridge Office Manager.

Belinda Price introduced Brian Henry as the guest speaker for the evening.

Public Comment

None.

Presentation

Mr. Henry gave a presentation (Attachment 1) on “Ongoing Efforts to Assure Waste Disposal Capacity for the Oak Ridge Reservation.”

Mr. Henry began the presentation with a broad overview of current onsite disposal facilities, detailed further in Attachment 1. He noted that the ORR has a number of onsite disposal facilities permitted for a variety of uses from construction debris to industrial waste and others that take low level radioactive and hazardous waste. The current Environmental Management Waste Management Facility (EMWMF) and future EMDF are both regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and OREM works closely with EPA and TDEC on actions associated with those facilities. All the landfills and disposal facilities have waste acceptance criteria for disposed materials. Characterizations are made of the waste and options are considered for disposal. Mr. Henry estimated that by volume, 90 percent of waste goes into onsite disposal facilities and by hazard, more than 90 percent of hazardous waste goes to offsite waste facilities. The ORR is about 34,000 acres that contains three main industrial sites. The focus has been on cleanup of ETTP and using the current EMWMF, said Mr. Henry. In the next few years, the focus will shift from ETTP, since we are nearing the end of cleanup, to Y-12 and Oak Ridge National Laboratory (ORNL). To make sure OREM can efficiently and effectively perform its cleanup duties at those sites over the next several decades, it needs to construct a new onsite waste disposal facility.

Mr. Henry explained a typical project scenario: a project starts by cleaning up what is inside of the building, followed by building demolition, and then foundation slabs are removed, and underlying soil is remediated. This

is the waste stream of the cleanup and the basic kinds of waste, he said. With such wastes, the goal is to recycle anything that can be recycled. Each type of waste – non-hazardous, low-level hazardous and low-level radioactive waste – each are safely disposed of in the appropriate landfill. Higher-level waste is disposed of offsite.

EMWMF is 75 percent full, Mr. Henry explained, and is at its constructed capacity. OREM is currently working with EPA and TDEC to adjust the cap on waste amounts allowed into EMWMF, but that has not been finalized yet, said Mr. Henry.

As the ETTP cleanup transitions to cleanup of Y-12 and ORNL we have been given money to start going after other contaminated areas that will help us get to the major portion of the cleanup. The 2018 budget allocates money for the biology complex and if Congress continues to give more money that will allow OREM to move into more facilities at Y-12 and ORNL.

For the program to be successful OREM needs new low level radioactive waste disposal capacity at EMDF up and operational. OREM, TDEC and EPA have a solid path forward and expect to have a proposed plan for EMDF this summer and a Record of Decision in 2019. Characterization was done for the proposed site. Topography is such that the area is a ridge/valley system and the conclusion was that Bear Creek Valley is the right location for the onsite disposal facility. OREM also looked at options on the east side, center and west side of Bear Creek Valley, as well as a separate option for two small facilities. Part of the challenge for siting a new landfill, he said, is the need to take into consideration topology, geology, hydrology, land use and lots of other factors in partnership with the state and EPA. An important consideration from the EPA is trying to site a landfill between existing tributaries. Additionally, some roads on the ORR will need to be rerouted. As part of the site research for EMDF, OREM in March installed piezometers to monitor ground water and surface water and install surface water plumes to determine how the system behaves. Data is now being collected so that the analysis can be included in the proposed plan presented to the public this summer.

There are decades worth of cleanup work ahead, said Mr. Henry, and it's key to ensure the new onsite waste disposal facility is up and running prior to starting those projects.

After the presentation board members asked the following questions.

Mr. Wilson asked when the rerouting of the standard roads and haul roads is complete, where will the waste go, and once the rerouting is complete will the old roads be removed? Mr. Henry said the current roads will remain functional until the new roads are complete. He also indicated that after rerouting is complete the roads will be removed. He is pursuing DOE approval to do early site preparation in fiscal year 2019.

Mr. Trujillo asked if industrial landfill four that accepts classified waste only accepts waste that is not contaminated? Mr. Henry explained what waste each type of landfill and the EMWMF would accept and said that if there is significant hazardous waste it would go offsite.

Mr. Trujillo asked how successful the recycle/reuse program is? Mr. Adler indicated that it is very hard to recycle materials from contaminated sites and is sometimes prohibited to recycle/reuse hazardous materials Successful recycling is paper or when a building is taken down that is not contaminated that can be recycled. It is often more expensive to recycle than to use new material, he noted. OREM has numbers on the recycle program and Mr. Adler will share this information at a later meeting.

Mr. Trujillo asked on the proposed waste disposal site, will there be a problem with rerouting tributaries and do we have an estimate of how much it will cost? Mr. Henry answered that the project will reroute the stream to have good surface water flow as well as have a temporary drainage feature on the outskirts to help drain as construction is completed and a liner put on the site. Once the site is constructed and a liner put in it effectively cuts off recharge to the area. He estimated the project will range from \$175 million to \$355 million for construction of the landfill in phases and all of the support facilities, but does not include the final cap, which is decades in the future. The lifecycle cost is approximately \$600 million to \$700 million, he added.

Mr. Tapp asked about the haul road being removed when ETTP cleanup is completed – does this location have any impact on this decision? Mr. Henry indicated that the way the haul roads are laid out is one portion comes from ETTP, then there is another road that comes from ORNL to the haul road, and a haul road from Y12. The piece of haul road between ORNL and ETTP would not be impacted by this project

Ms. Shoemaker asked if the selection of this site was based on groundwater and followed up by asking if the tributaries in this area are blue line tributaries? Mr. Henry replied that there were a lot of factors when shifting from the East Bear Creek Valley to Central Bear Creek Valley site and they are based on the hydrology - not only surface water and tributaries but the placement of ridges. The site is hydrologically separated to have drainage all around it so that surface water can be handled. The tributaries may have good or bad flow depending on the time of year, he noted.

Mr. Wilson asked about runoff that comes off the current waste disposal site, and if there is a tie in from the runoff of the new facility to the same runoff site? Mr. Henry replied that the concept is to plan for a water treatment facility onsite.

Mr. Borroughs. asked about building the haul road prior to doing construction and how much time does this save? Mr. Henry replied that OREM is looking at doing things in parallel to open the site sooner, and estimates that approach should save three to six months of time.

Mr. Trujillo then asked if that meant OREM is behind schedule? Mr. Henry replied that at this point OREM is okay on schedule time, but a lot of it depends on when EMWMF gets full and how much cleanup is done, as well as how much funding is acquired. Current estimates say the EMWMF will be full in the mid-2020s, he explained, and completion of EMDF is projected for 2024. OREM would like to have a two year overlap in site availability and so we are looking at ways to bring the time forward. The key driver is to minimize programmatic risk that are associated with waste disposal and if funding remains steady over the next three-to-five years, we need to be open sooner rather than later to keep up with cleanup needs.

After the presentation members of the public asked the following questions.

A member of the public asked if OREM still plans to return the haul road to greenfield once the ETTP cleanup was finished? Mr. Adler explained the record of decision calls for returning the haul road to a greenfield, but that could change. Unless this decision is changed that is what will occur, he said, however, there has been some interest in maintaining the road for other purposes.

A member of the public asked what is the end use designation for the Central Bear Creek Valley site? Mr. Henry indicated future land use designations after cleanup are recreation, industrial and unrestricted use. Right now the site is designated for recreation, but if the project moves forward at this site, the designation would be changed to industrial for future use

Mr. Holden asked if the National Nuclear Security Administration (NNSA) had asked that management/use of the haul road be given to them for their use? Mr. Adler said that at this point NNSA has not expressed an interest in preserving the road.

Mr. Wilson reminded everyone that the EM & Stewardship Committee will be discussing this topic further in two weeks and asked members who are issue managers on this topic to begin considering items to be discussed.

Motions

4/11/2018.1

Mr. Wilson asked for a motion to approve the meeting agenda. Rudy Weigel motioned, Leon Baker seconded. The motion passed unanimously.

4/11/2018.2

Mr. Wilson asked for a motion to approve the February minutes. Leon Baker moved to approve and Eddie Holden seconded. The motion was approved unanimously.

Alternate DDFO Report

Ms. Noe welcomed new staff member Teresa Lamarche to the ORSSAB. She said all new member packages were submitted to DOE headquarters for approval, but other sites have experienced delays and that ORSSAB might have the same issue. She noted that Ms. Kimel is looking into options for the annual meeting in August because the venue from last year is not available this year.

Committee Reports

EM and Stewardship Committee report – Mr. Swindler summarized the last committee meeting on February 28, which was centered on OREM Excess Contaminated Facilities. He said members asked questions relating to various buildings on the ORR and what determines the priority of the cleanup.. He reported that the committee decided not to make a recommendation on this topic because the presentation was meant more as background information for the current topic of waste disposal. The next EM and Stewardship meeting will be on April 25..

Executive Committee report – Mr. Wilson reported on actions regarding the annual meeting including the search for a new location. He noted that he and Ms. Price met with Ms. Kimel to discuss updating the board's outreach presentation.. He reminded members who are interested in giving the presentation to provide input.

Open Discussion

Eddie Holden said he heard that NNSA had asked the Community Reuse Organization of East Tennessee (CROET) about using Building 1065 at ETPP to store materials and asked for clarification on if NNSA had received the building over CROET's objection. Mr. Adler said that this had been worked out. He said there is a collection of warehouses that NNSA has taken over management responsibility for and they did seek to take waste storage boxes to Building 1065, however, DOE asked that they not use the building for hazardous waste as a condition of taking ownership of the building. Mr. Adler also said Site 3133 has been transferred to CROET. For the near term, he explained, NNSA will use half of this site as a lay down area for materials needed for construction of the Uranium Processing Facility but again it will not be used for radiological materials.

Announcements and Other Board Business

ORSSAB's next scheduled meeting will be Wednesday, June 13, 2018 at the DOE Information Center. The topic will be Ongoing Ground Water Efforts. Issue Managers: Richard Burroughs, Michelle Lohmann, Belinda Price, Leon Shields, Bonnie Shoemaker, Fred Swindler, John Tapp and Dennis Wilson.

Action Items

Open

1. David Adler will provide the board information on the volumes of material DOE recycles

Closed

1. Staff will send an email to board members to gauge their interest in giving presentations about the board to community groups. **Completed by email 2/15/2018**

Mr. Wilson adjourned the meeting at 7:08 p.m. Attachments (1) to these minutes are available upon request from the ORSSAB support office.

I certify that these minutes are an accurate account of the April 11, 2018, meeting of the

Oak Ridge Site Specific Advisory Board.

Richard Burroughs, Secretary

Dennis Wilson, Chair
Oak Ridge Site Specific Advisory Board
DW/mtl

DATE

EM SSAB Chairs
Recommendation to the Department of Energy
Recommendation Regarding the Energy Communities Alliance Report on Waste Disposition

Background

The Energy Communities Alliance (ECA) sponsored the wide-ranging report “Waste Management: A New Approach to DOE’s Waste Management Must be Pursued.” These recommendations would, if implemented, bring about major changes in longstanding national policies regulating the categorization, treatment, and disposition of DOE legacy radioactive waste. The environmental management of such wastes would henceforth be based, not on origin, but on the radioactive characteristics of the waste and the resulting risks to human health and to the environment.

The report underlines the urgency of pursuing a new approach. According to figures cited in the report, DOE’s overall environmental waste liability has more than doubled to \$372 billion over the past 20 years, of which EM’s portion has grown over \$90 billion from \$163 billion to \$257 billion. Reducing the lifecycle costs of these radioactive wastes and the burden on local communities requires a new decision approach based on risk management.

The systemic problems of the DOE/EM program identified by the ECA report are clear and compelling. The present classification waste based on origin, rather than risk goes back to the beginnings of the nuclear weapons program. The economics of the program are currently unsustainable—somewhat akin to making the minimum payment on a growing credit card balance. The current classification categories in DOE Order 435.1 (Radioactive Waste Management) do not align with NRC domestic or IAEA international standards. In principle, transition to a risk management approach would result in less “over-classification” of waste and reduce the volume of wastes subject to higher levels of handling. According to the ECA report, costs would be significantly reduced—estimated at \$2.5 million per day.

The ECA report itself is based on much prior research dealing with the same problem. The ECA is composed of representatives of local communities hosting DOE facilities and thus has a degree of local “buy-in.” Furthermore, the report ostensibly has the support of the Waste Management industry, as evidenced by remarks by industry leaders at the 2018 Waste Management Conference in Phoenix.

However, while the report presents a coherent and consistent argument on behalf of a new approach, it would be difficult to determine the merits based on this policy study alone. The lack of empirical data is a significant drawback. There are no charts or figures in the study. The “new” system of classifying waste is not defined either in general terms or specific levels of radioactivity. Methods for determining or calculating the conversion of existing to new classes of waste are not presented. Global figures for total amounts of waste and total costs are presented narratively. But it is not possible to evaluate the differential impact by DOE facility or State. The WIPP facility plays a prominent role in the proposed solution as the recipient of significantly increased volumes and types of waste. But the specific amounts are not explained. WIPP is also expected to receive increased capital expenditures for expansion, but specific numbers are not provided. Information on the notional return on investment is not provided (except the vague estimate of \$2.5 million per day mentioned above). On the whole, the merits are asserted but not really evaluated or empirically justified.

The ECA Report sets forth policy changes to advance desirable and widely-accepted goals of cleaning up nuclear wastes nationally. But given the empirical shortcomings, the report should be regarded, at this juncture, as a worthwhile, but preliminary policy study. A pro or con recommendation on the merits of the proposal is not possible at this time.

Recommendations

1. The Chairs recommend that DOE/EM undertake a comprehensive analysis of the ECA report, including technical, financial, environmental, safety, transportation, and other implications of implementing its recommendations. This is for the purpose of evaluating the impact of such changes.
2. The Chairs recommend that DOE/EM evaluates the site-specific impact of implementing the recommended changes including both potential risks and benefits.
3. In undertaking its evaluation, the Chairs recommend that DOE/EM should address, at a minimum, the questions developed by the Chairs set forth in the attachment.
4. The Chairs recommend that DOE/EM provide a timeline for performing the analysis and brief its results on an ongoing basis to the Chairs and their respective SSABs for comment and input.

References

1. ***“Waste Disposition: A New Approach to DOE’s Waste Management Must Be Pursued,”*** Energy Communities Alliance, September 2017.
<https://static1.squarespace.com/static/55c4c892e4b0d1ec35bc5efb/t/59ce7384cd39c3b12b97f988/1506702214356/ECA+Waste+Disposition+Report.pdf>

Attachment

Relevant Questions Concerning the ECA Report

Technical

What would the “risk” based classification look like?

Are there precedents for such a classification?

Would it replace or complement existing DOE classification system?

If risk is substituted for origin, what would be the technical definitions, based on what criteria?

Do changes require new federal legislative action? If by regulation, could the changes be challenged in court?

Would regulations regarding exposure to radioactivity for workers and the public need to be changed, if waste is recategorized?

Materials

How much waste would be removed from the HLW category under new definition?

How would volumetric changes be determined, on average or by individual containers?

How much of new TRU & LLW derive from liquid waste?

How would TRU and LLW currently comingled with HLW be separated?

How much would be potentially directed to WIPP?

Would container volumes currently stored at WIPP be recalculated.

Provide charts/graphs showing quantities currently classified and quantities following classification.

WIPP

What is current WIPP capacity limit? What would be new limit if container contents were recalculated?

Is this a manual or algorithmic recalculation?

What legal changes would be required? Do changes require action by state legislatures?

What burdens does WIPP expansion impose on the sites? Transportation and transportation safety, personal exposure, traffic, roads, environmental?

How would those burdens be mitigated?

Cost/Benefit

What is the economic impact of the changes?

What is the return on investment?

What is the cost/benefit impact for DOE sites?

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It's time to think about electing board officers (chair, vice chair, secretary) for FY 2019.

The process for election of new officers is as follows:

- Board members are asked to begin thinking about serving on the Nominating Committee.
- June meeting - The Nominating Committee is elected at the board meeting.
- Staff email the Nominating Committee their list of duties and schedule.
- August - The Nominating Committee presents a slate of candidates at the annual meeting.
- September - New officers are elected at the board meeting and take office when the meeting ends.

The Nominating Committee is an ad hoc committee and shall:

1. Be elected at a regular Board meeting at least two months preceding the annual election of officers.
2. Be composed of at least three ORSSAB members who are not officers.
3. Have the right as individual members to be nominated for any office.
4. Meet or conference call to elect a committee leader and review membership for potential officers.
5. Have the option to conduct its meeting(s) in private.
6. Obtain the consent of all nominees.
7. Present a slate of nominees for Board offices at the meeting preceding the meeting in which officers are elected.

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From: [Noe, Melyssa P](#)
To: [KimeL, Shelley \(CONTR\)](#); [Lamarche, Teresa \(CONTR\)](#)
Subject: FW: action items?
Date: Tuesday, June 05, 2018 10:31:51 AM

I have received the information below from UCOR which should close the first action item below.

For FY 2017 :

For Municipal Solid Waste, the information has been broken into the various waste streams and for the most part, the EPA weight to volume guidance was used to come up with the following:

Municipal Solid Waste Recycling and Reuse

		Volume (yd3)
Two Caterpillar Compactors from ORR Landfill	2 @ 45,792.20 lbs	112.44
Total Paper and Cardboard Recycled		459.36
Total Plastic Recycled		816.34
Electronics		29.07
Scrap Metal		4,178.07
Total ORNL transfers		276.10
Total transfer to others for reuse		754.60
Tires		300.00
Antifreeze		36.75
Misc.		23.94
Total		6,986.68

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Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** Leon F. Shields
- II. Date(s) of Travel:** 4/24/18 – 4/27/18
- III. Location of Meeting:** Washington D.C.
- IV. Name of Meeting:** National Environmental Justice Conference
- V. Purpose of Travel:** As a new member, participation is critical in understanding the vital issues related to environmental justice.

VI. Discussion of Meeting:

During the attendance of the 2018 National Environmental Justice Conference presentations and discussions involved a wide range of topics. A few highlights include: Creating a Makerspace to Encourage Economic Development, Indigenous Knowledge into Environmental Studies, EPA's CUPP Program, Green Infrastructure in Communities, Legacy Programs in Environmental Justice, Healthy Environments of Future Generations, and Rural Development.

VII. Significance to ORSSAB:

The participation that ORSSAB members take in the role of environmental management has direct impacts on the community surrounding the Oak Ridge Reservation. Participation in these types of conferences promote networking, education, and involvement with other partnering agencies to support the actions and decisions that members make in ORSSAB stewardship. Presentations at the National Environmental Conference provides a variety of aspects in issues faced in decommissioning facilities with unique factors and placing those managed areas back to a safe, eco-friendly, and economic environment.

VIII. Names & Telephone Numbers of Significant Contacts:

Mentorship for Environmental Scholars
Clarence Brown / Program Manager
P.O. Box 647
Bristow, VA 20136
877-839-9987

Mentorship for Environmental Scholars
Indigo Rockmore / ORNL Intern, Chemical Engineering
P.O. Box 647
Bristow, VA 20136
877-839-9987

United States Congress
Congressman James Clyburn / South Carolina
242 Cannon House Building
Washington, D.C. 20515
202-225-3315

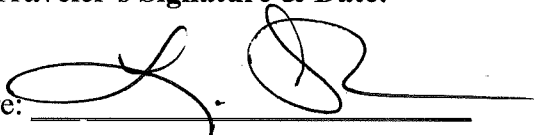
Michigan Technical University
Jerry Jondreau / Director of Recruiting Indigenous
gpjondre@mtu.edu

USDA Rural Development
Claudette Fernandez / WEP
202-690-4730
Claudette.fernandez@wdc.usda.gov

IX. Action Items:

The conference lecturers presented various handouts regarding programs. Please see attached, a packet of information.

X. Traveler's Signature & Date:

Signature: 

Date: 4-30-18

Note: The following publications from the conference are available on request from ORSSAB staff:

- Conference Agenda
- A View of Environmental Justice at DOE
- Addressing Environmental Justice Needs
- Community Leaders Use Science
- Energy Literacy
- How We Manage Environmental Justice at DOE
- EPA Environmental Justice Progress Report Summary
- Federal Interagency Working Group on Environmental Justice
- Mentorship for Environmental Scholars Projects 1 & 2
- National Environmental Justice Advisory Council
- NIEHS Worker Safety Training
- Tales from the Trenches
- Tribal Engagement Roadmap



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. **Name of Traveler:** Dennis Wilson
- II. **Date(s) of Travel:** May 1-4 2018
- III. **Location of Meeting:** Roswell and Carlsbad, New Mexico
- IV. **Name of Meeting:** EMSSAB 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:**

I attended the May 2 & 3 the meeting of the U.S. Department of Energy's (DOE) Environmental Management Site Specific Advisory Board (EMSSAB) senior leadership from each of the eight Site Specific Advisory Boards (SSAB) in order to:

- i) visit the DOE Carlsbad Field Office for an overview of the Waste Isolation Pilot Plant (WIPP);
- ii) tour the WIPP facility with its senior managers as guides and safety monitors;
- iii) share updates of accomplishments and issues, and exchange ideas for future direction in discussions among DOE's leadership and leaders from its major cleanup sites across the nation.

Other attendees from ORSSAB were Belinda Price, the current Vice-Chair, and Shelley Kimel, ORSSAB Administrator. David Borak, the EMSSAB Designated Federal Officer presided over the meeting which was facilitated by James Tanner, key support for the Savannah River Citizen's Advisory Board (CAB) on the second day. The meeting was well organized and run by the EM HQ staff. The Northern New Mexico CAB located over 300 miles away assisted with the meeting and were instrumental in siting the meeting. Due to budget considerations, the meeting was held in Roswell, NM.

Wednesday, May 2 After traveling to the Carlsbad DOE Field Office, the meeting attendees were met by Todd Shrader, the office manager, and Mark Percy, the deputy underground operations manager who shared with members the history and importance of WIPP. With the criticality of WIPP to the missions of all the DOE sites, details of the ongoing construction efforts, limitations of safe current operations and timing for ongoing upgrades were met with keen interest along with a five-year budget plan including priorities. Members going on the WIPP tour also received a preliminary safety briefing. Following this, representatives of the Carlsbad Mayor's Task Force shared with members how WIPP affects local residents and is an important part of the regional economy is embraced as a key element of its future.

After lunch, the Chairs and some members of the DOE staff visited the WIPP site, over an hour away. A hands-on mine safety training especially for the use of emergency breathing apparatus was given to all attendees. Site safety equipment was issued to all. Dividing the group into two, each was given an above-ground tour and a mine tour. Belinda and I were in the group touring the surface operations of WIPP first. The waste containers shipped and staged for unpacking were explained. The unpacking operation is quite efficient to ensure safety and ease of reuse of the transportation over-packs. It was explained that the design of the safety overpack has been in place for over 25 years. The methods and procedures are constantly reviewed to ensure the highest safety bar is maintained. Air handling is most limiting aspect of the operation since the HEPA filters were put in place for the exhaust since the shutdown occurred. This limitation causes the operation to alternate salt mining with waste placement to different times of the day. The result is waste

placement reaching only 50% of pre-shutdown levels (7 shipments) until another (3rd) air handling shaft is completed in a 4-year time frame. Once we were issued all in-mine safety equipment, we took a 9-person caged elevator to the floor of the 2100 ft. deep salt mine. Another element of this elevator is used to bring 4 tons of salt at a time to the surface during the mining time of day. Golf carts were used for our transport along the miles long tunnels (20 ft. wide x 20-25 ft. high). We observed the ceiling and side wall bolting equipment, the salt mining equipment and safety salt movement monitoring equipment. It was clearly explained that salt movement is both expected and planned since it is the feature that makes the choice of salt for burying the waste so important. The planned collapse of the ceiling effectively buries the waste safely for all time without the destruction of the packaging. The redefinition of the “packaged waste” brought into the mining will allow more waste placement and extend the life of WIPP under its current permit. Everyone we met as part of WIPP were highly motivated, very professional, clearly supportive of EM’s mission and willing to advance the use or expand WIPP in the future. Long three-hour drive retracing our route back to Roswell.

Thursday, May 3

The May 3rd meeting in Roswell had the SSAB Chairs hear updates on EM program budget and planning topics, new proposals on regulatory reform and waste disposition. The Chairs round robin presentation updates from the eight SSAB’s. The Chairs spent time formulating a letter to the New DOE-EM Secretary since she was not able to attend the meeting but videotaped her introduction to us. There considerable time spent reviewing a proposed recommendation regarding the recently published Energy Communities Alliance report on waste classification.

EM Program Update – Mr. Gilbertson, Associate Principle Deputy Assistant Secretary for Regulatory and Policy Affairs clarified the following topics:

- i) EM’s Fiscal Year 2019 Budget Request is a record high for a second straight year and demonstrates the Administration’s strong and continued support for cleanup. For OREM, that includes construction of the Mercury Treatment Facility and disposition of Uranium-233 stored at Oak Ridge.
- ii) Several cleanup projects across the complex will be completed.
- iii) Continued progress on excess facilities, including the Biology Complex at Y-12
- iv) Additional investment in technology development for the cleanup mission such as robotic and remote handling systems
- v) An overview of cleanup progress at all sites. In Tennessee, Oak Ridge recently received Critical Decision 2/3 Approval for Building 2026 Uranium-233 Processing, among others.

After the presentation, Mr. Gilbertson discussed the potential for advancing the learning among the sites and this should include any recommendations made by the Advisory Boards. He suggested that DOE-EM is looking for leadership from these recommendations across the EM complex.

Members continued to be interested in infrastructure needs across the complex and also discussed DOE’s recycling and reuse of materials like nickel and mercury, which are costly to store.

Chairs’ Round Robin – Each board had a few minutes to talk about their site-specific topics, accomplishments, or recent activities. Mr. Wilson gave the ORSSAB presentation, which focused on the upcoming priorities for Oak Ridge Reservation cleanup that the board has identified:

- i) Support Offsite Groundwater Monitoring
- ii) Excess Facilities Disposition
- iii) Ensure Future Waste Disposal Capacity

OR’s public outreach was a popular topic during the day’s discussions and after Oak Ridge presented its slide several other chairs complimented ORSSAB on its outreach efforts, particularly when it was clarified that it is all volunteer work by members.

Budget and Planning Update – Mr. Trischman, Director of Budget and Planning, brought clarity to the budgeting process;

Mr. Trischman gave attendees an overview of the federal budget process and timeline. He also noted the broad legislative support EM has received in recent years when it received the funding it asked for or was granted funds over and above the request in the final enacted budget. Mr. Trischman specifically mentioned OR excess facilities funding for the Biology Complex, the Critical Experiment Facility and the Beta-4 Tool Storage Facility at Y-12. He noted that some of the budgetary success could be attributed to teamwork between EM and other organizations like the National Nuclear Security Agency, which also bears responsibility for many excess facilities. A key presentation element was the inventory of excess facilities from all agencies.

EM has briefed the House and Senate on the FY 2019 budget request, he said, and is addressing follow-up questions as needed. The first feedback from Congress should be received in May or June. EM anticipates operating under a continuing resolution in part of FY 2019 and has planned for that.

Plans for the FY 2020 budget are underway. Site managers should give presentations to EM-1 in May and recommendations to the secretary will be prepared in June. The department's request will be submitted to the Office of Management and Budget in September, hear back in November, and the President will submit a final federal budget to Congress in February 2019.

Mr. Trischman gave an update on the Government Accountability Office's (GAO) interest in excess facilities. In 2017 GAO added environmental liability to its high risk series reports. The most recent report noted progress on many high-risk areas, but said substantial efforts were still needed. Although DOE-EM currently is responsible for over 335 critical excess facilities and has built these into its planning, the total inventory from all agencies is over 1600 excess facilities. This impacts OR-EM planning for future EMDF's, preventive maintenance budgets, and longevity of the mission.

EM SSAB Product Development

The chairs discussed a draft recommendation prepared by the Northern New Mexico Citizens Advisory Board regarding the Energy Community Alliance Report on Waste Disposition. (The draft was prepared after several conference calls among board chairs prior to the Chairs Meeting.) After some discussion, the draft recommendation with approved with minor changes.

In addition, the Chairs drafted a welcome letter to EM-1 Anne White which was approved. (See attached)

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. Sharing experiences and best practices ensures the SSABs remain a valuable resource to DOE. By gathering together and presenting recommendations with one voice, the boards' recommendations carry greater impact.

VIII. Names & Telephone Numbers of Significant Contacts:

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

IX. Action Items:

- i) Put the approved Chairs recommendation on the June 14 ORSSAB meeting agenda for approval.

X. Traveler's Signature & Date:

Signature: *Dennis M. Nelson*

Date: 06/01/2018

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

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

Ms. Anne Marie White
Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Assistant Secretary White:

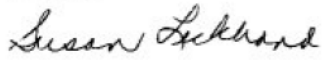
The EM SSAB appreciated the video greeting you provided to us at our recent meeting in New Mexico. We welcome you to your new position as Assistant Secretary and look forward to providing you with informed, clear and useful input and recommendations and invite you to attend our next EM SSAB Chairs Meeting tentatively scheduled for the EM Cleanup Workshop on September 11, 2018.

The EM SSAB is the largest, most diverse advisory board in the EM complex. We represent many thousands of citizens, public interest groups and tribal nations impacted by the EM legacy waste clean-up sites across the country.

Many of us understand that regulations are sometimes duplicative, cumbersome and overly restrictive. That being said, we encourage DOE to scrutinize proposed regulatory changes to ensure those changes are in step with each SSAB's core values, inclusive of the following considerations:

- Protect worker health and safety;
- Protect and restore the groundwater;
- Protect the environment – do no harm during cleanup or with new development;
- Involve the public;
- Secure sufficient funding;
- Maintain the integrity of the State regulatory agreements;
- Develop and deploy new technology, without impeding cleanup;
- Incorporate long-term stewardship needs in current and future cleanup decisions;
- Partner with local communities and workforce in order to maintain the skill set necessary to accomplish these cleanup activities.

We look forward to meeting you soon.



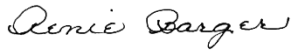
Susan Leckband, Chair
Hanford Advisory Board



Steve Rosenbaum, Chair
Nevada SSAB



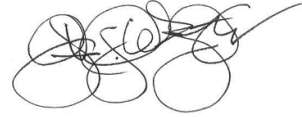
Dennis Wilson, Chair
Oak Ridge SSAB



Renie Barger, Chair
Paducah CAB



Gil Allensworth, Chair
Savannah River Site CAB



Gerard Martinez y Valencia, Chair
Northern New Mexico CAB



Bob Berry, Chair
Portsmouth SSAB



Keith Branter, Chair
Idaho Cleanup Project CAB

cc: Mark Gilbertson, EM-4
Betsy Connell, EM-4.3
David Borak, EM-4.32



Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** Belinda Price
- II. Date(s) of Travel:** May 1-4 2018
- III. Location of Meeting:** Roswell and Carlsbad, New Mexico
- IV. Name of Meeting:** EMSSAB 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 U.S. Department of Energy's (DOE) Environmental Management (EM) SSAB (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. Other Oak Ridge attendees representing ORSSAB during the meeting included Dennis Wilson the current Chair and Shelley Kimel, ORSSAB Administrator. Dave Borak, the EM SSAB Designated Federal Officer, presided and James Tanner, who supports the Savannah River Citizens Advisory Board, facilitated on the second day.

The EM HQ staff did an excellent job in setting up and running the meeting. The Northern New Mexico Citizens Advisory Board, though located some distance away, also assisted with the event organization and supported the event. The arrangements for guests and meeting space met all our needs. Because of budgetary constraints and hotel room availability, we stayed in Roswell.

Wednesday May 2

On May 2 the EMSSAB Chairs (herein to mean including the Chair and Vice Chair of each SSAB) and staff visited the DOE Carlsbad Field Office for an overview of the Waste Isolation Pilot Plant (WIPP). Todd Shrader, the office manager, and Mark Percy, the deputy underground operations manager, shared with members the history and importance of WIPP. Details of the construction efforts and ongoing upgrades were also discussed. Members going on the WIPP tour received a safety briefing. Following this, two representatives of the Mayor's Task Force shared with members how WIPP affects local residents and its importance to the regional economy. Both representatives commented that they were concerned that our business meeting the following day, including the public comment period, was to occur in Roswell and not in Carlsbad. DOE took note of their concern.

After lunch the Chairs and some members of the DOE contingent visited the WIPP site. Waste emplacement at the mine is currently ongoing in a limited capacity while a new air handling unit is being installed. Waste is being emplaced at night and drilling operations occur during the day. We were given a safety presentation and hands on demonstration of the emergency breathing apparatus that we would take into the mine with us. The party was then split into two groups. Group one went into the mine first while group two was given a surface facilities tour. Dennis and I were in the group that received the surface tour first. The surface tour included a tour of the facilities including the waste receiving/unpacking facility, where our guide explained the procedure for unpacking the shipping containers, which are reused. We were able to see some of the operations occurring and this was very educational. We were then given our safety equipment, kitted up for the mine tour and assigned to escorts. We were taken to one of the elevators and taken down into the mine in

shifts. The mine itself is at just over 2,000 feet depth installed into Permian age (~250 million years old) rock salt. Once in the mine, we were taken in golf carts through several of the tunnels, moving through several “airlocks” that break up sections of the mine and provide “fire breaks” if they were to be necessary. The rock salt is gradually filling into the void spaces (tunnels) so we were able to observe the bowed ceilings at some locations. Nine foot long bolts and metal “netting” are used to hold the walls and ceiling in place. We were allowed to take some of the rock salt as a souvenir. The ride back up to the surface was in the larger of the two elevators. Current plans include drilling a third access shaft that will provide better air flow and allow larger equipment to be taken in and out of the mine. WIPP personnel are very enthusiastic about the work they are doing and committed to the project. They are in favor of expanding the type of waste that they are able to take, redefining the waste volume to not take into account the “packaging” and in potentially expanding the facility in the future.

Thursday May 3

On May 3, the SSAB chairs gathered in Roswell to hear an update from DOE on budget and planning as well as new information on regulatory reform and waste disposition. They also spent time formulating a recommendation regarding the recently released Energy Communities Alliance report on waste classifications and drafting a letter to new DOE-EM Secretary Anne White. The secretary was not able to attend the meeting, but did record a video message for EMSSAB – a first for the group.

EM Program Update – Mark Gilbertson, Associate Principle Deputy Assistant Secretary for Regulatory and Policy Affairs discussed the following topics:

- EM’s Fiscal Year 2019 Budget Request is a record high for a second straight year and demonstrates the Administration’s strong and continued support for cleanup. For OREM, that includes construction of the Mercury Treatment Facility and disposition of Uranium-233 stored at Oak Ridge.
- Several cleanup projects across the complex will be completed.
- Continued progress on excess facilities, including the Biology Complex at Y-12.
- Investment in technology development for the cleanup mission such as robotic and remote systems
- An overview of cleanup progress at all sites. He noted that Oak Ridge recently received Critical Decision 2/3 Approval for Building 2026 Uranium-233 Processing, among others.

In discussion, Mr. Gilbertson emphasized the benefits of applying lessons learned across all sites and asked chairs to keep the whole DOE EM complex in mind when making recommendations. DOE EM is looking for the Chairs to provide recommendations that could potentially move the entire complex forward.

Members continued to be interested in infrastructure needs across the complex and recycling and reuse efforts of materials like nickel and mercury, which are costly to store.

Chairs’ Round Robin – Each board had a few minutes to talk about their site-specific topics, accomplishments, or recent activities. Mr. Wilson gave the ORSSAB presentation, which focused on the upcoming priorities for Oak Ridge Reservation cleanup that the board has identified:

1. Support Offsite Groundwater Monitoring
2. Excess Facilities Disposition
3. Ensure Future Waste Disposal Capacity

Dennis’s presentation also included a discussion of public outreach efforts by the ORSSAB members and other Chairs complimented ORSSAB on its outreach efforts, particularly when it was clarified that it is all volunteer work by members.

Budget and Planning Update – Mr. Trischman gave attendees an overview of the federal budget process and timeline. He also noted the broad legislative support EM has received in recent years when it received the funding it asked for or was granted funds over and above the request in the final enacted budget. With respect to the Oak Ridge facilities, Mr. Trischman noted that high priorities included the Biology Complex, Critical Experiment Facility and the Beta-4 Tool Storage Facility at Y-12. He noted that some of the

budgetary success could be attributed to teamwork between EM and other DOE organizations like the National Nuclear Security Agency, which also bears responsibility for many excess facilities. EM-1 has briefed the House and Senate on the FY 2019 budget request, he said, and is addressing follow-up questions as needed. The first feedback from Congress should be received in May or June. EM anticipates operating under a continuing resolution in part of FY 2019 and has planned for that. Plans for the FY 2020 budget are underway. Site managers should give presentations to EM-1 in May and recommendations to the secretary will be prepared in June. The department's request will be submitted to the Office of Management and Budget in September, hear back in November, and the President will submit a final federal budget to Congress in February 2019.

Mr. Trischman gave an update on the Government Accountability Office's (GAO) interest in excess facilities. In 2017 GAO added environmental liability to its high risk series reports. The most recent report noted progress on many high-risk areas, but said substantial efforts were still needed. I asked that the Chairs be made aware of the publication of the new report when it is issued.

One member of the public, Norbert Rempe, addressed the group during the public comment period and presented the case for DOE being overly protective of workers. His position was that when people are working in the mine they are not subject to the normal cosmic radiation that is present at the surface. Norbert is a retired geologist living in Carlsbad and having identified me as a fellow geologist kindly presented me with a copy of a Geological Society of America publication that he was editor for: *Reviews in Engineering Geology XIX Deep Geologic Repositories*, 2008.

EM SSAB Product Development

The chairs discussed a draft recommendation prepared by the Northern New Mexico Citizens Advisory Board regarding the Energy Community Alliance Report on Waste Disposition. (The draft was prepared after several conference calls among board chairs prior to the Chairs Meeting.) After some discussion, the draft recommendation was approved with minor changes.

In addition, the Chairs drafted a welcome letter for EM-1 Ann White which was approved.

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. Sharing experiences and best practices ensures the SSABs remain a valuable resource to DOE. By gathering together and presenting recommendations with one voice, the boards' recommendations carry greater impact.

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 approved chairs recommendation and approved letter to EM1 on the June 14 ORSSAB meeting agenda for consideration for approval.

X. Traveler's Signature & Date:



Signature: _____

Date: 5-16-18

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Oak Ridge Site Specific Advisory Board

TRIP REPORT

- I. Name of Traveler:** Shelley Kimel
- II. Date(s) of Travel:** May 1-4 2018
- III. Location of Meeting:** Roswell and Carlsbad, New Mexico
- IV. Name of Meeting:** EMSSAB 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:

On May 2 the U.S. Department of Energy's (DOE) Environmental Management Site Specific Advisory Board (EMSSAB) chairs and staff visited the DOE Carlsbad Field Office for an overview of the Waste Isolation Pilot Plant (WIPP). Todd Shrader, the office manager, and Mark Percy, the deputy underground operations manager, shared with members the history and importance of WIPP. Details of the construction efforts and ongoing upgrades were also discussed. Members going on the WIPP tour also received a safety briefing. Following this, representatives of the Mayor's Task Force shared with members how WIPP affects local residents and is an important part of the regional economy as well.

On May 3, the SSAB chairs gathered to hear an update from DOE on budget and planning as well as new information on regulatory reform and waste disposition. They also spent time formulating a recommendation regarding the recently released Energy Communities Alliance report on waste classifications. The group also drafted a letter to new DOE-EM Secretary Anne White. The secretary was not able to attend the meeting, but did record a video message for EMSSAB – a first for the group.

The agenda and presentation materials distributed at the meeting are attached to this report; digital files are available on request from ORSSAB staff. These documents are also available on the EMSSAB chairs website at www.energy.gov/emssab. Headquarters staff took minutes during the meeting, and a transcript should be available from DOE in the near future. An additional presentation given by WIPP staff will be provided soon.

The EM HQ staff did an excellent job in setting up and running the meeting. The nearest SSAB, though located some distance away, also put significant effort into assisting with the event. The arrangements for guests and meeting space met all our needs. Several attendees noted that having a one-day meeting for updates and to create a recommendation was challenging compared to previous meetings where an additional half day was available.

Details for Thursday, May 3

The working portion of the meeting featured an EM program update from Mark Gilbertson, associated principle deputy assistant secretary for regulatory and policy affairs; a round robin presentation of the eight SSABs; a budget and planning update by Steve Trischman, director of budget and planning; further updates on waste disposition and regulatory reform from Mr. Gilbertson; and a product development session by the chairs. James Tanner, who supports the Savannah River Citizens Advisory Board facilitated the meeting.

EM Program Update – Mr. Gilbertson's presentation (attached) touched on the following topics:

- EM's Fiscal Year 2019 Budget Request is a record high for a second straight year and demonstrates the Administration's strong and continued support for cleanup. For OREM, that includes construction of the Mercury Treatment Facility and disposition of Uranium-233 stored at Oak Ridge.
- Several cleanup projects across the complex will be completed.
- Continued progress on excess facilities, including the Biology Complex at Y-12
- Additional investment in technology development for the cleanup mission such as robotic and remote systems
- An overview of cleanup progress at all sites. In Tennessee, Oak Ridge recently received Critical Decision 2/3 Approval for Building 2026 Uranium-233 Processing, among others.

After the presentation, chairs asked followup questions on greater use of robots in the cleanup process and whether that would spread to all sites. Mr. Gilbertson said they would be used as appropriate, but are still undergoing testing for now.

In discussion, Mr. Gilbertson emphasized that it was important for members to be aware of major projects at all sites due to the ripple effect of successes and/or complications at one site to potentially affect each board's local site. For example, a safety issue at one site may cause similar operations at other sites to pause in order to study the activity. In the same manner, he also asked chairs to keep a broader view in mind when making recommendations – that with thought, local recommendations could potentially move the entire complex forward.

Members continued to be interested in infrastructure needs across the complex and also discussed DOE's recycling and reuse efforts. Some sites were particularly interested in reuse of materials like nickel and mercury, which are costly to store.

Chairs' Round Robin – Each board had a few minutes to talk about their site-specific topics, accomplishments, or recent activities. Mr. Wilson gave the ORSSAB presentation, which focused on the upcoming priorities for Oak Ridge Reservation cleanup that the board has identified:

1. Support Offsite Groundwater Monitoring
2. Excess Facilities Disposition
3. Ensure Future Waste Disposal Capacity

Public outreach was a popular topic during the day's discussions and after Oak Ridge presented its slide several other chairs complimented ORSSAB on its outreach efforts, particularly when it was clarified that it is all volunteer work by members.

Budget and Planning Update – Mr. Trischman gave attendees an overview of the federal budget process and timeline. He also noted the broad legislative support EM has received in recent years when it received the funding it asked for or was granted funds over and above the request in the final enacted budget. He echoed that funding would support many of the same projects Mr. Gilbertson mentioned in his update. In addition to the Biology Complex, Mr. Trischman mentioned excess facilities funding for the Critical Experiment Facility and the Beta-4 Tool Storage Facility at Y-12. He noted that some of the budgetary success could be attributed to teamwork between EM and other organizations like the National Nuclear Security Agency, which also bears responsibility for many excess facilities.

EM has briefed the House and Senate on the FY 2019 budget request, he said, and is addressing follow-up questions as needed. The first feedback from Congress should be received in May or June. EM anticipates operating under a continuing resolution in part of FY 2019 and has planned for that.

Plans for the FY 2020 budget are underway. Site managers should give presentations to EM-1 in May and recommendations to the secretary will be prepared in June. The department's request will be submitted to the Office of Management and Budget in September, hear back in November, and the President will submit a final federal budget to Congress in February 2019.

Mr. Trischman gave an update on the Government Accountability Office's (GAO) interest in excess facilities. In 2017 GAO added environmental liability to its high risk series reports. The most recent report noted progress on many high-risk areas, but said substantial efforts were still needed.

EM SSAB Product Development – Oak Ridge attendees included Dennis Wilson and Belinda Price, who represented ORSSAB during the meeting discussions. EM SSAB Designated Federal Officer Dave Borak presided.

The chairs discussed a draft recommendation prepared by the Northern New Mexico Citizens Advisory Board regarding the Energy Community Alliance Report on Waste Disposition. (The draft was prepared after several conference calls among board chairs prior to the Chairs Meeting.)

As part of the discussion Mr. Gilbertson reported that Congress has already asked for a report on how changes in waste definitions would affect DOE.

There was much discussion on what, specifically, the chairs would like DOE to do with the report's information. A motion was made to move forward with the current draft recommendation, but attendees agreed that changes to waste definitions would be a very long-term goal. The current recommendation should be seen as just an initial part of a deeper study of this issue, which could result in several additional recommendations on more specific areas of the topic.

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. Sharing experiences and best practices ensures the SSABs remain a valuable resource to DOE. By gathering together and presenting recommendations with one voice, the boards' recommendations carry greater impact.

VIII. Names & Telephone Numbers of Significant Contacts:

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

IX. Action Items:

None

X. Traveler's Signature & Date:



Signature: _____

Date: 5-14-18

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Oak Ridge Site-Specific Advisory Board



Current Activities

- Public Outreach
 - Upcoming Community Budget Workshop
 - Redesigning educational presentation
 - Achieving greater public attendance at meetings through Facebook advertising.
- Continuous Learning:
 - Participated in tours related to Excess Contaminated Facilities and Future Waste Disposal Capacity in 2018 – two key priorities.
 - Attended groundbreaking for the Outfall 200 Mercury Treatment Facility, a cornerstone of continuing cleanup operations beyond 2020.
 - Presence at WM Symposia, National Environmental Justice Training, DOE National Cleanup Workshop with more requests pending
- Under Consideration:
 - Recommendations on FY20 Budget, Waste Disposal, and Groundwater issues.

FY 2018 Priorities

Support Offsite Groundwater Monitoring

- Continue Offsite Groundwater Quality Assessment
- Examine potential offsite plume migration pathways
- Continue funding for offsite groundwater monitoring

Excess Facilities Disposition

- Continue planning and implementing upfront activities
- Remove/decontaminate equipment
- Develop access plan to establish safe pathways; strengthen major structural sections
- Redirect any funding plus-ups for upfront activities

Ensure Future Waste Disposal Capacity

- Ensure sufficient capacity at proposed new disposal site
- Secure adequate funding for future cleanup activities



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

EM Update for the EM SSAB Chairs

Mark Gilbertson

Associate Principal Deputy Assistant Secretary for
Regulatory and Policy Affairs
Office of Environmental Management

May 2018

Environmental Management's Fiscal Year 2019 Budget Request is a record high for a second straight year and demonstrates the Administration's strong and continued support for cleanup.

The request allows EM to continue making progress on those capabilities necessary to tackle longer-term risks that are significant contributors to lifecycle costs:

- Ramps up efforts to address radioactive tank waste at Savannah River---the site's largest environmental challenge
- Supports ventilation system completion and critical infrastructure at WIPP to enable increased waste shipments and emplacement.
- Continues progress at Hanford's Waste Treatment Plant to support initiating waste treatment by December 2023, per the Consent Decree.
- Supports shifting to construction for the planned Mercury Treatment Facility and continued progress on the capability to address the remaining U-233 stockpile at Oak Ridge.



Tank 20 at the Savannah River Site



Waste Emplacement at the Waste Isolation Pilot Plant

EM will also be able to mark completion of significant cleanup activities across the complex:

- Completes demolition of the C-400 Cleaning Building at Paducah
- Completes buried waste exhumation activities at Idaho
- Complete decommissioning and begin demolition at the Main Plant Process Building at the West Valley Demonstration Project



Waste Exhumation at Idaho



C-400 Cleaning Building at Paducah

EM will continue progress of work proposed in the FY 2018 Congressional budget with work on facilities at the Y-12 National Security Complex, and at Lawrence Livermore National Laboratory. (\$150M)

Y-12



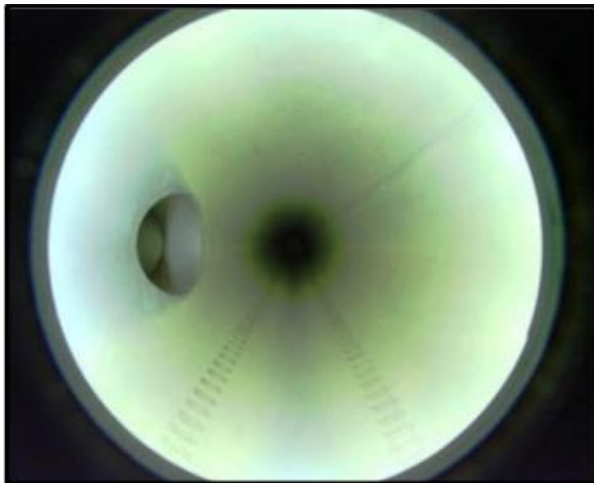
Y-12 National Security Complex – Biology Complex Building

Lawrence Livermore National Laboratory (LLNL)



LLNL– Livermore Pool Type Reactor Building 280

- EM's Technology Development (TD) efforts are focused on alternative solutions that enhance safety, improve performance and help reduce environmental liability
- EM has focused on potential to use robotic and remote systems
- For example, EM is currently undergoing performance testing for the "RadPiper" to be used at in large processing pipes at the Portsmouth GDP



Washington

- Hanford Site
- Richland Operations Office
- Office of River Protection

EM Sites

Idaho

- Idaho National Laboratory

New York

- West Valley
- Separations Research Process Unit
- Brookhaven

California

- Energy Technology Engineering Center
- Lawrence Livermore

Kentucky

- Paducah

Ohio

- Portsmouth

Nevada

- Nevada National Security Site

Utah

- Moab

South Carolina

- Savannah River Site

New Mexico

- Los Alamos
- Sandia
- Carlsbad

Tennessee

- Oak Ridge

EM has 16 sites in 11 states and has reduced its footprint by 90% to less than 300 square miles



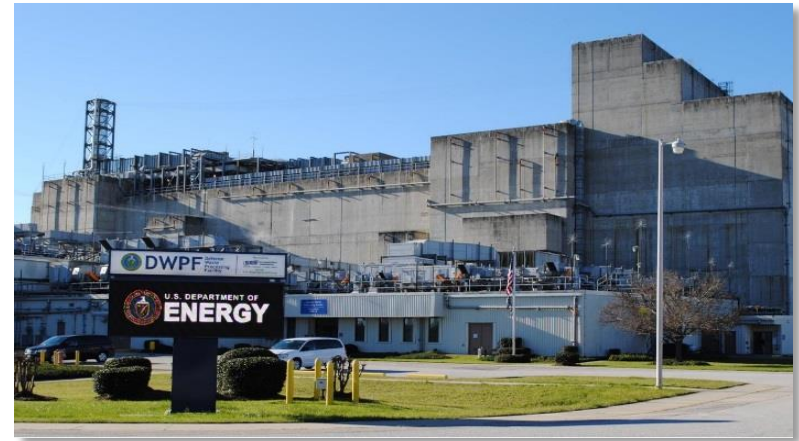
South Carolina

Savannah River Site

- Supports Salt Waste Processing Facility start-up
- Operate Defense Waste Processing Facility producing 135 -175 canisters.
- Continue construction of Saltstone Disposal Units 7, 8, and 9
- Complete D Area Ash Project including closure of the 488-1D Ash Basin and the Coal Pile Runoff Basin.
- Supports foreign and domestic fuel receipts in L Area.
- Supports disposition of spent (used) nuclear fuel in H-Canyon

Recent Accomplishments

- Completed construction of Saltstone Disposal Unit (SDU) 6 (FY 2017).
- Completed significant tie-in work to connect the Salt Waste Processing Facility to the liquid waste facilities (FY 2017).
- Removed failed Melter 2 in the Defense Waste Processing Facility and installed Melter 3 (FY 2017/FY 2018).
- Produce 40 Canisters of highly radioactive waste at the Defense Waste Processing Facility (DWPF) and Treat and disposition 700,000 gallons of tank waste salts (FY 2018).



Defense Waste Processing Facility



Salt Waste Processing Facility



Washington

Richland

- Continues Cesium Strontium Capsule activities to move capsules from wet to dry storage
- Continues waste site remediation and groundwater treatment
- Continue focus on canyon and waste site risk mitigation

Recent Accomplishments

- Treated 2.2 billion gallons of contaminated groundwater and completed T Plant modification for receipt of K Basin sludge (FY 2017)

Office of River Protection

- Continues construction, startup and commissioning activities at the Waste Treatment Plant supporting direct feed of low-activity waste for immobilization by December 2023.
- Continues design activities for the Low Activity Waste Pre-treatment System.
- Pursue a complementary pretreatment capability using tank-side cesium removal equipment to provide initial feed by December 2023, per the Consent Decree.
- Continues tank vapors work and supports Single Shell Tank retrievals

Recent Accomplishments

- Completed testing for WTP switchgear building (FY 2017).
- Completed the retrieval and transfer of high-level radioactive waste from tank AY-102 (FY 2017).



Waste Encapsulation and Storage Facility



Waste Treatment and Immobilization Plant



Idaho

Idaho

- Continues commissioning and the startup of Integrated Waste Treatment Unit Project
- Repackaging and characterizing contact-handled TRU waste
- Continues buried waste retrieval activities completing exhumation of the ninth and final retrieval area
- Experimental Breeder Reactor-II and Advanced Test Reactor spent (used) nuclear fuel will be transferred from wet to dry storage.

Recent Accomplishments

- Completed retrieval of about 65,000 cubic meters of transuranic waste at the Idaho Site's Advanced Mixed Waste Treatment Project (FY 2017).
- Moved 20 percent of Advanced Test Reactor spent fuel of the Idaho Nuclear Technology and Engineering Center (INTEC) wet storage basin to dry storage (FY 2017).



Integrated Waste Treatment Unit



Accelerated Retrieval Project Enclosure 9

Tennessee

Oak Ridge

- Continues capital asset project with modifications to the Building 2026 to support processing of U-233 materials
- Completes design and begins site preparation of the Outfall 200 Mercury Treatment Facility
- Continues demolition of remaining facilities at East Tennessee Technology Park
- Continue slab and soil remediation at East Tennessee Technology Park
- Initiates design for a new On-Site Waste Disposal Facility
- Continues mercury-related technology development

Recent Accomplishments

- Completed demolition of the K-732 Switchyard, K-832, K-832-H, and K-1203 at ETPP (FY 2017).
- Receive Critical Decision 2/3 Approval for the Building 2026 Uranium-233 Processing Preparation Project (FY 2018).
- Completed 13 contact-handled Transuranic waste shipments to the Waste Isolation Pilot Plant in FY 2017.



Demolition of East Tennessee Technology Park facilities



Outfall 200 Mercury Treatment Facility Rendering



Ohio

Portsmouth

- Continues operations of the Depleted Uranium Hexafluoride (DUF6) conversion facility
- Continues to clean out and prepare Gaseous Diffusion Plant (GDP) buildings for demolition: Deactivation focused on the second and third process buildings and achieving deactivation requirements for three additional units
- Supports continued construction of On-Site Waste Disposal Facility (OSWDF)

Recent Accomplishments

- Resumed DUF6 Operations after 3-year shutdown of operations (FY 2018).
- Completed construction of the On-Site Waste Disposal Facility Sediment Pond 3 (FY 2018).



X-333 Process Building at Portsmouth



Kentucky

Paducah

- Continues operations of the Depleted Uranium Hexafluoride (DUF6) conversion facility
- Continues building stabilization activities at the C-400 Complex

Recent Accomplishments

- Reached final regulatory agreement to accelerate the investigation and cleanup of the C-400 Complex (FY 2017).
- Complete Limited Area footprint reduction for the administrative facilities (C-100, C-101, C-102, and C-304) (FY 2018).



C-400 Complex at Paducah

New Mexico

Carlsbad (\$403M)

- Continues waste emplacement and increases transuranic waste shipments to 10 per week
- Continues work on the new ventilation system and addresses needs for major repair or replacement of critical infrastructure

Recent Accomplishments

- Resumed waste emplacement and mining activities at the Waste Isolation Pilot Plant (FY 2017).
- Achieve Critical Decision-2/3 to commence construction on the Safety Significant Confinement Ventilation System (15-D-411) and Utility Shaft (formerly Exhaust Shaft) (15-D-412).



Transuranic waste shipments arrive at the Waste Isolation Pilot Plant in Carlsbad, New Mexico

Los Alamos (\$192M)

- Planning for retrieval and repackaging of the below-grade transuranic waste
- Continues execution of New Mexico Environment Department approved groundwater remedies for the high explosives plume in Cañon de Valle (RDx)
- Continue activities for Chromium plume investigation through modeling and hydrology studies, installation of extraction and injection wells, and interim measure activities progression towards an approved Corrective Measures Evaluation.

Recent Accomplishments

- Completed cleanup of the final two known legacy sites in the Los Alamos townsite (FY 2017).
- Complete Remediated Nitrate Salt processing (FY 2018).



Chromium project extraction wells at Los Alamos, New Mexico

Sandia (\$3M)

- Continues field work for implementation of groundwater interim measures

Nevada (\$60M)

Nevada National Security Site

- Continues soil and groundwater remediation activities
- Continues disposal operations for low-level and mixed low-level Waste

Recent Accomplishments

- Disposed more than 900,000 ft³ of classified, low-level, and mixed low-level radioactive waste at the Area 5 Radioactive Waste Management Site (FY 2017).
- Commenced cleanup of the historic Clean Slate II site on the Tonopah Test Range (FY 2017).



Groundwater Well Drilling

Utah (\$35M)

Moab

- Continues excavation, transportation and disposal operations
- Continues groundwater monitoring

Recent Accomplishments

- Exceeded 2017 goal of shipping 450,300 tons of uranium mill tailings by 8,600 tons (FY 2017).
- Extracted almost 8.4 million gallons of contaminated groundwater from wells, preventing contaminants from reaching the Colorado River (FY 2017).



Locomotive transports sealed containers of tailings from Moab to a disposal site

- **EM continues to make measurable and meaningful progress towards cleanup, including several recent major accomplishments in FY 2017:**
 - Continues waste emplacement at the Waste Isolation Pilot Plant and needed infrastructure improvements
 - Completion of cleanup activities at Hanford's 618-10 burial ground
 - Construction of the Savannah River Site's 33 million-gallon Saltstone Disposal Unit 6
 - Retrieval of about 65,000 cubic meters of transuranic waste at the Idaho Site's Advanced Mixed Waste Treatment Project, bringing a nearly 15-year effort to closure
 - Groundbreaking of the new Mercury Treatment Facility at Oak Ridge, which will enable EM to carry out additional cleanup at the Y-12 National Security Complex
- **We will continue to build on our success by:**
 - Leveraging the expertise of the national lab complex and exploring potential project management and contract approaches used by the Office of Science
 - Placing emphasis on the need for and timeliness of executive decisions
 - Identifying opportunities to streamline the management team



Hanford



Idaho



Waste Isolation Pilot Plant



Savannah River



Technology Development



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Update on Regulatory Compliance, Waste Management & Transportation

EM SSAB Chairs Meeting

Mark Gilbertson

**Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs
Office of Environmental Management**

May 2018

Key Priorities

- Regulatory reform opportunities that improve effectiveness and efficiency of cleanup
- Risk based disposal policy and strategies to ensure safe disposal of EM waste
- WIPP status and transuranic waste
- Self-regulation of radioactive waste disposal through the Low-Level Waste Disposal Facility Federal Review Group
- Certification of radioactive and other hazardous materials transportation packages
- Policy/planning for new decontamination and decommissioning projects, infrastructure improvements, and excess facility transfers

Executive Order 13777,

- In February 2017, President Trump issued Executive Order 13777 directing agencies to evaluate existing regulations and make recommendations to agency heads regarding repeal, replacement or modification.

DOE Policy 451.1, National Environmental Policy Act Compliance Program

- Issued by the Deputy Secretary in December 2017, and cancelled DOE Order 451.1B; and placed responsibility and authority for NEPA on Heads of Departmental Elements

DOE Order 435.1 Oversight Program Update:

- EM significantly upgraded its DOE 435.1 oversight program in response to the Judgment of Needs contained in the Accident Investigations on the 2014 WIPP incidents

- In December 2017, DOE issued a policy to streamline NEPA.
 - Opportunities to streamline the process to make NEPA more efficient and effective
 - Places responsibilities and accountability on the heads of Departmental elements as opposed to General Counsel's office
 - Recognizing that most NEPA actions originate in the field, EM has tasked the field to identify the resources it needs to implement NEPA and to provide its recommendations on delegations of approval authority from EM-1
- The Department is also looking at opportunities to improve contracting associated with Management and Operations Contracts and Cleanup Contracts
 - Review underway by EM's acquisition organization
 - Receiving input from EFCOG and others
- In addition, more broadly the Department is seeking input from all FACA committees on opportunities for regulatory reform (Reference letter from Secretary Perry to Heads of Departmental Elements, dated 12/7/17)

Strengthening Relationships with Regulators

- EM is working with Environmental Protection Agency (EPA) Headquarters to address EPA's Superfund Task Force Recommendations, which look to streamline and improve efficiency/effectiveness of cleanup
 - Three recommendations related to federal facilities aimed at Improving the dispute resolution process, revising enforcement guidance, and improving engagement with federal agencies. But we are also interested in opportunities for expediting cleanup and remediation presented by the other recommendations
 - EPA Administrator elevated the approval authority to the Administrator for CERCLA RODs whose remedial actions cost more \$50M, recognizing the need for his involvement early in the process.
- We continue to engage EPA Headquarters, the state regulators, and all of the parties (EPA HQ, regional administrators, state regulators, and DOE) come together through our EPA Dialogue meetings, facilitated by the Environmental Council of States, to identify and resolve issues and challenges in support of an effective and efficient cleanup.

- **Interpretation of the Definition of High-Level Radioactive Waste (HLW):** No decisions have been made on changing the Department's interpretation of the Nuclear Waste Policy Act definition of HLW. An option under consideration is to interpret the definition of HLW to account for relative risk based on the level of radioactivity. This would replace the current approach of managing wastes resulting from the reprocessing of spent nuclear fuel based on its source.
- **Depleted uranium oxide:** EM continues to work on the Supplemental Environmental Impact Statement for the disposition of depleted uranium oxide conversion product generated from DOE's inventory of depleted uranium hexafluoride.
- **Test Bed:** In December 2017, EM treated and shipped ~3 gallons of treated, stabilized waste Hanford tank waste off site to the Waste Control Specialists (WCS) in Andrews, Texas.
 - The samples were decanted, filtered to remove solids, and processed to remove key radionuclides to the maximum extent practical.
 - The waste was then sent to Perma-Fix, where it was treated, stabilized, characterized to verify that it met regulatory requirements, and packaged in a U.S. Department of Transportation-approved container for shipment. DOE is looking at next steps.

- **Greater-than-Class C (GTCC) low-level radioactive waste:** In November 2017, DOE submitted the Report to Congress on disposal alternatives for GTCC LLW. The Department is currently evaluating potential National Environmental Policy Act requirements related to GTCC LLW disposal.
- **WIPP Status and Transuranic (TRU) Waste:**
 - WIPP has received more than 200 shipments since restart last year, and more than 12,100 shipments since its initial opening.
 - We are currently sending 6-8 shipments per week to WIPP, and aim to increase to 10 shipments/week in 2018.
 - Further increases in emplacement rates are anticipated to occur in the 2021 timeframe when a new ventilation system is in place and we begin emplacements in a new panel (Panel 8) with less contamination.
 - During 2018, we have shipped or plan to ship to WIPP from Waste Control Specialists, Argonne National Laboratory, Idaho, Los Alamos National Laboratory, Oak Ridge, and Savannah River Site.

- **New Mexico Environment Department (NMED) Permitting Status for WIPP:**
 - Recently approved: New safety significant ventilation system, updated training program
 - Pending requests (and status):
 - Panel closure (to support sealing of south end for worker safety; final decision anticipated spring 2018);
 - Volume of Record (public comment period on Class 2 PMR just closed; expect next action by NMED this month);
 - New shaft and access drifts (awaiting determination of class by NMED);
 - Excluded waste provision (DOE requested, at the end of last year, that NMED re-activate review of 2013 submittal, no outward actions so far);
 - Above-ground storage (submitted as class 3 PMR in 2017; not an operational or programmatic priority).
- **Waste Control Specialists (WCS) Waste**
 - DOE met an important milestone in mid-April with removal from WCS of the last above-ground drums of TRU waste without RCRA codes.
 - A small number (5) of above-ground drums with RCRA codes will continue to be safety stored and monitored.
 - We continue to evaluate options to address these waste containers that are being stored below grade at WCS.

- **Policy/planning for new decontamination and decommissioning projects, infrastructure improvements, and excess facility transfers**
 - Contaminated excess facilities
 - Received \$235M in the FY 2018 Omnibus to accomplish D&D at the LLNL Pool Type Reactor (\$100M), the Y-12 Biology Complex (\$125M), and the Idaho EBR-II (\$10M).
 - Oak Ridge and Idaho have EM staff and cleanup contracts already in place; LLNL does not – EM establishing staff and charting acquisition path to execute D&D.
 - FY18 Plan for Deactivation and Decommissioning of Nonoperational Defense Nuclear Facilities (D&D Report) in coordination – biennial report to Congress.
 - Report addresses excess facilities challenge from overall DOE perspective.
 - Report focuses on 1,639 DOE excess facilities; 1,269 are contaminated.
 - 254 contaminated excess facilities considered “Higher Risk”.
 - \$19.4B ROM estimate to D&D “Higher Risk” facilities; 93% of total D&D cost for all 1,639 DOE excess facilities.

FY 2017 Packaging and Transportation Highlights

- 7,700 Hazmat shipments; 2.6 million miles with no Department of Transportation recordable accidents
- 1,900 first responders trained in 117 Transportation Emergency Preparedness Program courses
- 32 package certification actions completed
- 4,300 certificate records in DOE's Radioactive Material Packaging Website (RAMPAC)
- 48 National Transportation tenders extended
- 7 DOE carriers were evaluated in the Motor Carrier Evaluation Program

EM Site-Specific Advisory Board Chairs Meeting

Steve Trischman
Director, Office of Budget and Planning

May 2018

- **Budget Cycle**
- **FY 2018 Budget Omnibus**
- **FY 2019 Budget Request Status**
- **Environmental Liability**
- **Budget and Planning Integration**



Primary Phases of the Budget Process

➤ Formulation

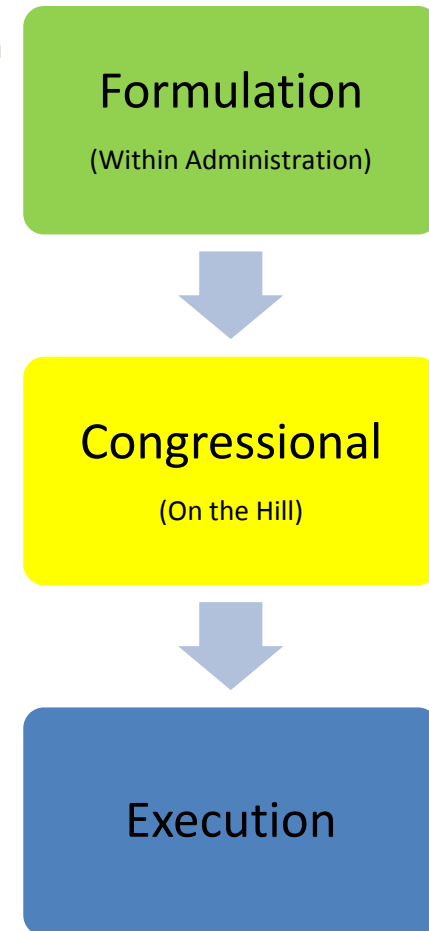
- Executive Branch prepares the President's Budget
- OMB and the Federal agencies begin preparing the next budget almost as soon as the President has sent the last one to the Congress
- OMB officially starts the process by sending planning guidance to Executive Branch agencies in the spring
- The President completes this phase by sending the budget to the Congress on the first Monday in February

➤ Congressional

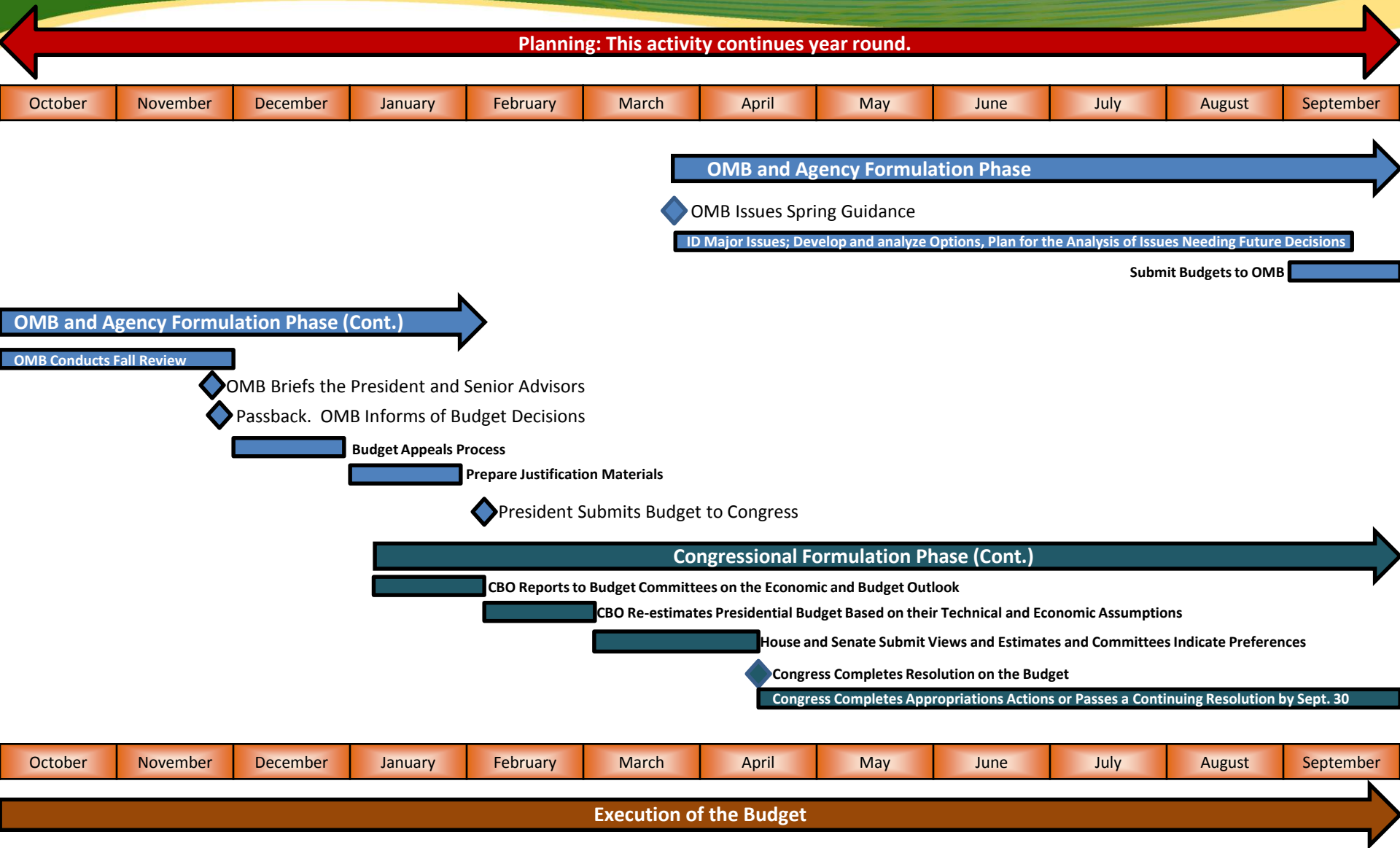
- Begins when the Congress receives the President's Budget
- The Congress does not vote on the President's Budget itself, and it does not enact a budget of its own
- It considers the President's Budget proposals, passes an overall revenue and spending plan called a "budget resolution," and enacts the regular appropriations acts and other laws that control spending and receipts

➤ Execution

- This phase lasts for at least five fiscal years and includes two parts:
 - Apportionment – OMB must provide an Apportionment schedule allocating funds to agencies for spending
 - Spending and Reporting

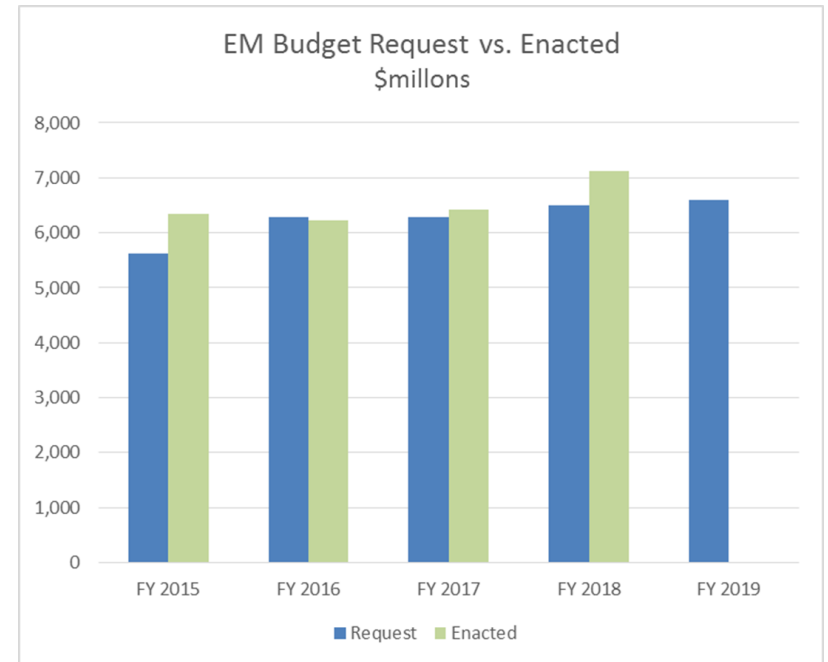
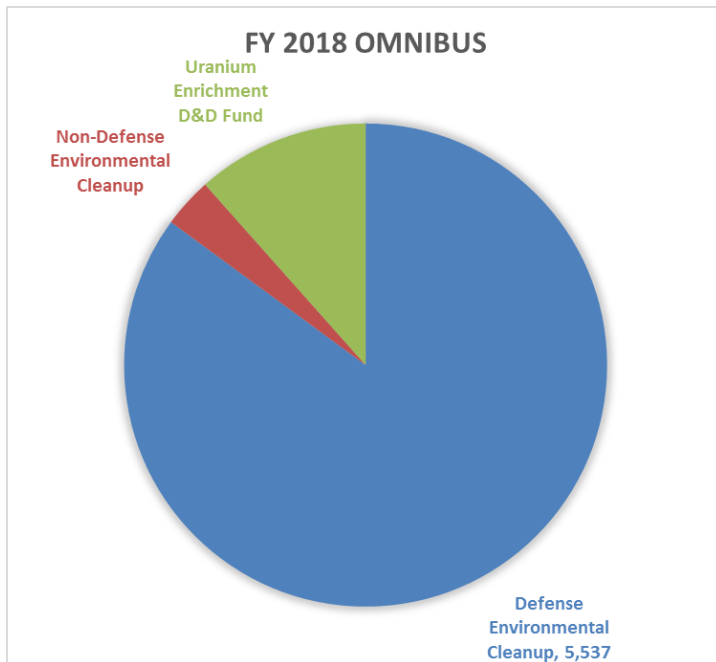


Budget and Planning Timeline

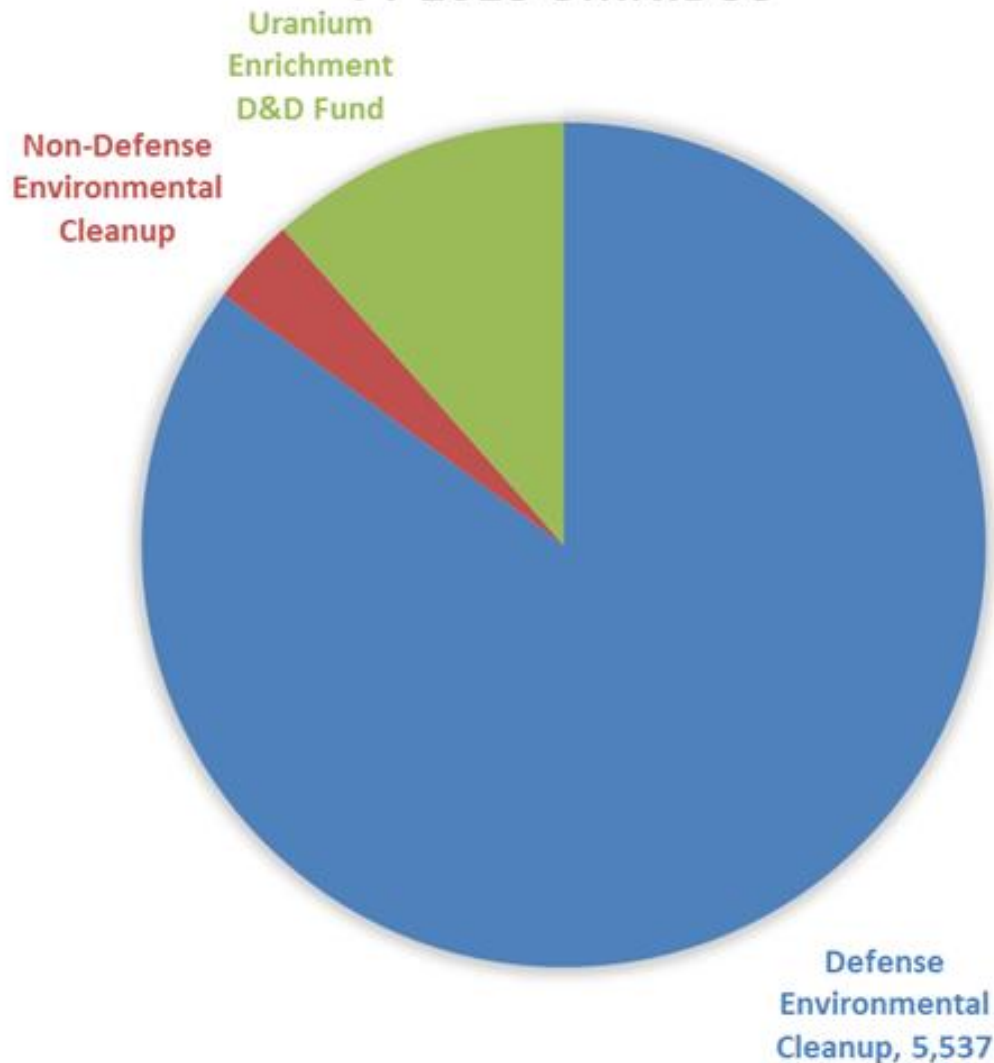


*During OMB’s Agency Formulation Phase, Budget Allocations are Embargoed and **NOT** Releasable Outside of the Administration

Site	FY 2017 Enacted	FY 2018 Request	FY 2018 HEWD	FY 2018 SEWD	FY 2018 Enacted	FY 2019 Cong Req.
Appropriation Summary						
Defense Environmental Cleanup	5,405	5,537	5,405	5,580	5,988	5,630
Non-Defense Environmental Cleanup	247	218	222	266	298	218
Uranium Enrichment D&D Fund	768	753	768	788	840	753
Total, EM	6,420	6,508	6,395	6,634	7,126	6,601

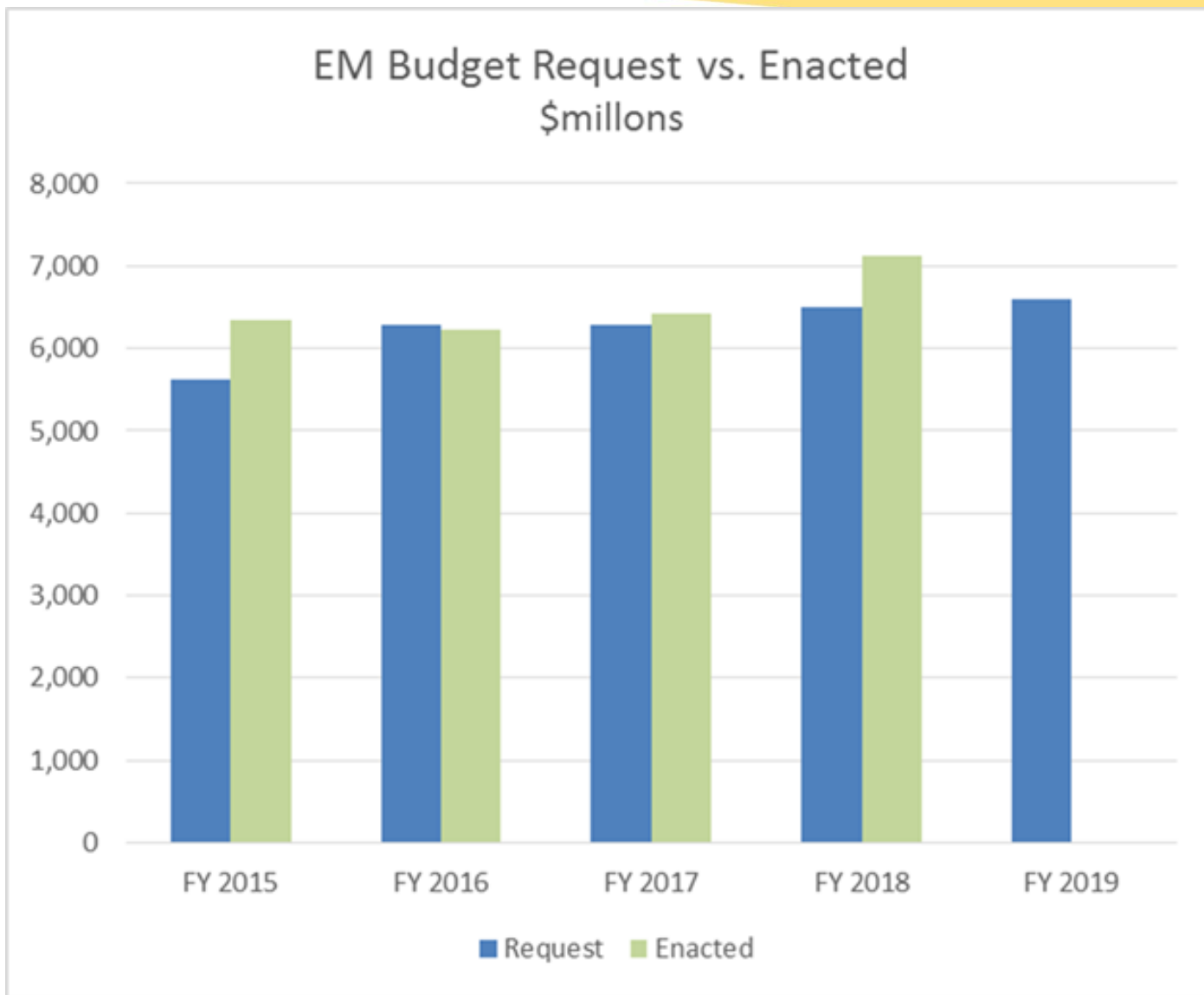


FY 2018 OMNIBUS



Defense \$6.0B
Non-Defense \$0.3
UED&D \$0.8B

FY17-19 Budget Requests



FY17-19 Budget Requests

Site	FY 2017 Enacted	FY 2018 Request	FY 2018 HEWD	FY 2018 SEWD	FY 2018 Enacted	FY 2019 Cong Req.
Brookhaven	0	2	1	2	2	2
Carlsbad	325	323	323	307	383	403
ETEC	10	9	8	9	9	8
Idaho	390	359	394	359	446	359
Los Alamos	194	192	194	218	220	192
Lawrence Livermore	1	1	31	1	101	2
Lawrence Berkeley	9	0	0	21	41	0
Moab	38	35	34	38	38	35
Nevada	62	60	60	60	60	60
Oak Ridge	498	390	461	515	640	409
Richland	916	800	840	910	947	747
River Protection	1,500	1,504	1,518	1,590	1,560	1,439
Paducah	272	270	270	273	273	270
Portsmouth	382	418	418	418	448	415
Savannah River	1,369	1,448	1,398	1,426	1,471	1,656
SPRU	4	2	2	2	5	15
Sandia	4	3	3	3	3	3
West Valley	70	64	68	78	78	64
Defense Closure Site Activities	9	5	5	5	5	5
Non-Defense Closure Site Activities	6	0	0	0	10	0
Program Direction	290	300	300	290	300	300
Mission Support Activities	15	43	15	15	15	13
Technology Development	25	25	20	25	35	25
Excess Facilities	0	225	0	55	0	150
Uranium Thorium Reimbursements	30	30	33	14	36	30
Total, EM	6,420	6,508	6,395	6,634	7,126	6,601

- Resources \$706M above our FY 2017 Enacted level will allow clean progress
 - +\$235M investment to address Excess Facilities at Oak Ridge, LLNL, and Idaho
 - +\$102M to support Savannah River's Nuclear Material and Liquid Waste Program
 - +\$60M to reduce the Departments reliance on Barter at Portsmouth
 - +\$60M to support ORPs WTP and Tank Waste program
 - +\$58M investment to support the completion of the Ventilation System at Carlsbad
 - +\$37M to continue completion efforts at LBNL and SEFOR
 - +\$31M to address PFP completion and address PUREX tunnels at Richland
 - +\$105M to support continued cleanup progress at ID (\$56M), LANL (\$26M), OR (\$16M) and WV (\$8M)
 - +\$20M investment in Technology Development needs
 - +\$10M for the Federal workforce

Environmental Management's Fiscal Year 2018 budget supports substantial progress:

- Maintains a safe and secure posture at all sites, while continuing with cleanup activities
- Continues waste emplacement at the Waste Isolation Pilot Plant
- Continues progress in protecting the Columbia River at Hanford
- Continues construction and commissioning activities for the Direct Feed Low Activity Waste approach to treat tank waste at Hanford
- Completes commissioning and startup of the Salt Waste Processing Facility at Savannah River
- Continues commissioning of the Integrated Waste Treatment Unit at Idaho
- Completes design and begins construction of the Mercury Treatment Facility at Oak Ridge
- Completes activities necessary to ready Building X-326 for demolition at Portsmouth

The mission of the Office of Environmental Management is to complete the safe cleanup of the environmental legacy brought about by five decades of nuclear weapons development and government-sponsored nuclear energy research



New Funding for Excess Facilities



Y-12 National Security Complex – Biology Complex Building



Lawrence Livermore National Laboratory – Livermore Pool Type Reactor Building 280



Y-12 National Security Complex – Critical Experiment Facility



Y-12 National Security Complex – Beta-4 Tool Storage Facility

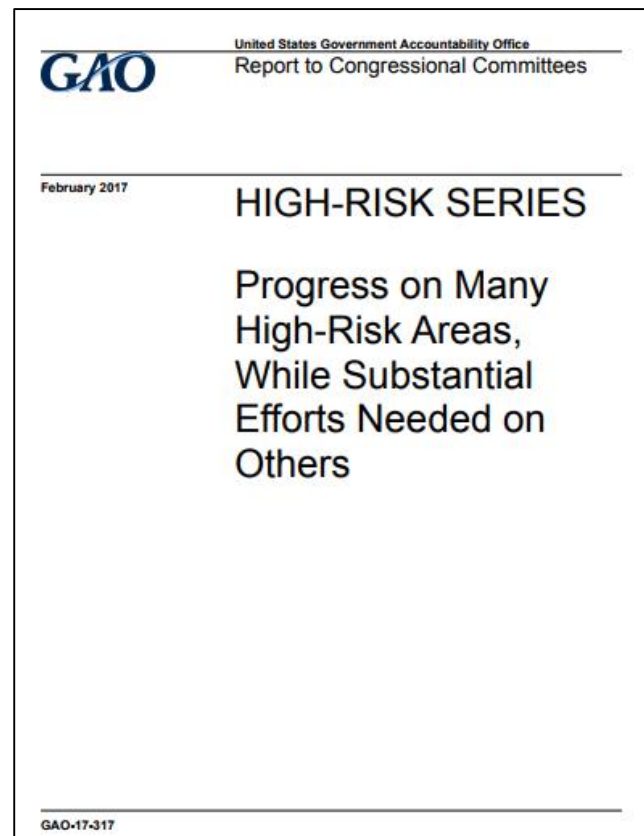


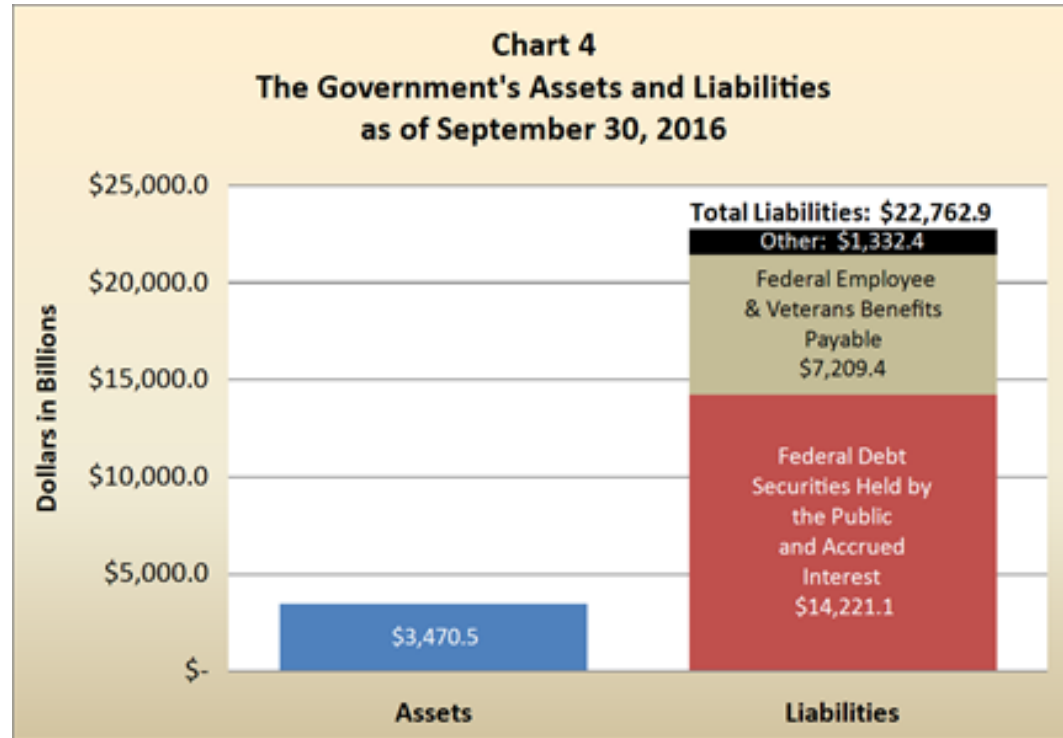
Lawrence Livermore National Laboratory – Heavy Elements Facility

- President's FY 2019 Budget was released on February 12, 2018
Detailed justification's released on March 20, 2018
- EM has briefed HEWD and SEWD on FY 2019 budget request
- EM is currently addressing follow-on questions as needed
- Anticipate initial Congressional Marks will be received in May/June timeframe
Will continue to work with Congressional staffers to address any additional needs as the process moves forward. Impacts briefings on Marks in late summer/early fall
- Anticipate FY 2019 will operate a portion of the year under a continuing resolution (CR)
Planning for a minimum of 3 month CR

- Spring formulation guidance from OMB to CFO to EM (pending)
- HQ/Field planning workshop (last month) provided the information for EM to begin formulation over the next few months
- Site Manager presentations to EM-1 this month
- Preparing EM recommendations to the Secretary in early June
- Department will submit its request to OMB in September
- Passback from OMB occurs in November
- The President's Budget goes to Congress in February 2019

- GAO added a new high risk area in 2017: Environmental Liability
- The EM Environmental Liability is the estimated cost for DOE to meet its present environmental cleanup obligations, including all work required to complete cleanup of facilities; remediation of soil and groundwater; and management and disposition of wastes, spent nuclear fuel, and surplus nuclear materials managed by EM.
- EM annually updates its EL estimate prior to recording this amount in DOE's Consolidated Financial Statements.

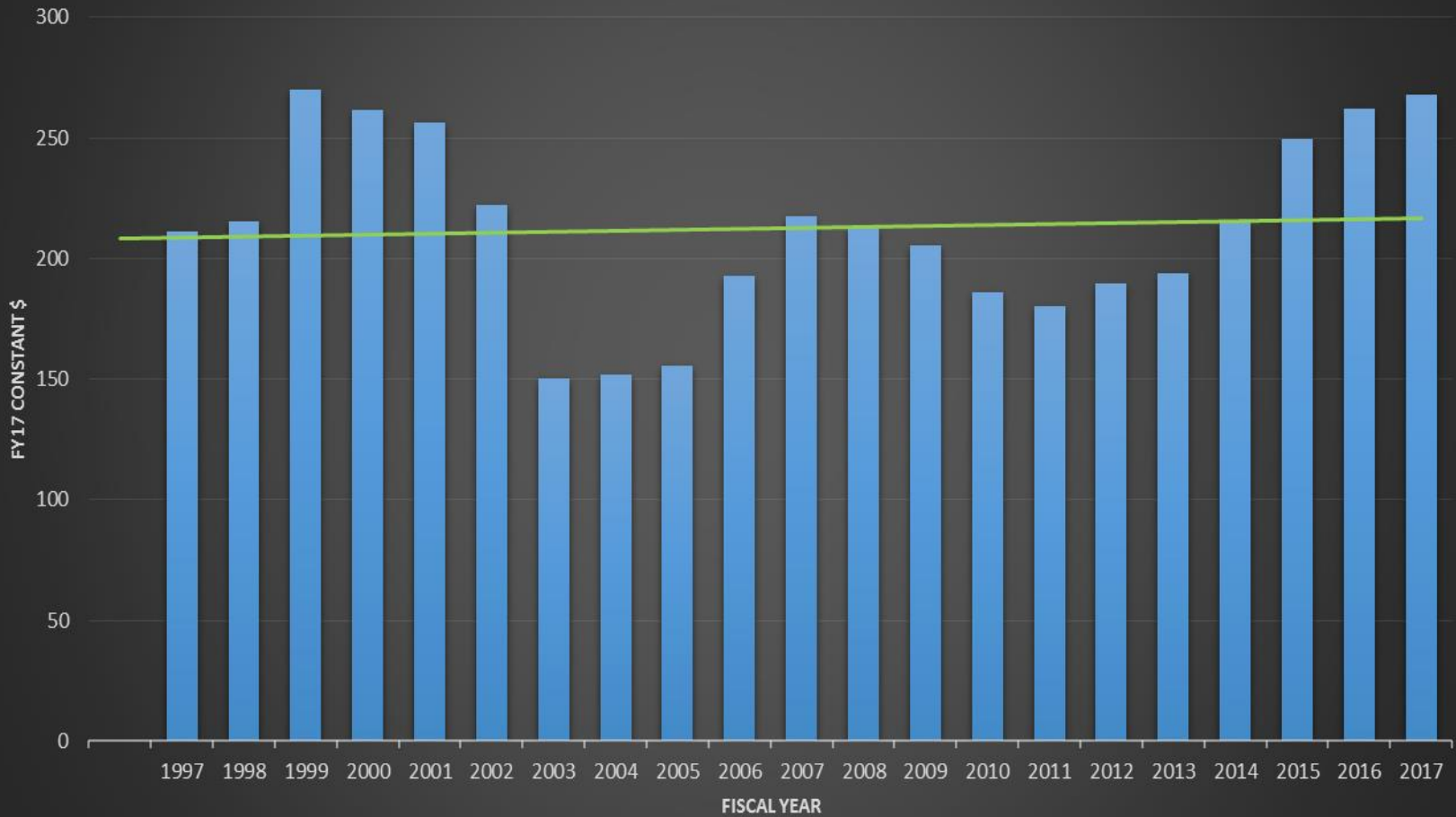




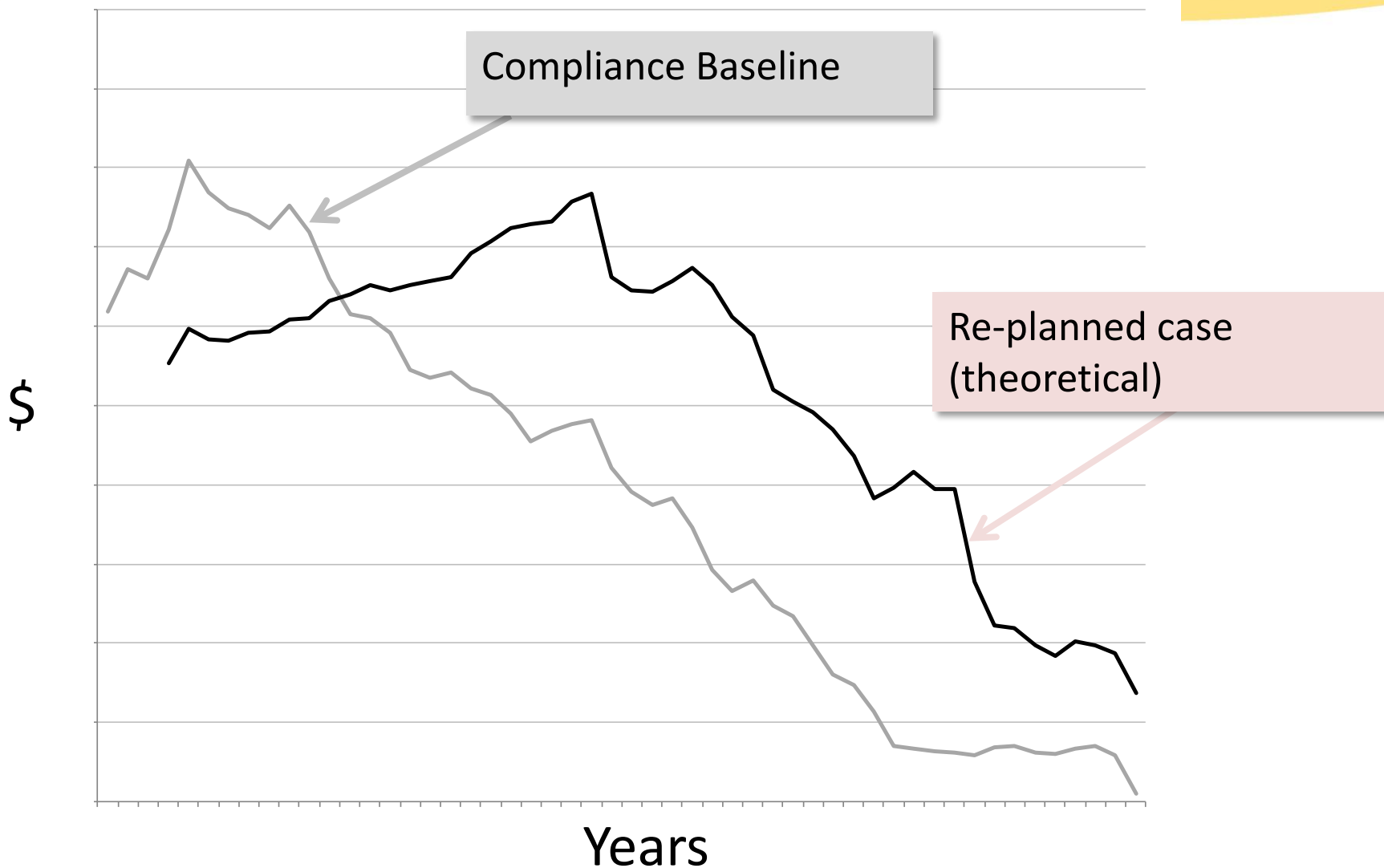
Assets³:							
Cash & Other Monetary Assets	\$	464.6	\$	305.1	\$	159.5	52.3%
Loans Receivable, Net	\$	1,277.6	\$	1,216.0	\$	61.6	5.1%
Inventories & Related Property, Net	\$	314.3	\$	320.6	\$	(6.3)	(2.0%)
Property, Plant & Equipment, Net	\$	979.5	\$	925.3	\$	54.2	5.9%
Other	\$	434.5	\$	494.2	\$	(59.7)	(12.1%)
Total Assets	\$	3,470.5	\$	3,261.2	\$	209.3	6.4%
Liabilities³ :							
Federal Debt Held by the Public & Accrued Interest	\$	(14,221.1)	\$	(13,172.5)	\$	1,048.6	8.0%
Federal Employee & Veterans Benefits	\$	(7,209.4)	\$	(6,772.4)	\$	437.0	6.5%
Other	\$	(1,332.4)	\$	(1,559.9)	\$	(227.5)	(14.6%)
Total Liabilities	\$	(22,762.9)	\$	(21,504.8)	\$	1,258.1	5.9%
Net Position (Assets minus Liabilities)	\$	(19,292.4)	\$	(18,243.6)	\$	1,048.8	5.7%

United States Liabilities	2016	2015	Change	
		(Billions)		
Federal Debt and Accrued Interest	14,221	13,173	1,048	8%
Federal Employee & Veterans Benefits	7,209	6,772	437	6%
Other	1,332	1,560	(228)	-15%
Total	22,762	21,505	1,257	6%
Other				
Environmental and Disposal Liabilities				
DOE	372	340	32	9%
DOD	63	60	3	5%
Other Agencies	12	12	-	0%
	447	412	35	8%
DOE				
EM	257	240	17	7%
Active Facilities	37	31	6	19%
Other Legacy EM EL	78	69	9	13%
	372	340	32	9%
Percent of total liability	1.1%		0.08%	

Office of Environmental Management Environmental Liability (\$ Billions)

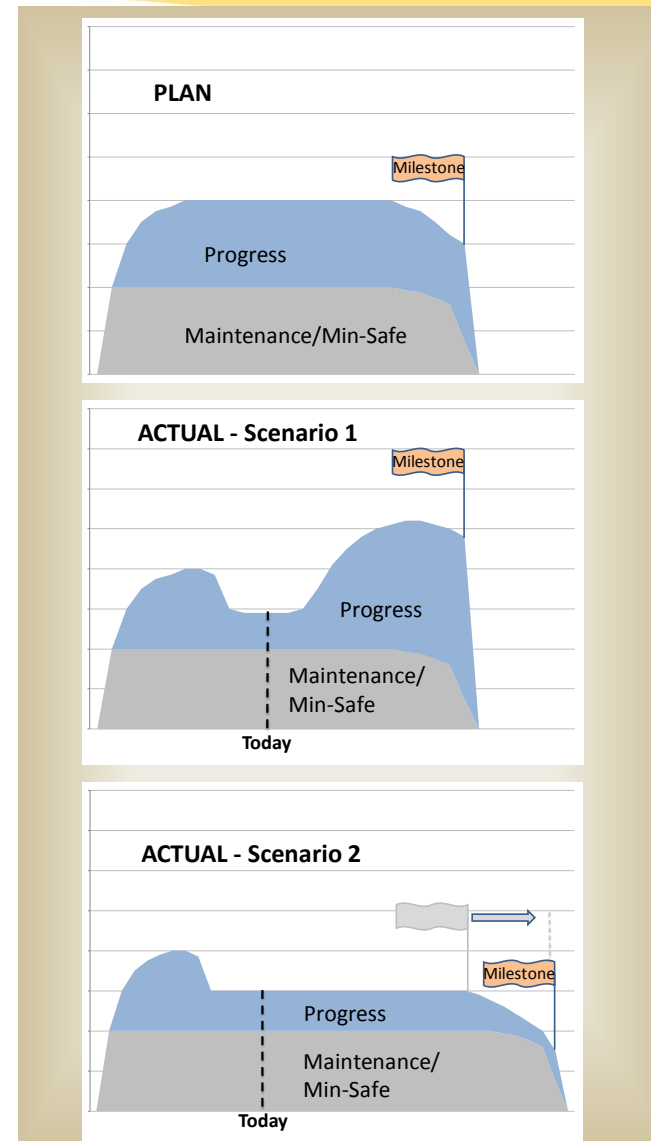


Site Cleanup Baselines Require Replanning to Accommodate Different Annual Funding, Scope Changes, Technical Issues



Accumulation of Technical Challenges and Funding Shortfalls Results in Unworkable Baseline

- **Baselines reflect compliance requirements**
- **Baselines are ambitious in an effort to make progress at all sites**
- **Constrained funding in a given year delays progress**
- **Technical issues can cause delay and increase cost**



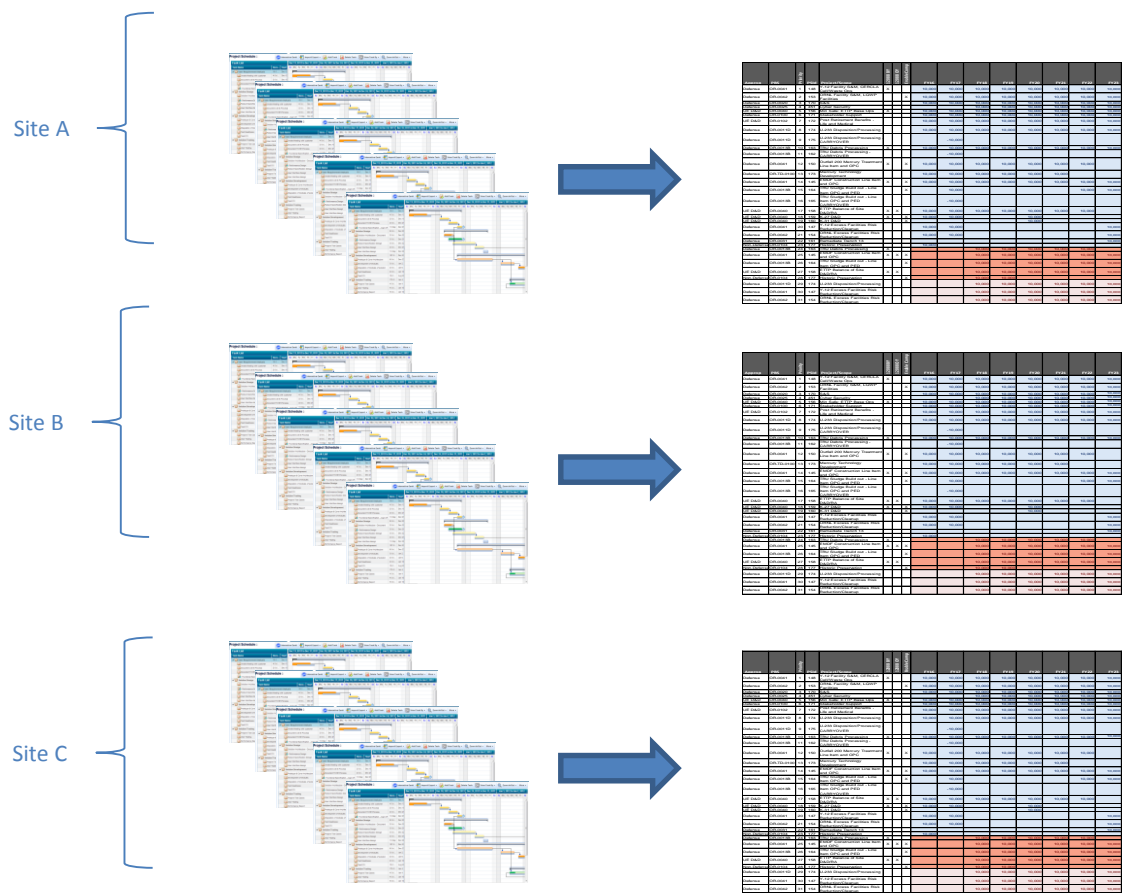
Near-Term Planning & Budget Activities

- Currently developing life-cycle planning profiles.
 - Establish realistic cost and schedule expectations for each site and document underlying assumptions/basis.
 - Provide improved basis for measuring progress and evaluating alternative cleanup approaches.

- Expand HQ-Field EM planning and budget alternatives analysis.
 - Continue planning and budget workshops
 - Update/life-cycle planning profiles
 - Provide essential input for update EM Program long-term strategy
 - Support Administration transition




Site Prioritization



Program Prioritization

Department of Energy
FY 2018 Congressional
Budget Request



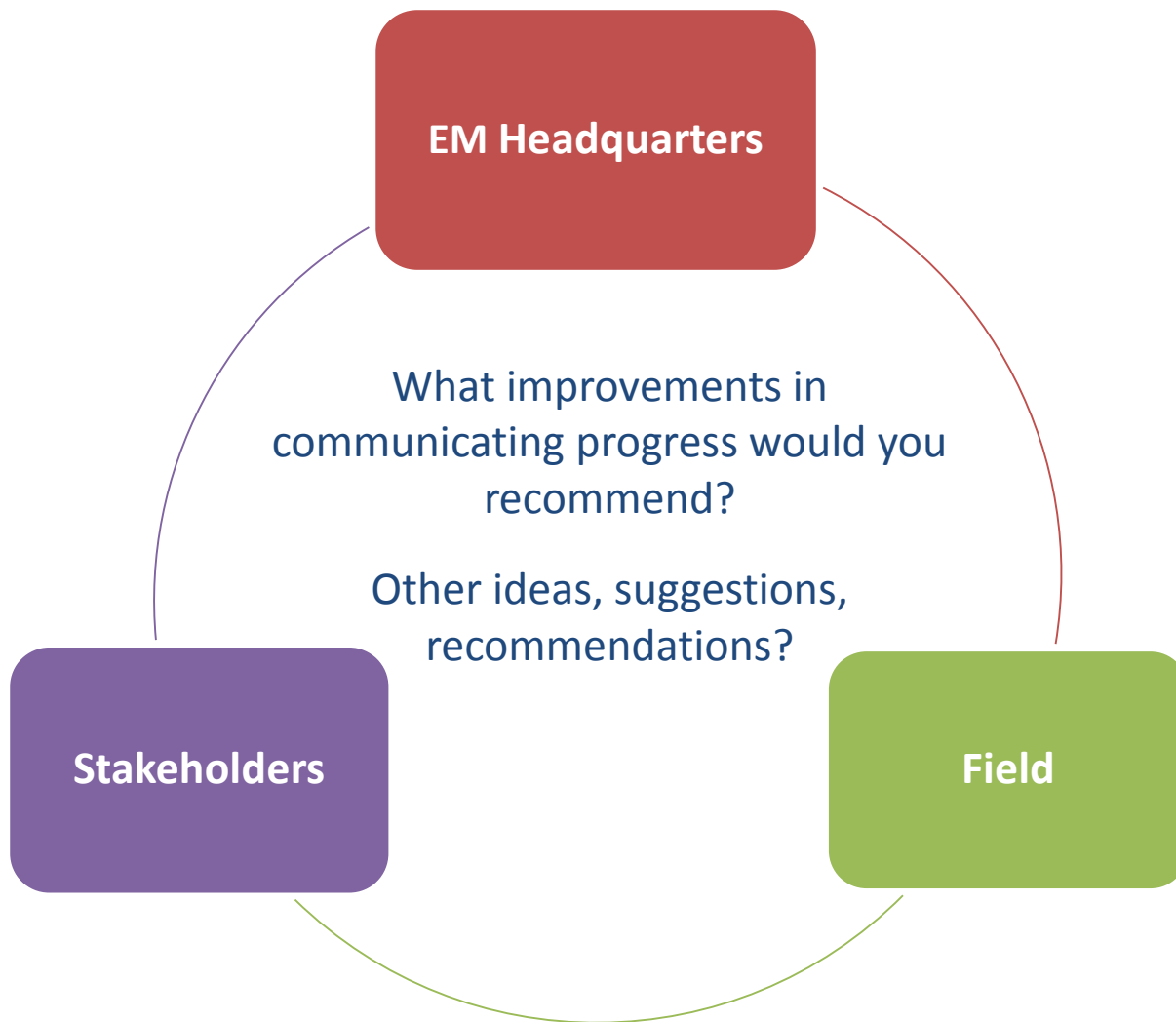
Environmental Management

➤ **When can stakeholders engage and provide input**

- EM releases letter of engagement refresher to site offices
 - Letter outlines how/when site offices can engage with stakeholders for the upcoming fiscal year process
 - Letter is usually released prior to receiving guidance from OMB or the Department
 - Typically done in the February timeframe; however due to the delay in FY 2018 budget activities the FY 2019 letter was not released until late spring

➤ **How can stakeholders engage and provide input**

- Site offices enlist specific engagement for next budget cycle from stakeholders usually in the February/March timeframe
- Engagement is typically discussed in terms of priorities and overarching activities to be performed, not in terms of how much is needed for activities
- Engagement should continue to occur year-round, you are not limited to communicating your priorities just in the initial timeframe -- If things change, let us know



Background

- **What drives the budget requirements?**
 - The Budget and Accounting Act requires the President to submit a budget
 - Agencies have internal process that ultimately lead to the President formally transmitting budget proposals to Congress
 - The Congress considers the recommendations and uses the information included in the budget as it drafts and passes laws that affect spending
 - Neither branch of Government can unilaterally decide how budgets are distributed/executed, it is through the budget process the Government decides how much money to spend, what to spend it on, and how to raise the money it has decided to spend
- **All Government agencies are required to follow the governing steps laid out in the Office of Management and Budget (OMB) Circular No. A-11 “Preparation, Submission, and Execution of the Budget”**
 - Provides an overview of the budget process
 - Indicates what/when agencies can communicate externally

➤ **Defense Environmental Cleanup**

- Often referred to as 050 funds
- Funds legacy cleanup activities associated with Defense funded legacy waste
- Subject to Defense fund caps

➤ **Non-Defense Environmental Cleanup**

- Often referred to as non-050 funds
- Funds legacy cleanup activities associated with non-defense funded legacy waste
- Subject to non-defense fund caps

➤ **Uranium Enrichment Decontamination and Decommissioning (UE D&D)**

- Often referred to as non-050 funds
- Funds legacy cleanup activities under statutory requirements from the Energy Policy Act of 1992 for the sole purpose of uranium enrichment facility decontamination
- Subject to non-defense fund caps

FY 2017 Enacted Structure - \$6,418,908 net

(dollars in thousands)

<p>\$5,405,000</p> <p>Defense Environmental Cleanup (050)</p>	<p>\$563,000</p> <p>Defense Uranium Enrichment D&D (050)</p>	<p>\$247,000</p> <p>Non-Defense Environmental Cleanup (non-050)</p>	<p>\$768,324</p> <p>Uranium Enrichment Decontamination and Decommissioning (UE D&D) (non-050)</p>
<p>1.Closure Sites</p> <p>2.Hanford Site: Central Plateau Remediation</p> <p>3.Hanford Site: Richland Community and Regulatory Support</p> <p>4.Hanford Site: River Corridor and Other Cleanup Operations</p> <p>5.Hanford Site: 15-D-401 Containerized Sludge Removal Project</p> <p>6.Idaho National Laboratory: Idaho Cleanup and Waste Disposition</p> <p>7.Idaho National Laboratory: Idaho Community and Regulatory Support</p> <p>8.NNSA Sites: Los Alamos</p> <p>9.NNSA Sites: Lawrence Livermore National Laboratory</p> <p>10.NNSA Sites: Nevada</p> <p>11.NNSA Sites: Sandia National Laboratories</p> <p>12.NNSA Sites: Separations Process Research Unit</p> <p>13.Oak Ridge: OR Cleanup and Disposition</p> <p>14.Oak Ridge: OR Nuclear Facility D&D</p> <p>15.Oak Ridge: OR Reservation Community and Regulatory Support</p> <p>16.Oak Ridge: OR Technology Development and Deployment</p> <p>17.Oak Ridge: U233 Disposition Program</p> <p>18.Oak Ridge: 14-D-403 Outfall 200 Mercury Treatment Facility</p> <p>19. Oak Ridge: 17-D-401 Onsite Waste Disposal Facility</p> <p>20.Office of River Protection: Tank Farm Activities</p> <p>21.Office of River Protection: 15-D-409 Low Activity Waste Pretreatment System</p> <p>22.Office of River Protection: 01-D-16A-D WTP Subprojects A-D</p> <p>23.Office of River Protection: 01-D-16E Pretreatment Facility</p> <p>24.Office of River Protection: WTP Commissioning</p> <p>25.Program Direction</p> <p>26.Program Support</p> <p>27.Safeguards and Security</p> <p>28.Savannah River Site: Savannah River Site Risk Management Operations</p> <p>29.Savannah River Site: Radioactive Liquid Tank Waste Stabilization and Disposition</p> <p>30.Savannah River Site: SR Community and Regulatory Support</p> <p>31.Savannah River Site: 05-D-405 Salt Waste Processing Facility</p> <p>32.Savannah River Site: 15-D-402 Saltstone Disposal Unit #6</p> <p>33.Savannah River Site: 17-D-402 Saltstone Disposal Unit #7</p> <p>34.Technology Development and Deployment</p> <p>35.Waste Isolation Pilot Plant: Waste Isolation Pilot Plant</p> <p>36.Waste Isolation Pilot Plant: 15-D-411 Safety Significant Confinement Ventilation System</p> <p>37.Waste Isolation Pilot Plant: 15-D-412 Exhaust Shaft</p> <p>38.CB-010 Economic Assistance to the State of NM</p>	<p>1.UEDD Fund Contribution</p>	<p>1.Fast Flux Test Reactor Facility</p> <p>2.Gaseous Diffusion Plants</p> <p>3.Small Sites</p> <p>4.West Valley Demonstration Project</p>	<p>1.Oak Ridge</p> <p>2.Paducah Nuclear Facility D&D</p> <p>3.Portsmouth Nuclear Facility D&D</p> <p>4.Portsmouth: 15-U-408 On-Site Waste Disposal Facility</p> <p>5.Pension and Community and Regulatory Support</p> <p>6.Title X Uranium/Thorium Reimbursement Program</p>

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EM Project Update

ETTP		April	May
Sitewide ROD			The Design Characterization Completion Report for the Sitewide Groundwater Treatability Study was submitted to the regulators for review.
Central Neutralization Facility (CNF) Demolition	Deactivation is complete. Mobilization is complete and Storm Water Pollution Prevention Plan control measures are in place. CNF facilities and structures demolition is complete and crews continue final disposal of associated debris. Site cleanup and restoration activities were initiated.		
Remaining Facilities	Purging of all of the surge tanks in Building K-631 was begun with four completed and two at 50 percent complete.		The Toxic Substances Control Act Incinerator transfer line removal-flex line removal is 20 percent complete.
	Poplar Creek deactivation is 80 percent complete overall and demolition is 50 percent complete.		Completed coordination with the Tennessee Wildlife Resources Agency (TWRA) for a proposed easement that will provide access to the Duct Island Parcel. This was necessary because the proposed access easement crosses a small section of the TWRA-managed Black Oak Ridge Conservation Easement that surrounds ETTP.
ORNL		April	May
Biology Complex	Preliminary sample results were received for the 9743-02 and 9770-02 Building demolition debris. Once data is validated, a special waste request for disposal at the ORR Industrial Landfill will be submitted to the State of Tennessee.		Work started on pre-demolition activities for Building 9207 and ancillary facilities. Long-lead procurement items are being ordered and field crews are now on site.
	Preparation is underway for procurement of trailers, construction elevators, and other equipment to support the pre-demolition activities at Building 9207 and ancillary facilities (represents approximately 80 percent of the remaining square footage of the Biology Complex).		An interface agreement with Consolidated Nuclear Security, LLC for the utility work necessary for the installation of trailers and other infrastructure has been established.
Surveillance and Maintenance	All fogging activities have been completed for Buildings 3028 and 3029. The waste materials from this project are staged and stored awaiting acceptance of the waste profile.		Initiated the removal of the old dual media and air stripper at Building 3609 in preparation for the installation of new equipment.
	Trailer activities at 7078/7582/6556 are continuing with sanitary waste and potable water connections being installed. Repaired Core Hole 8 4411 Well and Extraction Well #1. Also began packaging miscellaneous waste at Building 3026.		Removal activities for old process equipment at the main Process Waste Facility, Building 3608, were initiated.
Molten Salt Reactor Facility	The in-situ disposition feasibility evaluation has been reactivated. Planning activities are underway for a team site visit and workshop, which would result in a draft position paper on the feasibility of in-situ grouting of the salt tanks.		Work packages are being finalized for replacing the in-line filter in the Glove Box and the vacuum pump located at MSRE. Also continuing to pursue efforts toward continuous venting of the reactive gas removal system and preparing for the sampling contract for the fuel drain tanks.

EM Project Update

ORNL	April	May
Molten Salt Reactor Facility		The evaluation of the Feasibility of In-Situ Decommissioning (ISD) was initiated. If the conclusion is made that ISD is a feasible approach, a more formal analysis will be incorporated into a revision of the RI/FS.
U-233 Disposition	Fieldwork involving cap and compaction grouting began to address long-term soil stability as a result of the 3019 dropout.	Completed engineering calculations validating the use of CARTs (carbon steel casing dollies) to transport the MSRE salt probes outside of the high bay.
	Completed initial Depleted Uranyl Nitrate conversion pilot testing in support of the 2026 Processing Preparation Project.	
Y-12	April	May
Outfall 200 Mercury Treatment Facility (MTF)	A pre-proposal site tour for the OF 200 MTF balance of construction procurement was held. Twenty-seven individuals representing 21 companies attended. The tours included the headworks area, transfer pipeline corridor, and the treatment facility location.	OF 200 MTF Balance of Construction proposals were received for evaluation
	All three Early Site Preparation contactors have mobilized and utility relocation, demolition, and secant pile wall work is ongoing.	Completed installation of a demonstration secant pile at the MTF Headworks site; drilled to a depth of 41.5 ft and filled with concrete. Also completed drilling probe holes for the north secant pile wall. Early site preparation utility relocation and demolition work continues.
	The RDR/RAWP was approved by the regulators	
Y-12 Facilities D&D	Preparations underway to prepare for removal and demolition of the remaining large blue tanks south of the mezzanine. Approximately 2.5 tons of mercury have been recovered to date.	Demolition of the mezzanine structure, equipment, and piping on the west end of Alpha 4 continues with approximately 2.5 tons of mercury collected to date.
	OREM is reviewing the proposal for work on the East COLEX equipment, which will include demonstrations of alternative methods for removing the mercury from the equipment piping.	The debris is being segregated and loaded into waste containers as each section of the demolition occurs to minimize mercury vapor issues. Completed cold and dark activities to isolate the east COLEX equipment and characterization activities have begun.
		Demolition of the COLEX equipment on the west side of Alpha 4 is approximately 50 percent complete. Characterization of the east COLEX equipment is nearing completion.
		The WHP for Beta 4 Facility Characterization Activities was submitted to the regulators for review.

EM Project Update

Off-Site Cleanup/Waste Management	April	May
Transuranic Waste Processing Center (TWPC)	Headspace gas sampling of the Radiochemical Engineering Development Center contact-handled TRU waste was initiated. Approximately 1,000 containers are to be routed through headspace gas sampling to support final approval to ship the waste to the Waste Isolation Pilot Plant (WIPP).	The DOE HQ Voluntary Protection Plan (VPP) assessment was completed and resulted in a recommendation to retain VPP Star Status for the TWPC. This was the first review under the contract from North Wind Solutions, LLC.
	The Site Treatment Plan Semiannual Progress Report was submitted to the regulators for review and approval.	
EMDF	The fieldwork associated with installation of piezometers and surface water flumes at the Central Bear Creek Valley preferred site for the new CERCLA low-level radioactive waste disposal facility has been completed.	The surface water walkdowns of NT-10, D-10W, and NT-11 were completed at the proposed EMDF site with the State of Tennessee. Field surveys of mammals and amphibians and wetland delineation are also underway.
	The FFA parties continued to finalize the Proposed Plan.	The Field Sampling Plan (Ph. 2) was submitted to the regulators for review.
WRRP	Held a Melton Valley/Bethel Valley exit pathway meeting with the regulators to provide a status update.	Completed an in field survey with ORNL natural resources personnel of proposed sites on the ORR near the Clinch River for installation of new exit pathway wells. The surveyors concluded that the proposed activity is not expected to have significant impacts on natural resources.

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Abbreviations/Acronyms List for Environmental Management Project Update

AM – action memorandum

ARARs – Applicable or Relevant and Appropriate Requirements

ARRA – American Recovery and Reinvestment Act

BCV – Bear Creek Valley

BG – burial grounds

BV- Bethel Valley

CARAR – Capacity Assurance Remedial Action Report

CART - carbon steel casing dollies

CBFO – Carlsbad Field Office

CERCLA – Comprehensive Environmental Response, Compensation
and Liability Act

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

DARA – Disposal Area Remedial Action

DNAPL – Dense Non-Aqueous Phase Liquids

DOE – Department of Energy

DSA – documented safety analysis

DQO – data quality objective

EE/CA – engineering evaluation/cost analysis

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

HRE – Homogenous Reactor Experiment

IROD – Interim Record of Decision

ISD - In-Situ Decommissioning

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

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

NPDES – National Pollutant Discharge Elimination System

NPL – National Priorities List

OR – Oak Ridge

ORGDP – Oak Ridge Gaseous Diffusion Plant

OREIS – Oak Ridge Environmental Information System

OREM – Oak Ridge Office of Environmental Management

ORNL – Oak Ridge National Laboratory

ORO – Oak Ridge Office

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

VPP – Voluntary Protection Plan

WAC – waste acceptance criteria

WEMA – West End Mercury Area (at Y-12)

WHP – Waste Handling Plan

WIPP – Waste Isolation Pilot Plant

WRRP – Water Resources Restoration Program

WWSY – White Wing Scrap Yard

Y-12 – Y-12 National Security Complex

ZPR – Zero Power Reactor



FY 2018 Incoming Correspondence

#	Date	To	From	Description	Distribution
103	5/1/18	Moore, DOE Deacon, DOE Henry, DOE McMillan, DOE	Awasthi, TDEC Czartoryski, TDEC	Submittal of Semi-Annual Progress Report Site Treatment Plan for Mixed Waste on the US DOE ORR	DOEIC, Notified board officers of receipt
104	5/7/18	Japp, DOE	Froede, EPA	Review of revised D2 Phase 1 Field Sampling Plan for the proposed EMDF for CERCLA, ORR Waste Disposal, Oak Ridge, TN (DOE/OR/01-2739&D2)	DOEIC, Notified board officers of receipt
105	5/7/18	Japp, DOE	Young, TDEC	TDEC Approval Letter Phase 1 Field Sampling Plan for the proposed EMDF for CERCLA, ORR Waste Disposal, Oak Ridge, TN (DOE/OR/01-2739&D2) w/ attachment A: Statement of Work to Expedite Groundwater Characterization, Central Bear Creek Valley Site 7C (August 8, 2107)	DOEIC, Notified board officers of receipt
106	5/8/18	Jones, EPA Young, TDEC	Henry, DOE Japp, DOE	Transmittal of the Waste Handling Plan for the Demolition of the BETA 4 Complex located at Y-12, Oak Ridge, TN (DOE/OR/01-2766&D1)	DOEIC, Notified board officers of receipt
107	5/9/18	Jones, EPA Young, TDEC	Deacon, DOE Japp, DOE	Removal of Toxic Substances Control Act Contaminated Slabs	DOEIC, Notified board officers of receipt
108	5/11/18	Jones, EPA Young, TDEC	Deacon, DOE Japp, DOE	Transmittal of the Revision to the Implementation Process to the Remedial Design Report/Remedial Action Work Plan for Zone 2 Soils, Slabs, and Subsurface Structures, ETPP, Oak Ridge, TN (DOE/OR/01-2224&D5/R1)	DOEIC, Notified board officers of receipt
109	5/10/18	Japp, DOE	Young, TDEC	Response to April 2, 2018 letter from DOE – Disposal of Building K-25 Underlying Slab and Soils per the Record of Decision for Soil, Buried Waste, and Subsurface Structure Actions in Zone 2, ETPP, Oak Ridge, TN (DOE/OR/01-2161&D2)	DOEIC, Notified board officers of receipt
110	5/10/18	Japp, DOE	Young, TDEC	Addendum to the Waste Handling Plan for Surveillance and Maintenance Activities at the ORNL, Oak Ridge, TN (DOE/OR/01-2565&D2/A2)	DOEIC, Notified board officers of receipt

#	Date	To	From	Description	Distribution
111	5/22/18	Jones, EPA Young, TDEC	Deacon, DOE Japp, DOE	Internal Dispute Resolution Agreement on K-25 and K-27 Reference: TDEC Comment Letter removal Action Report for the D&D of K-25 & K-27 buildings at ETTP (DOE/OR/01-2729&D2)	DOEIC, Notified board officers of receipt
112	5/21/18	Japp, DOE	Young, TDEC	Addendum to the Remedial Design Report for the Disposal of ORR CERLA of 1980 Waste, Oak Ridge, TN (DOE/OR/01:1873&D4/A1/R1)	DOEIC, Notified board officers of receipt
113	5/23/18	Japp	Jones, EPA	Comments on Identifying Building K-25 Slab Disposed in Accordance with Waste Handling Plan for Consolidated Soils and Waste Sites Within Zone 2, ETTP, Oak Ridge, TN (DOE/OR01-2328&D1)	DOEIC, Notified board officers of receipt
114	5/29/18	Jones, EPA Young, TDEC	Deacon, DOE Japp, DOE	Transmittal of the Design Characterization Completion Report for the Sitewide Groundwater, Treatability Study at ETTP, Oak Ridge, TN (DOE/OR/01-2768&D1)	DOEIC, Notified board officers of receipt

Travel Opportunities

Meeting/Event	Dates	Location	Reg. Cost	Website	Conference Lock Date; (# Allocated Attendees)	Deadline to Submit Requests
FY 2018						
Intergovernmental Meeting with DOE (Pending requests: <i>none</i>)	Nov. 15-17, 2017	San Antonio	none		NA	10/4/17
EPA National Brownfields Conference Attendees: <i>none</i>	December 4-7, 2017	Pittsburgh	\$125	https://www.brownfields2017.org/	N/A	11/1/17
2018 Spring Chairs Meeting Attendees: Price, Wilson)	May 1-4, 2018	Roswell/ Carlsbad, NM	none		N/A	3/7/18
2018 U.S. EPA Community Involvement Training Conference (Attendees: Lohmann)	July 18-19, 2018	Kansas City, MO	none	https://www.epa.gov/superfund/community-involvement-training-program-0	N/A	5/21/18
RadWaste Summit (Attendees: Shields)	Sept. 4-6, 2018	Henderson, Nevada	\$625	http://www.exchangemonitor.com/forums/annual-radwaste-summit/	2/3/18	1/2/18
DOE National Cleanup Workshop Attendees: Price, Wilson)	Sept. 11-13, 2018	Alexandria, VA	\$425	http://www.cleanupworkshop.com/	5/10/18 (2)	5/10/18
FY 2019						
Waste Management Symposium (Requests: none)	March 3-7, 2019	Phoenix	TBD	www.wmsym.org	TBD (2)	TBD/likely July
Perma-Fix Nuclear Waste Mgmt. Forum (Requests: none)	Nov. 26-28, 2019	Nashville	TBD		TBD (2)	TBD/likely July
National Environmental Justice Conference & Training (Requests: none)	March 13-15, 2019	Washington, D.C.	none	http://thenejc.org	N/A	TBD/likely January

Shaded trips are closed