

**ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD  
to the  
U.S. DEPARTMENT OF ENERGY**

**PUBLIC MEETING MINUTES**

**Luther F. Carson Four Rivers Center  
100 Kentucky Ave Paducah, KY 42003  
May 10-11, 2017**

## LIST OF ACRONYMS

CAB – Citizens Advisory Board	NMED – New Mexico Environment Department
CD – Critical Decision	NNMCAB – Northern New Mexico Citizens’ Advisory Board
D&D – Decontamination & Decommissioning	NNSA - National Nuclear Security Administration
DFO – Designated Federal Officer	NNSS – Nevada National Security Site
DDFO – Deputy Designated Federal Officer	NRC - Nuclear Regulatory Commission
DOE – Department of Energy	NSSAB – Nevada Site-Specific Advisory Board
EA – Environmental Assessment	OR – (DOE) Oak Ridge Site
ETTP – East Tennessee Technology Park	ORP – Office of River Protection
EIS – Environmental Impact Statement	ORSSAB – Oak Ridge Site-Specific Advisory Board
EM – DOE Office of Environmental Management	Paducah – (DOE) Paducah Site
EM SSAB – Environmental Management Site-Specific Advisory Board	Paducah CAB – Paducah Citizens Advisory Board
EPA – Environmental Protection Agency	PORTS SSAB – Portsmouth Site-Specific Advisory Board
FACA – Federal Advisory Committee Act	RCRA – Resource Conservation and Recovery Act
FY – Fiscal Year	Portsmouth – (DOE) Portsmouth Site
GAO – Government Accountability Office	SEP – Supplemental Environmental Project
GTCC LLW – Greater-Than-Class-C LLW	SRS – (DOE) Savannah River Site
HAB – Hanford Advisory Board	SRS CAB – Savannah River Site Citizens Advisory Board
Hanford – (DOE) Hanford Site	SWPF – Solid Waste Processing Facility
HEPA – High Efficiency Particulate Air	TRU – Transuranic Waste
HLW – High-Level Waste	WIPP – Waste Isolation Pilot Plant
HQ – DOE Headquarters Office	WIR – Waste Incidental to Reprocessing
INL – Idaho National Laboratory	WTP – Waste Treatment Plan
INL CAB – Idaho National Laboratory Site EM Citizens Advisory Board	
IWTU – Integrated Waste Treatment Unit	
LANL – Los Alamos National Laboratory	
LLW – Low-Level Waste	
LFRG – Low-Level Waste Disposal Facility Federal Review Group	
NE – DOE’s Office of Nuclear Energy	

## PARTICIPANTS

Hanford Advisory Board: Susan Leckband, Chair, Shelley Cimon, Vice-Chair; Kyle Rankin, co-Deputy Designated Federal Officer; Kristen Holmes, Federal Coordinator; Jennifer Colborn, Staff; Dieter Bohrmann, Staff; Dana Gribble, Staff

Idaho National Laboratory Citizens Advisory Board: Keith Branter, Chair; Marvin Fielding, Vice-Chair; Jack Zimmerman, Deputy Designated Federal Officer; Bob Pence, Federal Coordinator; Jordan Davies, Staff

Nevada Site-Specific Advisory Board: Steven Rosenbaum, Chair; Francis Bonesteel, Vice-Chair; Kelly Snyder, Deputy Designated Federal Officer; Barbara Ulmer, Staff

Northern New Mexico Citizens' Advisory Board: Gerard Martinez y Valencia, Chair; Ashley Sanderson, Member; Michael Gardipe, co-Deputy Designated Federal Officer

Oak Ridge Site-Specific Advisory Board: Belinda Price, Chair; Dennis Wilson, Vice-Chair; David Hemelright, Member; Pete Osborne, Staff; Ben Williams, Staff

Paducah Citizens Advisory Board: Renie Barger, Chair; Michael Kemp, Vice-Chair; Judy Clayton, Member; Bill Murphy, Member; Robert Smith, Federal Coordinator; Eric Roberts, Staff; Yvette Cantrell, Staff; Kenneth Wheeler, Staff; Nancy Duff, Staff

Portsmouth Site-Specific Advisory Board: Bob Berry, Chair; Carlton Cave, co-Vice-Chair; Joel Bradburne, Deputy Designated Federal Official; Greg Simonton, Federal Coordinator; Julie Galloway, Staff; Rick Greene, Staff; Cynthia Lewis, Staff

Savannah River Site Citizens Advisory Board: Nina Spinelli, Chair; Earl Sheppard, Vice-Chair; Michael Mikolanis, co-Designated Deputy Federal Official; Susan Clizbe, Federal Coordinator; James Tanner, Staff

### DOE Headquarters:

Sue Cange, Acting Assistant Secretary for Environmental Management

Stacy Charboneau, Associate Principal Deputy Assistant Secretary for Field Operations

Joceline Nahigian, Deputy Chief of Staff

Robert Seifert, Acting Director of Intergovernmental, Regulatory and Stakeholder Engagement

Steve Trischman, Director of Budget and Planning

David Borak, EM SSAB Designated Federal Officer

Douglas Tonkay, Director of Waste Disposal

Kristen Ellis, Director of External Affairs

Robert Edwards, Manager of Portsmouth and Paducah Project Office

Lois Jessup, Director of Program Planning

Jared Bierbach, Office of Intergovernmental and Stakeholder Programs

### Non-DOE Participants:

Hon. Robert Leeper, McCracken County Judge, Paducah, KY

## MEETING MINUTES

The U.S. Department of Energy's (DOE) Office of Environmental Management (EM) Site-Specific Advisory Board (SSAB) met on May 10-11, 2017, at the Luther F. Carson Four Rivers Center in Paducah, Kentucky. Participants included EM SSAB officers and members, DOE staff, EM SSAB Deputy Designated Federal Officers (DDFO), Federal Coordinators and contractor support staff. The meeting was open to the public and conducted in accordance with the requirements of the Federal Advisory Committee Act (FACA).

### **Day One: Wednesday, May 10, 2017**

#### **Opening Remarks**

David Borak, Designated Federal Officer (DFO) for the EM SSAB, called the Chairs Meeting to order at 8:30 a.m. CDT. Mr. Borak introduced Judge Bob Leeper of McCracken County.

Hon. Leeper welcomed all EM SSAB representatives, and thanked Renie Barger and Mike Kemp, Chair and Vice-Chair of the Paducah CAB, and Sue Cange, Principal Deputy Assistant Secretary, for attending. He recognized the local art community and the many attractions that Paducah has to offer.

Robert Edwards, Manager of the Portsmouth Project Office, emphasized the impact that sites have on their respective communities and thanked the citizen participants for volunteering their time.

Renie Barger thanked DOE staff, board members, contractor staff, and community members for their service. Dave Borak shared a brief history of EM SSAB and emphasized its importance. Mr. Borak then thanked all representatives.

Eric Roberts, the meeting facilitator, reviewed the agenda and logistical details.

#### **EM Update**

Sue Cange, Acting Assistant Secretary for Environmental Management, provided a general EM program update.

Ms. Cange thanked the Chairs for their service and advice. She advised them to focus their recommendations on a program level with the entire EM complex in mind. She reminded attendees of the progress EM has made, cleaning up 91 sites since 1989.

She said that this past year, one of the most critical accomplishments for EM was the successful recovery of WIPP and the resumption of waste emplacement. The demolition of five gaseous diffusion plants was completed at the East Tennessee Technology Park, which is the first time that this has been accomplished anywhere in the world. Demolition of the Plutonium Finishing Plant has begun at Hanford; completion is an important cleanup goal for 2017. Construction of the Salt Waste Processing Facility was completed at the Savannah River site and the eighth underground waste tank has been closed.

Ms. Cange continued to list the accomplishments of the sites, stating that Idaho has exhumed 7,500 cubic meters of radioactive waste. At Portsmouth, the first floor unit of the X-326 Gaseous Diffusion Processing Building has been deactivated, paving the way for more demolition activities. At Paducah, a contract was awarded for operation of the DUF 6 Conversion Facilities, which is a catalyst for significant progress concerning inventory at Paducah and Portsmouth. At Los Alamos, a project to remove contaminated soil from four legacy waste sites was completed. At Nevada, the Double Tracks Plutonium Test Area has been closed, and a revegetation effort has begun.

Ms. Cange noted that the mission is not estimated to be completed until the 2070's, costing upwards of \$212 billion. There is a strategic planning effort underway to improve the budget formulation process. EM's budget for FY 2017 is \$6.4 billion. The projected budget for FY 2018 as documented in the President's Budget Blueprint is \$6.5 billion, however there are still many steps to go before receiving an appropriation.

She encouraged the Chairs' discussion to produce recommendations for how EM should effectively communicate with local communities and stakeholders about accomplishments and future plans, as well as how success is measured. She also encouraged creative and cost-effective recommendations on how EM can better perform community outreach and education to expand the base of informed stakeholders.

Ms. Cange thanked the SSAB members for volunteering their time and opened the floor for questions.

### Discussion

Shelly Cimon asked how the new field-centric organization model coincides with a focus on broad, programmatic thinking. Ms. Cange replied that the reason EM is embracing a field-centric model is to empower field managers to have greater control over their sites. As a part of the reorganization, Stacy Charboneau heads the new Office of Field Operations at HQ which has consolidated all field operations under one roof. Ms. Charboneau is working very hard to give the field a greater role in determining their own priorities.

Susan Leckband stated that she welcomed the change and that she understands that the discussion and communication is just as important as the end result. Ms. Charboneau concurred. Ms. Cange concluded that EM's mission is extremely important, and this is a way for all to contribute.

### **Presentations: Chairs Round Robin: Chairs' Site Reports**

The Chairs shared current issues facing their sites and significant local board accomplishments and activities.

### Paducah Citizens Advisory Board (Paducah CAB) – Renie Barger

Ms. Barger began discussing the groundwater plume that Paducah CAB would like to see aggressively attacked. First, the building over it must be removed. She stated that regulatory

approval is the biggest hurdle in this process. The CAB fully supports continued deactivation as a means of lowering surveillance and maintenance costs, as well as lowering the risk to human health and the environment.

Mike Kemp stated that this past year the CAB spent a considerable amount of time on education. He also commented that the relationship with CAB and DOE is extremely cooperative.

#### Oak Ridge Site-Specific Advisory (ORSSAB) – Belinda Price

Belinda Price began her discussion by noting the SSAB's four upcoming priorities. One is to continue the support of offsite groundwater contamination monitoring. The second is to ensure sufficient waste disposal capacity at the Oak Ridge Reservation. The third is to encourage excess facility disposition, and finally, the fourth, to address mercury in East Fork Creek and continue technology development for that initiative.

Ms. Cimon asked if the responsibility of any buildings in Oak Ridge have been passed from DOD to DOE or NNSA. Ms. Cange responded that Oak Ridge is home to many excess facilities owned by NNSA, the Office of Science, and the Office of Nuclear Energy. 25 percent of excess facilities in the December 2016 Excess Contamination Facilities Report are located in Oak Ridge, so excess facilities are a priority in Oak Ridge.

#### Nevada Site-Specific Advisory Board (NSSAB) – Steven Rosenbaum

Steven Rosenbaum highlighted the NSSAB's efforts to inform the public about Supply Chain Management (SCM), as well as seek their input. He stated that they are engaged with local and state government agencies to provide a community perspective. The NSSAB attended public safety training exercises and had their recommendations and evaluations implemented. They also attend emergency management exercises, nuclear programs, stakeholder forums, intergovernmental meetings, and industry-wide meetings such as the Waste Management Symposia and the Rad Waste Summit. He noted that an intern has been brought on to further outreach to a younger demographic.

Mr. Rosenbaum reviewed the Board's interests and concerns, such as the significant changes of the local campaign and EM's realignment of administration and operations. The Board is concerned that with changes, lapses will happen when critical pieces fail or are overlooked. He encouraged changes to be carefully thought out before implementation. The Board is also faced with an aging staff, and runs the risk of losing their knowledge. The Nevada EM Office lost 20 percent of their experienced staff. Mr. Rosenbaum asked for additional dialogue on this topic.

Ms. Charboneau ensured Mr. Rosenbaum that she has already considered the consequences of not planning changes carefully before implementation. She also stated that there is a knowledge management effort underway to combat the issue of an aging workforce.

#### Portsmouth Site-Specific Advisory Board (PORTS SSAB) – Bob Berry

Bob Berry stated that he believes Portsmouth can be DOE's next great success in their cleanup mission. Everything is in place for that to happen, but there are still some concerns. The Board is

worried about future funding and an aging workforce. If they lose people, it could extend the cleanup period.

Mr. Berry noted that Portsmouth's 326 building is scheduled to be closed by the end of FY 2017. He believes that with proper funding, the mission at Portsmouth can be complete in 15 years. The tonnage that Portsmouth is allowed to sell was reduced from 1,600 to 1,200 tons, costing a significant amount from their budget.

Mr. Berry stated that, according to DOE, Portsmouth is the most acceptable site for a next-generation nuclear plant. He noted that making it a closure funding site would save taxpayers over \$1 billion. They look forward to having the site cleaned up and available for reindustrialization, bringing jobs into the community.

Ms. Leckband asked for clarification of the Board's position concerning a new nuclear plant. Mr. Berry stated that the Board has not promoted that at this point.

#### Savannah River Site Citizens Advisory Board – Earl Sheppard & Nina Spinelli

Earl Sheppard noted that double-stacking of the transuranic waste processing containers has begun and has saved approximately \$1 million so far. Design and build have been completed for the 32-million-gallon Salt Waste Disposal Unit. This is a great accomplishment for the Savannah River Site. Mr. Sheppard stated that in an effort to improve public participation, meeting locations were spread throughout the area to get a better feel for the communities throughout South Carolina.

Nina Spinelli reiterated that public participation is of major interest to the Savannah River Site. She noted that they offer live and recorded meetings on social media for better access to those that are unable to make it in person. She stated that focus has been placed on keeping CAB members who have rotated off involved and interested. An idea is to have an unofficial alumni program to have previous members come together and participate in the full CAB meeting as a member of the public. This keeps their knowledge and expertise around for the benefit of the Board. Ms. Barger and Ms. Leckband commended this idea. David Hemelright noted that Oak Ridge also has a program like this by encouraging previous members and the public to participate in its board and committee meetings.

#### Idaho National Laboratory Site EM Citizens Advisory Board – Keith Branter

Keith Branter stated that after environmental monitoring of the aquifer in Idaho, the results are good. He stated that the aquifer seems to be pretty healthy. The IWTU is behind schedule and there is pressure to get it started. All transuranic waste in Idaho was set to be transferred to WIPP by 2018, but that is also behind schedule.

Mr. Branter stated that INL has a very good relationship with DOE and that the public is well-informed.

### Hanford Advisory Board – Susan Leckband

Susan Leckband noted that Hanford is the most long-term project in EM. She stated that the Board's mantra is to "Protect the Columbia River." The Board is concerned about a section of the vitrification facility, the Direct-Feed Low-Activity Waste (DFLAW), which contains low-activity waste. The plant is currently set to begin processing in 2022, but this is dependent on many factors. Ms. Leckband stated that the Board is very supportive of the success of the project.

Ms. Leckband also noted that the plutonium facility is set to be slab on grade by the end of the year. She stated that the Board is very excited about this upcoming accomplishment. Two other waste sites had remediation delayed due to negotiations of the Tri-Party Agreement. This delay is a major concern of the Board. Remediation workers must be protected, as the 324 building has a very radioactive plume beneath it. The site is very close to the Columbia River and the intake for the water supply for the City of Richland.

Ms. Leckband emphasized the Board's public engagement efforts and their aging workforce problem.

### Northern New Mexico Citizens' Advisory Board – Gerard Martinez Valencia

The NNM CAB is transitioning into a new EM cleanup contract this year, beginning July 1<sup>st</sup> and ending October 1<sup>st</sup>. The Board is focusing on groundwater cleanup and the protection of the chromium interim measure. There is significant progress being made on the remediation of nitrate salts. Gerard Martinez y Valencia stated that they are dedicated to the monitoring and controlling of surface water. He noted that negotiations with local tribes have gone very well. He thanked the DOE staff for working with the Pueblo staff to enter into agreements.

Mr. Martinez emphasized that the direct effects of climate change are visible in New Mexico, and there is a higher risk of wildfires due to a lack of ground moisture. The site is working to mitigate these threats.

The NNM CAB is looking at recruiting new Board membership; they take pride in their diverse membership and representation of the community. Mr. Martinez stated that DOE is very responsive and thanked the DDFOs for always being transparent and honest.

Ms. Leckband asked if New Mexico is doing pump-and-treat as well as monitoring the wells, whereupon Mr. Martinez stated that they are.

### **Field Operations Update**

Stacy Charboneau opened the update by speaking about her past experience at Hanford and her passion for what she does. She discussed EM Field Operations and their focus on sustaining safe cleanup at EM sites. This new organization will assist with the change to a more field-centric model. She reminded that all sites are unique and there is not a one-size-fits-all answer to the problems in the field. Field Managers are relied on heavily to weigh risks and make decisions for



their specific sites. Ms. Charboneau stated that the reorganization is about giving trust and authority to the Field Managers for this reason.

She stated that certain EM HQ employees have been designated specific site-related liaisons, who report to Site Managers. Each site has at least one liaison. This liaison ensures timely responses from HQ to the sites. Ms. Charboneau also noted that there is a new Engineering Office, with a Chief Engineer who focuses on assisting the sites with specific technical expertise. Smaller sites may not have a specific engineering expert as a resource, so this solves the issue. A Quality Assurance (QA) organization exists within the Safety and Safeguards Group who performs QA oversight of all sites. As HQ identifies deficiencies, assistance can be deployed as needed.

Ms. Charboneau also elaborated on the new Technology Development Office. An Innovation and Technology Plan was developed at the end of 2016. Currently, the Office is focusing on robotics and worker safety. Robots can take readings or get visual confirmation at D&D sites to reduce risk to workers. She noted that there is also a SRNL Policy Officer working in the Field Operations Office as well. This connects EM to the network of National Laboratories to recognize needs and challenges.

Ms. Charboneau reaffirmed her strong belief in the EM reorganization to a field-centric structure. She spoke about the need to keep up with site infrastructure at aging sites. She urged the sites not to ignore their surveillance and maintenance programs. She stated that this Administration might choose to invest additionally in infrastructure, so DOE has put together an infrastructure portfolio that recognizes cleanup work as an investment.

EM has received the FY18 President's Blueprint, which puts EM's budget at \$6.5 billion, one of the largest in recent history. The Blueprint states that there is a need to address excess facilities and the modernization of the nuclear security enterprise.

Ms. Charboneau addressed the updates occurring at WIPP. In January, waste emplacement began after a three-year recovery. In April, shipments were received, and the next plants to ship to WIPP will be Oak Ridge and Los Alamos in 2017. She stated they are conservatively estimating up to 128 shipments this year. She noted that Panel 7 was contaminated from the event and the associated worker protection has slowed down emplacement. There is also limited ventilation in the facility. All air exchange is filtered since the event, limiting the kinds of work that can be done in the mine at any one time. There are two large capital projects to get back to pre-event air turnover in the mine. New ventilation systems are set to be in place by 2021.

Ms. Charboneau gave an update on above-ground storage at WIPP, stating that the additional capacity will allow WIPP to continue with waste emplacements and continue to receive shipments during maintenance outages or other interruptions in emplacement operations. She reminded that there is no intention to make above-ground storage a long-term storage facility. She stated her commitment to holding open and public meetings regarding the above-ground storage.

In closing, Ms. Charboneau emphasized her excitement about the new reorganization and where EM is headed.

### Discussion

Mr. Martinez asked about which program is responsible for the bore holes. Ms. Charboneau stated that Office of Nuclear Energy (NE) is responsible.

Ms. Leckband asked if there is an expectation for the field offices to continue to increase transparency. Ms. Charboneau responded that they should be as transparent as they possibly can to ensure accurate information is being released to the public. She stated that EM has made a significant effort in recent years to build relationships of trust in order to have difficult conversations.

Ms. Cimon encouraged more education to the sites, the communities, and the stakeholders about the new shift to field-centric organization. Ms. Charboneau responded that it would be great for the Site Managers to locally expand that message. She also commented on the lack of funding for the Advisory Boards to travel to meetings and symposiums as much as EM would like. Ms. Cimon also asked for Ms. Charboneau to elaborate on the excess facilities in the context of the work to be done. Ms. Charboneau responded that priorities need to be determined on a site-by-site basis. HQ recognizes highest priority activities. She stated that although \$6.5 billion in funding for the program is higher than previous years, regulatory agreements are still calling for more than that, so prioritizing is very important.

Ms. Price asked for clarification of the contamination of Panel 7. Ms. Charboneau responded that there are no airborne concerns. However, out of precaution, workers are wearing anti-contamination clothing since it is not a cleared area.

Mr. Sheppard asked if the H Canyon at Hanford is on the list of high-risk areas. Ms. Charboneau stated that they plan to utilize robotics to get into the area to better understand the urgency and risk.

Mr. Kemp asked how placing more responsibility on Site Managers will affect their freedom to provide public information. Ms. Charboneau responded that presentations still must be steered to HQ for approval.

Mr. Marvin Fielding asked for clarification of the WIPP mining capacity and its ability to get back to clean operations. Ms. Charboneau stated that all of the mine is now clean with the exception of Panel 7. He asked if unfiltered ventilation could be possible soon. Ms. Charboneau stated that it continues to be evaluated. Ms. Cange added that it is complicated due to the stakeholders and other factors to consider.

Ms. Charboneau clarified that there is no less DOE oversight as a part of the field-centric model. Ms. Cange clarified that the model puts HQ in an assist-and-advocacy role than it has been in the past, but it does not stop assessments and oversight function.

Ms. Price asked if programs are currently owned by other entities such as the Office of Science. She stated her concern that other entities do not have advisory boards. Ms. Cange responded that there may be a willingness for EM to accept ownership to perform the work. She stated that in other cases, EM may allocate some cleanup dollars towards facilities not currently owned by EM. Ms. Price asked how these projects will be communicated to the public, since they are not under EM. Ms. Cange replied that most other programs look to EM as the expert in this area.

Ms. Leckband asked about the status of reclassifying waste based on constituents instead of process. Ms. Charboneau stated that this is something EM would like to pursue and advance in the near term.

### **Communicating EM Progress and Performance**

Steve Trischman, EM's Director of Budget and Planning, laid out the budget process. First, priority lists are developed to determine the work scope at each site. Site managers come to HQ to present a case for their program. These lists are reviewed and compiled by HQ. The Office of Management and Budget (OMB) gives targets for HQ to determine which targets are within the scope. The Secretary weighs in and the President's budget is submitted and is passed along to Congress. Congress holds hearings to ask HQ questions about the budget and it eventually passes. Mr. Trischman noted that this is the ideal budget, but there are often last minute changes to the priorities in the case of an incident.

He also noted that due to the transition process following the election, there were delays in the FY 17 budget. He stated that the FY 18 budget should be released in May, with FY 19 following shortly thereafter.

Mr. Trischman described life-cycle planning, in which the whole program is looked at through the end to analyze the best investments and the scope of work. Lessons learned are also analyzed to determine how to achieve cleanup faster. He noted that in some cases, cleanup is not being funded at a level that takes full advantage of EM's cleanup capability. He also noted that there are many costs that do not contribute to cleanup, such as water, roads, and infrastructure. He encouraged additional investment in cleanup before more facilities begin to have serious issues due to aging infrastructure.

Kristen Ellis, EM's Director of External Affairs, discussed the relationship between the budget strategy and the communications strategy. She noted that when communication is strategically planned, EM benefits, as well as the local communities represented. She stressed the importance of fostering credibility with all of EM's stakeholders.

She noted that EM is expanding their media reach with new technologies. Most sites have a Facebook page, as well as EM. Ms. Ellis is working hard to generate more interest by coming up with fun segments to highlight interesting facts and historical information. She also noted the release of a newsletter bi-monthly to educate about the sites in the complex. She mentioned the virtual meeting held for the public at Hanford and Savannah River Site. She stated that EM will be communicating their message at critical events, such as the National Cleanup Workshop and the Congressional Nuclear Cleanup Caucus.

Ms. Ellis highlighted the info-pod outreach series at Savannah River Site, the Community Budget Workshop at Oak Ridge, and the tour series at Paducah. She encouraged the Chairs to share what works at their site, and what community communication needs are not being met. She also asked for feedback on how to best communicate metrics to the community. She thanked the Chairs for their service and continued involvement.

### Discussion

Mr. Kemp asked who the desired audience segments are and what they need to know. Mr. Trischman noted Congress or local government as two segments. Ms. Ellis listed the residents near the sites. Ms. Leckband noted that communications must be flexible to reflect the audience's prior knowledge.

Ms. Cimon reminded the Chairs of the importance of being on the same page concerning metrics. She noted that sometime it can be difficult to sort through EM, DOE, and the Board's different metrics. She stressed the importance of educating students about the opportunities related to nuclear science.

Mr. Trischman noted the importance of the public knowing what it truly costs to operate at Savannah River Site in order to promote a better understanding of where the budget goes. Ms. Ellis stated that communicating accomplishments and progress is crucial for Congress and the public to understand why a continued investment is important.

Ms. Leckband brought up the "By the Numbers" graphic document that shows significant numbers of each site. She suggested that rather than simply stating that there have been 12.5 cubic meters of waste stored, it would be more beneficial to state 12.5 out of how many cubic meters there are to be stored. She stated that changes such as this will be more telling of the overall success.

Ms. Price stated that knowing the local DOE personnel's communications and feedback on those communications would be useful. Mr. Wilson suggested EM tying into EPA's environmental messages when presenting to high school students in order to relate with young environmentalists.

Mr. Martinez emphasized that a strong strategic plan comes before a budget. He also noted that a historical perspective on the sites help keep the public interested, citing the Manhattan Project National Park as an example. Mr. Richards noted that the public does not see the sites as an imminent threat or an exceptional environmental accomplishment; they see it as benign. He stated that it is hard for the public to take a genuine interest in something that is being handled and is benign.

### **Product Development Discussion**

Mr. Roberts asked the Board what information they need from DOE to help move the budget process forward. Ms. Cimon responded that EM should lay out what it needs and the budget will fall into place. She encouraged not to wait for the budget first. She suggested a five-year plan for Congress to get a better understanding of what the program needs.

Ms. Leckband suggested an in-depth discussion about how each site can advance the five-year vision and craft recommendations for achieving goals. She noted that having this discussion in fall would be too late, so she suggested knocking out the framework during this meeting and completing it via phone. Mr. Roberts suggested that the message should be extremely simple and clear to be effective. Mr. Berry voiced his concern that Portsmouth as a site has a hard time relating to other sites, since it isn't building any new technology and is focused on D&D until complete. Ms. Price stated that Portsmouth is still very relevant to the budget, as a way to

encourage implementation of lessons learned at Rocky Flats. More funding and focus will get D&D completed sooner and cut costs.

Mr. Martinez spoke about the permitting process, which constantly has shipments ready to go and is always moving. This potentially streamlines TRU waste and is more cost-effective long-term. The NNM CAB would like to ensure that the analysis of the permitting process will meet the needs of everyone and not just set up a staging area to host additional storage. Mr. Martinez asked for the wording of the NNM CAB's National Recommendation to be more detailed and specific concerning the operation of WIPP.

The Board also discussed the need to educate the public along the waste transport routes about the waste. Although the trucks are labeled "radioactive", they are not a harm to human health while traveling through the area.

### **Day Two: Thursday, May 11, 2017**

#### **DOE HQ News & Views**

Dave Borak began by reviewing the minimal changes to DOE during the leadership transition period. Mr. Borak noted that there are not many new political appointees in DOE currently, which is unusual in comparison to previous years. He reviewed the recommendations that the Board had discussed.

Mr. Borak then introduced Robert Seifert, Acting Director of Intergovernmental, Regulatory and Stakeholder Engagement. Mr. Seifert stated that he is looking forward to key leadership positions being filled. He stated that the previous week, he met with Tribal Nations to discuss what is important to them moving forward. He noted how crucial feedback from the Tribes and the Board is to make progress on EM's mission.

#### Discussion

Ms. Cimon asked what was discussed with the Tribal Nations. Mr. Seifert stated that long-term stewardship and natural resource damage are important topics that were discussed. Ms. Cimon asked if a metric could be developed that is common to all agencies. Mr. Seifert stated that it is something he would like to look at. He noted that the two performance metrics that the EPA has are congressionally mandated.

Mr. Roberts asked the Board to consider how to boil down metrics to make them digestible for those receiving them. He noted that it is difficult for sites to paint a full picture of their operations using a single metric.

Mr. Roberts asked Mr. Borak to talk about EM's reputation with GAO and Congress. Mr. Borak stated that DOE is on the "high-risk list" due to the high costs of groundbreaking technology used. Mr. Roberts noted that there are significant challenges ahead, and the expense is not necessarily DOE's fault; it is the nature of the engineering.

Ms. Leckband noted that graphics must be simple, and it should include groundwater metrics, since it is so important all over the US. She also listed the amount of tank waste treated as an important metric that the public cares about. She noted that colors are important when designing graphics; green is the color of success and red is the color of failure.

Mr. Roberts reminded that the target audience is usually non-DOE personnel. Mr. Kemp asked if there is any way to create a broad metric from the metrics of EPA and DOE. Mr. Sheppard stated that many different metrics are a good way to keep track of progress, but for the sake of public releases, attractive graphics are the best way to keep attention, regardless of how many metrics exist.

Mr. Martinez asked to pull up DOE.gov/electricpower to showcase some of the useful graphics related to power. He stated that he uses these in his classroom to teach his students.

### **Waste Disposition Update**

Mr. Doug Tonkay, Director of the Office of Waste Disposal, introduced himself, and stated that the scope of the organizations covers primarily low-level radioactive waste (LLW) activities. He stated that DOE Order 435.1, which allows Field Office Managers to decide what disposal facilities to use, is in the process of being reviewed. He noted that some facilities used to treat mixed waste are being closed or consolidated. He also discussed the Low-Level Waste Disposal Facility Federal Review Group (LFRG), an internal regulatory body that licenses disposal facilities.

Mr. Tonkay stated that Nevada hosts a DOE disposal facility that sites without on-site disposal can send waste to. He noted that the State of Nevada sits on the Waste Acceptance Review Panel and has access to the profiles of waste coming in. He stated that Portsmouth is undergoing initial land clearing for a new disposal facility. Paducah is going through a CERCLA decision process regarding disposal.

Mr. Tonkay stated that in Idaho, the cleanup of the old disposal facilities is continuing, which will cover the last of the old disposal facilities there. He stated that Idaho has celebrated pulling the last TRU waste from their large retrieval enclosure. He showed a melter and two large mixer tanks associated with vitrification that were recently disposed by West Valley. He noted that Moab is past the halfway point of their tailings shipping.

Mr. Tonkay stated that 90% of the waste is disposed on-site per DOE policy. He reminded that DOE has the responsibility as assigned to EM to dispose of greater-than-class-C (GTCC) LLW (commercial owned). He stated that GTCC-like waste is DOE owned or generated LLW or TRU waste with characteristics similar to GTCC, and with no identified disposal path. He noted that the preferred alternative is land disposal at generic commercial facilities and/or WIPP geologic repository. In accordance with the Energy Policy Act of 2005, the final decision on GTCC LLW disposal will be made once a Report to Congress has been submitted and Congressional action has occurred.

Looking ahead, Mr. Tonkay stated that within the next 12 months, WIPP plans to continue waste emplacement operations in Panel 7 and restart mining operations. In the long-term, WIPP plans to build a new air intake shaft and a new permanent ventilation system.

He noted that there were 8,426 shipments of radioactive waste in the past FY, 81% of which is low-level and mixed low-level waste.

Mr. Branter asked how to increase efficiency at WIPP, and what shift schedule is in place. Mr. Tonkay responded that they are working multiple shifts, but the emplacement and maintenance have to be staggered due to the ventilation constraints. The amount of equipment that can run underground is limited.

Mr. Martinez asked what the temporary setup is for the air system. Mr. Tonkay responded that the supplemental system is pushing air through and air is being brought up another shaft that is in the clean area of the mine.

### **Product Development**

Mr. Seifert reviewed the Cleanup Performance Road Map and Communication Strategy Recommendation produced by the Board. He noted that he believes it to be a great recommendation that will help EM speak broadly about performance metrics. He suggested that rather than establishing metrics, DOE should revisit existing metrics and recast in a clearer, concise way. The Board also discussed visual examples of metrics such as pie charts.

The final recommendation suggests that two clearly-described visual road maps are established. One should depict each site's schedule and key milestones, and the other should depict EM's key milestones in totality.

The Board also discussed the Above Ground WIPP Storage Recommendation, which entails seeking further efficiencies in the WIPP TRU program in order to streamline, expand and accelerate TRU waste disposition.

### **Closing remarks and adjournment**

Mr. Roberts and Mr. Seifert gave closing remarks to the Chairs.

Mr. Borak thanked the Chairs and EM SSAB staff for their participation in the meeting. The meeting was adjourned at 11:42 a.m. CDT.