

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

PUBLIC MEETING MINUTES

SEPTEMBER 29, 2020

PARTICIPANTS

Environmental Management Advisory Board Members:

EMAB Chair:

Carol Johnson

Dispute Resolution Subcommittee:

Shelly Wilson, Subcommittee Lead

Jack Craig, EMAB Vice-Chair

Mark D. Fallon *

Tracye McDaniel *

Josiah Pinkham

Timothy Runyon

CERCLA/RCRA Integration and Streamlining Initiatives Subcommittee:

Randall Jostes, Subcommittee Lead

Diahann Howard

Elliott Laws

Frazer Lockhart

Risk Based Decision Making, Future Land Use Designation, Points of Compliance, Levels of Protectiveness Standards Subcommittee:

Amy Fitzgerald, Subcommittee Lead

David Abelson

Jane Hedges *

Kimberlee Kearfott *

Nicole Martinez *

James Rispoli

Robert J. Thompson

Department of Energy Participants:

Betsy Connell, Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs

Mary Kruger, Director, Regulatory, Intergovernmental and Stakeholder Engagement

Joceline Nahigian, Director, Office of Intergovernmental and Stakeholder Programs

Kelly Snyder, Acting EMAB Designated Federal Officer

Alyssa Harris, EMAB Federal Coordinator

James Tyree, Office of Regulatory Compliance

Members of the Public:

Wayne Barber, Weapons Complex Monitor

Kelsey Shank, theEDGE, LLC

* Board member not present

LIST OF ACRONYMS

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CRESP – Consortium for Risk Evaluation with Stakeholder Participation
DoD – U.S. Department of Defense
DOE – U.S. Department of Energy
EM – (DOE) Office of Environmental Management
EMAB – Environmental Management Advisory Board
EPA – U.S. Environmental Protection Agency
FACA – Federal Advisory Committee Act
FFAs – Federal Facilities Agreements
GAO – U.S. Government Accountability Office
HQ – DOE Headquarters, Washington, D.C.
IDIQ – Indefinite Delivery Indefinite Quantity
LM – (DOE) Office of Legacy Management
PMP – Performance Management Plan
POC – Point of Compliance
RCRA – Resource Conservation and Recovery Act
SRS – (DOE) Savannah River Site

MEETING MINUTES

The U.S. Department of Energy's (DOE) Environmental Management Advisory Board (EMAB) met virtually on September 29, 2020. Participants included EMAB members, DOE staff, and members of the public. The meeting was open to the public and conducted in accordance with the requirements of the Federal Advisory Committee Act (FACA).

Opening Remarks

Ms. Carol Johnson, EMAB Chair, called the meeting to order at 2:00 p.m. ET. She welcomed the attendees and reviewed the logistics of the virtual meeting. Ms. Johnson told the attendees that in accordance with FACA, all discussions at this meeting would be made available to the public in the minutes. She stated that any written public comment received ahead of the meeting would be read into the record at 3:00 PM ET. Any written comments received after the meeting would be written into the minutes. She reminded any members with a conflict of interest to announce their recusal for the record prior to the discussion. She encouraged those interested in learning more about the EMAB to visit their website at www.em.doe.gov/emab, or to contact Acting EMAB Designated Federal Officer Kelly Snyder at kelly.snyder@emcbc.doe.gov.

Members not in attendance included Mr. Mark Fallon, Ms. Jane Hedges, Ms. Kimberlee Kearfott, Ms. Nicole Martinez, and Ms. Tracye McDaniel.

Dispute Resolution Methods Subcommittee

Subcommittee Lead Ms. Shelly Wilson thanked the members of the subcommittee: Mr. Jack Craig, Mr. Mark Fallon, Ms. Tracye McDaniel, Mr. Josiah Pinkham, and Mr. Tim Runyon. She said that the subcommittee focused on the relationships between DOE, U.S. Environmental Protection Agency (EPA), and the host states. She noted that many of the DOE sites have formal agreements in place with dispute resolution protocols built in. All parties must be in agreement before moving forward on cleanup actions.

Ms. Wilson said that the subcommittee analyzed paths for both dispute resolution and dispute prevention. The group looked at several case studies such as the Paducah C400 Alternative Dispute Resolution Project, the Oak Ridge Regulatory Partnership Framework, the Savannah River Site's (SRS) Core Team, the Department of Defense's (DoD) partnering in the Southeast, and examples of Tribal Nations' negotiations.

Ms. Wilson said that the Paducah Alternative Dispute Resolution Project and the Oak Ridge Regulatory Partnership Framework were both initiated at the beginning of 2020 and both have gathered the key regulatory decision-makers (DOE, EPA, and the host state) to meet frequently and with facilitation. They are both reporting initially positive results.

Ms. Wilson said that the SRS Core Team process and DoD's partnering process in the Southeast were both initiated over 20 years ago in the 1990s, and both have a low number of disputes. She said that they are collaborative team-based approaches that use frequent, facilitated communication and are committed to team skills building. She said that these are excellent

examples of tried-and-true collaborative approaches that have resulted in smooth, steady cleanup.

Ms. Wilson also discussed the ongoing dialogue between DOE, EPA, and states, coordinated through the Environmental Council of the States. She said that through this dialogue, the SRS Core Team process was promoted. She said that training on the subject was made widely available, most recently at the 2020 National Cleanup Workshop.

Ms. Wilson said that Mr. Pinkham brought a unique perspective to the charge by describing an example of the Nez Perce Tribe's negotiation process, which has similar values to the other collaborative, team-based approaches previously discussed. She said that one of the key tenets of this process is to negotiate for the sake of relationship preservation.

Through these case studies, the subcommittee drew the following conclusions:

- Sometimes dispute is necessary, but there are many drawbacks. Disputes take time and can take cleanup off schedule. Dispute can harm relationships between key decision-makers. Continuing disputes can increase the possibility of intractable conflict
- Cleanup is a marathon and not a sprint. Because the sites will take many years to complete cleanup, maintaining healthy relationships between decision-makers is very important. The collaborative partnering approach has proven to be successful, leading to a level of trust and willingness to be innovative and flexible, leading to higher quality cleanup decisions.

Ms. Wilson highlighted some of the tenets of success in the case studies:

- Formation of a regulatory decision-making team
- Having frequent discussions utilizing a facilitator
- Teaching the team how to work together and make decisions together
- Collective commitment to team values
- Team alignment to common goals

Ms. Wilson noted that teams with smart members don't necessarily make successful teams. She said that the team members need tools to learn how to make decisions as a group. She emphasized that teams must recognize the need for additional expertise if a conflict becomes intractable.

Ms. Wilson noted that some of these tenets lend themselves well to the DOE budget process when DOE is trying to regulate on a constrained budget. She said that milestones can be used as a "weapon" to guide funding instead of substantive work.

The DoD partnering process doesn't have five year milestones or longer. Ms. Wilson said that they focus on a joint execution plan and near term milestones in the current and following year. She said this is notable because year to year, site conditions, budgets, and technology all change. She said there is a long term vision, but enforceability is only near term, which works very well with an Indefinite Delivery/Indefinite Quantity (IDIQ) contract structure with a reliance on task orders. She added that it does leave the out-years more flexible so that DOE could make more

informed decisions and reasonable milestones. She said shifting to rolling near-term milestones would make best use of DOE's IDIQ contracts.

Ms. Wilson clarified that the near-term milestone approach works optimally if you've built a history of successful, steady cleanup and collaboration between parties. She said that collaborative partnering is the best way to move steadily towards cleanup progress.

The subcommittee's recommendations are:

Recommendation #1:

Explore increased use of collaborative partnering as the regulatory framework for DOE cleanup projects across the complex, incorporating success tenets from the case studies. This would include:

- Formation of regulatory decision making team (typically DOE, EPA, state and sometimes contractors),
- Regular and frequent team meetings and discussions,
- Use of an independent, third party facilitator when needed,
- Investment in team decision making and other team building skills,
- Use of regular team self-assessments to evaluate efficacy,
- Commitment to collaborative values, and
- Team alignment to common goals.

Recommendation #2:

Arrange for a leadership briefing of DOE-SRS, South Carolina Department of Health and Environmental Control, and Environmental Protection Agency Region 4 on the SRS Core Team to all EM Headquarters and Field Managers to ensure the entire organization understands the benefits of collaboration among the cleanup decision makers. Field Managers may invite their respective state and EPA leadership to participate as well.

Ms. Johnson said that she appreciated the attachments the subcommittee included that provide additional background and framework for DOE to consider. She asked if the subcommittee discussed why a team-based approach doesn't always work as well as you may expect. Ms. Wilson responded that in her experience, differing personalities can sometimes be an impediment to reaching a decision. She said that intentional partnering takes the personality aspect out of the decision-making process and leads the team to understand how to work together even given the various personalities on the team. DoD studies the personalities of individual team members for awareness. Ms. Johnson also mentioned that DoD regularly conducted self-evaluation of team performance. Ms. Wilson said that they do this very intentionally as part of a strategic plan to assess team health.

Ms. Amy Fitzgerald asked if the subcommittee discussed when the dispute resolution team should reach out to community partners. She said that there is some frustration at the local level regarding lack of inclusion in these discussions. Ms. Wilson responded that it varies, but from her own experience, the partnering team should always be on the lookout for interaction with the communities. She said that this is an excellent point for the team to continually communicate with the community and realizing their role in the decision-making process.

Mr. Frazer Lockhart asked if the subcommittee considered including DoD-style team self-assessments as part of the recommendation as a best practice. He said that this would be useful to provide reports to supervisors regarding how well the collaboration is going. Ms. Wilson responded that they have not considered this, but that she will add it into the recommendation.

Mr. Pinkham clarified that his comments on tribal negotiations and conflict only represent his experience, and to keep in mind that there is a broad spectrum of conflict resolution processes across many different tribes. He said there was one instance where the Nez Perce could have litigated on an environmental review, but they asked DOE to fix the problem first before resorting to litigation, which is exemplary. He said that he's noticed when litigation does occur, they are often due to either assumptions or lack of transparency. He said the best way to mitigate this is early and frequent communication. He added that beginning discussions as early as possible allows all parties to truly impact and shape the vision before it becomes concrete. Ms. Johnson said that perhaps this is an additional tenet for the recommendation.

Mr. Bob Thompson said that he appreciates the diversity of perspectives on the EMAB that utilize the tribal, local government, and various viewpoints of the group. He said that the report should recognize that the diversity of involved parties can sometimes be the downfall of the process with too many competing perspectives and priorities. He noted that identifying these differences could help to find common ground. Mr. David Abelson added that there should be a stated recognition that the inability to pull all parties together for a common vision does not mean a failure of process. He said that all parties won't always be able to get on the same page.

Ms. Johnson said that the report is aimed at making every effort, understanding that it won't be easy and there will be parties that are not always aligned. Ms. Wilson said that if there are disputes showing signs of intractability then special assistance should be involved.

CERCLA/RCRA Integration and Streamlining Subcommittee

Subcommittee Lead Mr. Randall Jostes thanked the other members of this subcommittee: Ms. Diahann Howard, Mr. Elliott Laws, and Mr. Frazer Lockhart. Their charge was to analyze the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) regulations that are creating confusion in implementation and causing inefficiency and inconsistencies in requirements. Their strategy was to interview subject matter experts to determine root causes for the difficulties of streamlining. The subcommittee sought to obtain the perspectives from DOE, EPA and states. They interviewed EMAB member and former Program Manager for the Washington State Department of Ecology Ms. Jane Hedges, former EPA Counsel Mr. Charles Howland, former Director of EPA's Federal Facilities Restoration and Reuse Office Mr. Jim Wolford, and DOE-EM Federal Facilities Agreement Program Manager Mr. Brian Hennessey.

Mr. Jostes clarified that the two programs, RCRA and CERCLA, are different from each other. He said that RCRA has traditionally focused on the regulation and the granting of permits for ongoing hazardous waste activities, while CERCLA has traditionally focused on site-wide cleanup of discontinued operations. Both have common objectives: effective cleanup and

protection of human health and the environment. He said that the difficulties concern the implementation and process, since they differ in terminology, methodology, procedures, interpretation, structure, and standards. He said that predictably, the outcome is duplication of effort, disputes and mediation, and litigation.

The subcommittee's recommendations are:

Recommendation #1:

- Multi-agency partnership agreements should be negotiated at the highest agency level and memorialized in writing concerning each DOE site. Subsequently, the partnership agreements should be re-ratified by all executives during the course of established executive level meetings.
- Intensive training regarding the benefits, techniques and implementation of partnering should be deployed to all field level personnel and refreshed on a quarterly basis.

Recommendation #2:

Consider developing and advocating for specific legislative language that would provide shared enforcement authority under CERCLA to state participants in Federal Facility Agreements (FFAs).

Mr. Jostes said that through their discussions with Mr. Hennessey, it was clear that SRS has been successful at streamlining RCRA and CERCLA. He noted that in 2003, a "*Memorandum of Agreement for Achieving an Accelerated Cleanup Vision*" was signed by all parties at SRS¹. Including but not limited to:

- Deputy Commissioner for Environmental Quality Control South Carolina Department of Health and Environmental Control
- Regional Administrator U.S. Environmental Protection Agency – Region 4
- Manager Savannah River Operations Office U.S. Department of Energy
- FFA Project Manager Division of Site Assessment and Remediation Bureau of Land and Waste Management South Carolina Department of Health and Environmental Control
- FFA Project Manager Environmental Restoration Division Savannah River Operations Office U.S. Department of Energy
- FFA Project Manager DOE Remedial Section Federal Facilities Branch Waste Management Division U.S. Environmental Protection Agency – Region 4
- Program Manager Operations and Decommissioning Division Savannah River Operations Office U.S. Department of Energy

The executed Memorandum of Agreement was preceded a year earlier by a foundational letter dated May 8, 2002. The foundational letter was signed by the following:

- Assistant Secretary for Environmental Management U.S. Department of Energy
- Manager Savannah River Operations Office U.S. Department of Energy

¹ The Memorandum of Agreement can be viewed at: <https://www.srs.gov/general/programs/soil/gen/moaaccel.pdf>

- Deputy Commissioner for Environmental Quality Control South Carolina Department of Health and Environmental Control
- Regional Administrator U.S. Environmental Protection Agency – Region 4

Mr. Jostes said that it is significant to note that any partnering has to start at the highest level with much cooperation. He said that the subcommittee heard multiple times throughout their research that CERCLA and RCRA could work very well independent of each other if the people involved are willing to work together. He said what was agreed to in the memorandum is paramount to the success of integrating and streamlining RCRA and CERCLA.

Mr. Jostes listed the following foundation and principles set forth in the memorandum:

Foundation

- The parties agreed that accelerating the reduction of risk and cleanup, in a cost-effective manner, is in the interest of the Parties, and the people of South Carolina and the region.
- The parties shared a vision for EM activities at SRS to accelerate completion of all cleanup by 2025.
- The parties have built a cooperative and effective relationship and base of success. The efforts contemplated herein will build on that success to mutual benefit, improving on the performance of a strong program. Such a commitment, including funding necessary to sustain the accelerated cleanup objectives, provides a truly significant opportunity to accelerate risk reduction and site cleanup.
- The parties agree that all activities will reflect the respective responsibilities of each, and will be done in compliance with applicable laws and regulations.
- The parties continue to value the importance of enforceable commitments to sustain progress.
- The parties agree, in setting priorities and cleanup strategies, to recognize, consider and include the principle of addressing greatest risk first, balanced by risk to workers, the public and the environment.

Principles

- Support risk-based decision making
- Support accomplishment of Performance Management Plan (PMP) initiatives with the exception of those initiatives affected by ongoing federal litigation. The Parties are committed to the overall goals and objectives of the PMP, and will strive to make significant progress in PMP implementation recognizing that difficult policy and regulatory issues may arise. We will continue to seek opportunities that build on our mutual successes within the applicable laws, regulations, and agreements.
- Support EM accelerated cleanup beyond PMP initiatives. Through numerous productive collaborations and working sessions at all levels. EPA, SCDHEC and DOE are actively identifying opportunities for fulfilling their SRS FFA and Site Treatment Plan obligations by using more efficient methods, leading to accelerated cleanup.

Mr. Jostes said that they would also like to highlight the success seen at Rocky Flats, which had strong interagency partnerships. Attached to the report is a document from Mr. Howland titled *Overview Of Partnering, And Its Potential Usefulness For Reducing Disputes Under Superfund Enforcement Documents, And Improving The Timeliness Of Resolving Those That Remain*. Mr. Jostes read an opening paragraph of this report: “Several EPA Regions have successfully used partnering to improve the quality and pace of cleanups at federal facilities...to help reduce the number of disputes that enter the dispute resolution process set out in our enforcement documents, and speed the resolution of those that still must be addressed. In short, partnering recognizes that the best way to resolve disputes is to prevent them in the first place...[p]artnering constitutes a mutual commitment by the parties on how they will interact... [It] is primarily an attitude adjustment where the parties form a relationship of teamwork, cooperation, and good faith performance.”

Mr. Jostes said that this dovetails well with the work done by the Dispute Resolution Subcommittee on partnering.

The second recommendation explores a legislative approach to make CERCLA the primary program but amend CERCLA to preserve states’ rights that they have under RCRA. This would fold RCRA into CERCLA and states would have motivation to ratify the legislation because they would maintain their rights under RCRA.

Mr. Jostes said that the following steps would need to be taken to implement this:

- Document the basic concept of partial CERCLA delegation to states and vet with DOE Office of General Counsel
- Coordinate and vet with EPA regulatory policy and legal staff
- Coordinate and vet with Congressional Cleanup Caucus
- Coordinate and vet with the most impacted states, likely those with longest term DOE environmental remediation missions
- Charter multi-agency team (DOE, EPA, selected states) to develop draft legislative language for consideration
- Support consideration and implementation of new legislative language

Mr. Jostes acknowledged that this recommendation may not be easy to implement, but it is the ideal path to address two programs that are independent and distinct from each other that partnering, high level buy in of partnering, implementation in the field and training has to be made a priority.

Ms. Johnson asked if the EM has ever taken up recommendations for legislation from the EMAB. Mr. Jim Rispoli said that the Consortium of Risk Evaluation with Stakeholder Participation (CRESP) report recommended legislative action by Congress, but it seemed to be a non-starter. He said that the idea presented today is a good one, but there is typically not much interest in doing so. Mr. Jack Craig agreed and said that legislative proposals could be potentially damaging to DOE’s relationships with state regulators.

Mr. Lockhart said that the legislation for the Rocky Flats Wildlife Refuge was a legislative solution that DOE embraced that was used to break a deadlock on the issues surrounding post-closure stewardship activities. He said that this is not the same scope as RCRA and CERCLA,

but this recommendation is for consideration as the ideal solution and may bring into focus the other aspects of the recommendation. Mr. Jostes acknowledged that it may be a bridge too far, but it is a bridge worth building.

Ms. Johnson commented that the report from Mr. Howland was very insightful.

Mr. Rispoli said that it is interesting to observe the issues with the regulators because EM is unique among regulated communities due to a shared objective between EM, the regulators, and the communities. He said that other regulated entities are often still concerned with ongoing operations and cleanup is not the primary focus. He said that in EM's case it is harder to understand why issues can't be solved. He said that the better the collaboration is, the better EM can support all stakeholders. He suggested explicitly mentioning this concept in the final report.

Mr. David Abelson said that getting a regulator to make a politically difficult decision is a big challenge. He said that the EM mission is not necessarily shared by the regulators because there are differences between the role of DOE and the role of regulators. Mr. Jostes said that in the private sector, if there is a common vision for future use of the site, elected officials will take a risk and promote a risk-based closure on a case-by-case basis if the community wants it back in a productive reuse scenario. He noted that at SRS, elected officials were committed to reuse for the good of the region by 2025. He emphasized that having a good reuse plan is a way to combat this challenge.

Mr. Rispoli said that he supports these comments and noted the elected officials have division heads underneath them who have their own competing priorities.

Public Comment

There were no comments by members of the public.

Risk-Based Decision-Making, Future Land Use Designation, Points of Compliance, Levels of Protectiveness Standards Subcommittee

Subcommittee Chair Amy Fitzgerald said that the EMAB was asked to look at what regulatory approaches could be recommended to increase the pace of cleanup. The subcommittee looked at four issues: risk-based decision-making, future land use designation, points of compliance, and levels of protectiveness standards. Ms. Fitzgerald noted that some members of the subcommittee are more policy oriented, some are more technical oriented and some are both.

Ms. Fitzgerald said that they examined the Government Accountability Office (GAO) reports over the past couple of years and one of the items in 2019 was to develop a program-wide strategy to balance cost and risk. This was the basis for their recommendations.

Ms. Fitzgerald led research on the future land use designation issue. She noted that DOE has an enormous portfolio of land – EM has nearly 600,000 acres across the country. EM also has a sister office, the Office of Legacy Management (LM), who has taken responsibility for some of that land, but many more acres are expected to be transferred to LM after remediation is

completed. Ms. Fitzgerald said that a key to becoming more efficient and effective with resources is the recognition that future land use is a major determining factor of the cost of remediation and long-term mortgage costs associated with monitoring institutional land use controls. She added that the issue of future land use also relates to risk prioritization. She emphasized that local land use is local and many sites differ in many ways with different authorities that govern land use.

Ms. Fitzgerald said that early on in the cleanup program, a number of the most challenging DOE sites were placed on the GAO priority list, which required the sites to be cleaned up under CERCLA. These sites included the now completed Rocky Flats, Fernald, Mound, and Weldon Springs.

Ms. Fitzgerald said that as site characterization progressed at these sites, it was increasingly clear that the relationship among baseline risk assessment, remedy selection and future land use would directly impact the cost and direction of the EM program. She said the question of “how clean is clean?” became a common theme across the DOE complex and future land use plans were developed at many of the DOE sites to describe likely future use scenarios for real property within the EM portfolio.

Ms. Fitzgerald said that she looked at a few examples of successful future land use planning. She said that Rocky Flats is the best example of DOE’s early engagement with regulators, interest groups and regional stakeholders to develop cleanup standards and future use plans. Rocky Flats’ 5,200 acre wildlife refuge was created in 2007 and managed by the U.S. Fish and Wildlife Service. She said that this demonstrates how future land use not only impacts cleanup, but reduces costs to reinvest funds into other sites. She said that one of the goals of future use planning is to streamline and accelerate cleanup. She said that LM maintains an additional 1,300 acres at the site to ensure long-term institutional controls are functioning as designed.

Ms. Fitzgerald said that another key to success is how DOE and the regulators partner with other stakeholders. She said that the East Tennessee Technology Park in Oak Ridge is a useful example to show how DOE, the agency’s contractors, and the community partnered for almost 20 years in planning the redevelopment of the former K-25 uranium enrichment site. The “Reindustrialization” team at DOE utilized the Title 10 CFR Part 770 authority to transfer property to the local community reuse organization. Using this authority had the extra advantages of transferring property at little or no cost if the future use was to promote economic development, and allowing DOE to provide indemnification to the new owners in the event that an environmental liability was discovered at a later date. Ms. Fitzgerald noted that recognizing early on that the land would be a future industrial site helped accelerate progress.

The subcommittee’s land use recommendation is: DOE should begin the process to update or amend land use plans so they reflect community values and current land use needs. Many of the land use plans within the complex are dated. They may not reflect adjacent community growth, neighboring land use designations, or changing missions. Some may not have had active local government, tribal or stakeholder input into the development. DOE sites also vary significantly in their proximity to populated areas. As such, DOE should establish and maintain relationships with regulators, affected local governments and planning organizations to regularly discuss how

cleanup goals align with public health and safety, community development, and desired future land use. Build upon and replicate successful initiatives from around the DOE complex.

Ms. Fitzgerald emphasized the importance of engaging the communities and recognizing that each site is very different and will have different desired outcomes from stakeholders.

Ms. Johnson suggested including an example of a future land use plan in the report as a best practice.

Mr. Abelson commented that at Rocky Flats there was a DOE-sponsored effort to decide future use of the site, but it was slow-moving and the cleanup contractor began asking what level of cleanup was needed. He said that a newly elected congressman provided an idea for future use and things started to progress. Mr. Abelson said this is a lesson learned that the communities came together with Congress to define what long-term future use was, and that DOE was involved but not a primary decision-maker. He said the details of this case study make a great example for how future use planning helps to drive cleanup decisions.

Mr. Lockhart commented that in all three subcommittees, the importance of high-level buy-in is stressed. Ms. Johnson said that this could be discussed in the executive summary as a common theme.

Mr. Rispoli led the risk-based decision-making topic. He clarified that the subcommittee considered the topic to be risk-informed decision-making rather than risk-based decision making to be more accurate in their assumptions and recommendations. He said that this approach would then permit inclusion of other aspects of significance, such as workforce stability, utilization of technology, regulatory provisions and legal requirements, short term completion of remediation of lower risk activities, local government values and priorities, and so forth.

Mr. Rispoli examined two recent reports, the “Omnibus” report done by CRESP, and the “Assessment of Science and Technology for the Department of Energy’s Defense Environmental Cleanup Program” (S&T Report) by the Nuclear and Radiation Studies Board at the National Academies of Sciences, Engineering, and Medicine, among others. He said that both reports encourage risk-informed decision making to anticipate future risks. He added that it is not readily apparent that transparency in the cleanup program includes a risk-informed priority list that is complex-wide, as compared to site by site.

Mr. Rispoli emphasized that risks are not only from nuclear contamination, but also from infrastructure conditions.

Mr. Rispoli discussed the process of developing a risk management plan, to include identification of such risks, and then a deliberative process to address whether to accept, mitigate, or remediate (remove) those risks. He said that were a numerical ranking system to be consistently implemented across all the DOE sites, it would then be possible to integrate the list across all the sites. He said that this approach would ideally offer improved transparency, budget prioritization and risk management.

The subcommittee's recommendations on the topic of risk-based decision-making are:

Recommendation #1:

The EM program should develop a consistent approach towards risk management, with the objective being a risk-informed, complex-wide integrated priority list of projects and other work. This approach would permit identification of similar risks across the remaining sites, a focus on technology development to address those risks as may be applicable, better informed consistent decision making concerning the options to address the risk, and a more transparent budget process that is informed by such an approach. Continue or re-invigorate the discussions with states, EPA and DOE (HQ and Field) to put definitions and directions around risk determination and decision making. Include local government representatives and community stakeholders at the beginning of the process to communicate program goals and objectives, and to incorporate local views that may impact risk-informed prioritization. Where appropriate, include local affected tribal nations in this dialog.

Recommendation #2:

Review Risk Evaluation tools such as the CRESR Risk Report done for Hanford, which pointed out some key risks {tunnels} to all the parties that hadn't been high on the priority list and when a tunnel collapsed, focus was diverted from all other activities to address the risk.

Recommendation #3:

Update Land Use Plans so final decisions on site use are clearly determined which will require tribal, stakeholder and particularly local government involvement and acceptance.

Ms. Johnson asked if DOE has a risk management plan or simply a priority list. Mr. Rispoli said that when he was on the CRESR committee it was very clear that each site had their own priority lists but not a complex-wide plan. He said that the NASEM committee suggested that the U.S. Army Corps of engineers do a complex-wide assessment to ensure a common baseline and approach. Ms. Johnson said that the recommendation allows for each site to have their own risk-informed priority lists using a consistent process that is used across the complex. Mr. Rispoli said that an external body would ideally perform an analysis to remove unconscious bias and create a truly consistent approach.

Ms. Howard commented that the executive summary should include emphasis on the fact that each site is different, and cautioned to keep this in mind while discussing creating any complex-wide approach on risk-informed decision-making. She added that the local communities should be part of this process as well, particularly in the early stages.

Mr. Abelson led research on the topic of Point of Compliance (POC). He said that the charge calls for examining waste footprints, but through the EMAB's discussions, it seems to be understood in terms of water quality standards.

He discussed the following evaluation criteria when establishing POCs:

1. Establish clarity of purpose: POCs bridge what is technically required with on-the-ground challenges (e.g., terrain) and overall goal for the cleanup. Clarity of purpose should provide

the foundation for developing POCs, because only through clearly identifying and articulating the purpose are the parties able to link priorities and interests, identify creative outcomes and support risk-informed decision-making.

2. Link the goals for the POCs to agency and community priorities and interests: In complex environmental cleanups there is no singular priority or interest. By linking decisions regarding the establishment of POCs to priorities and interests, DOE, the regulatory agencies, Congress and the communities move towards their shared goals for the cleanup. As the following example from Rocky Flats highlights, the twin goals were water quality protection for water leaving the federal site and regulatory relief upstream where meeting standards was less assured. Establishment of POCs was central to the agreement reached.
3. Identify creative outcomes that can be utilized: Generally, there are many regulatory-compliant options for where the agencies can establish POCs. In developing strategies for bringing together federal, state and local interests, creativity in where and why POCs are established often allow the parties to adopt solutions that are broadly supported. Two case studies are examined in the report at SRS and Rocky Flats.
4. Draw a tight nexus between the goals of risk-informed decisions and the establishment of POCs: Across federal facilities, POCs vary depending on the parties' goals. As discussed earlier in this EMAB report, at the center of risk-informed decision-making is risk identification and risk management. POCs can prove central to that analysis and resulting decisions.

Mr. Abelson said that the final point supports the previously discussed recommendations by emphasizing that a future use plan in the local communities' best interest is critical to defining the purpose and planning cleanup.

Mr. Lockhart commented that with the various parts of the subcommittee's charge, the POC seems the least understood by the public and stakeholders outside of the regulatory community. He said that the examples in the report show how POCs can be used in a positive way.

Ms. Johnson said that the topic of performance metrics was intended to be included in the charge and that she will include language about it in the report under the theme of partnering. She said that performance metrics should be determined locally to reflect the atmosphere and activities at the site. She suggested that this would be a bottom-up approach.

The members determined a deadline at the end of the week for incorporating any changes.

Acting EMAB Designated Federal Officer Ms. Kelly Snyder clarified that the EMAB will not be able to vote on the final report until the latest EMAB membership reappointment package is completed as some members terms are set to expire on September 30, 2020.

Ms. Snyder and the members thanked Ms. Johnson for her service as Chair of the EMAB. Ms. Johnson will resign from the EMAB at the end of her term this fall.

Ms. Johnson thanked the members for their dedication to the EMAB and adjourned the meeting.