



March 18, 2021

March 2021 Citizens Advisory Board Meeting Agenda

Chair

Don Barger

Vice-Chair

Victoria Caldwell

Board Members

Phillip Brown
Cindy Butterbaugh
Judy Clayton
Clint Combs
Celeste Emerson
Fran Johnson
Mike Kemp
Shay Morgan
Bill Murphy
Ciara Sauer
Blake Summarell
Patrick White

Jennifer Woodard
DOE DDFO

Buz Smith
DOE Federal Coordinator

Board Liaisons

Brian Begley
*Division of Waste
Management*

Victor Weeks
*Environmental Protection
Agency*

Mike Hardin
Fish and Wildlife Resources

Support Services

EHl Consultants, Inc.
Emerging Technology Center
5100 Alben Barkley Dr.
Paducah, KY 42001
Phone 270.554.3004
www.energy.gov/pppo/pgdp-cab
info@pgdpcab.org

5:30 pm

Call to order, introductions
Review of agenda

DOE Comments

-- 5 minutes

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 5 minutes

Administrative Issues

-- 20 minutes

- Spring 2021 EM SSAB Chairs Meeting Preview
 1. Charge #1
 2. Charge #2

Public Comments

-- 15 minutes

Final Comments

-- 10 minutes

Adjourn



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Paducah Citizens Advisory Board

Chairs Charge Discussion

March 2021

Jennifer Woodard

U.S. Department of Energy Portsmouth/Paducah Project Office
Paducah Site Lead

➤ Significant Accomplishments

- Tennessee Valley Authority Substation
- DUF6
- Dry Hybrid Fire Suppression System

➤ Community Outreach Activities

- Science Bowl

➤ Budget

- Budget Priorities

➤ Charge 1

- Citizens Advisory Board (CAB) response

➤ Charge 2

- CAB response

Project Update



Educational Outreach:

Science Bowl

- Paducah Tilghman High School won the U.S. Department of Energy's (DOE) virtual West Kentucky Regional Science Bowl on February 5, 2021.
- Murray Middle School won DOE's West Kentucky Regional Science Bowl on Friday, February 19, 2021.

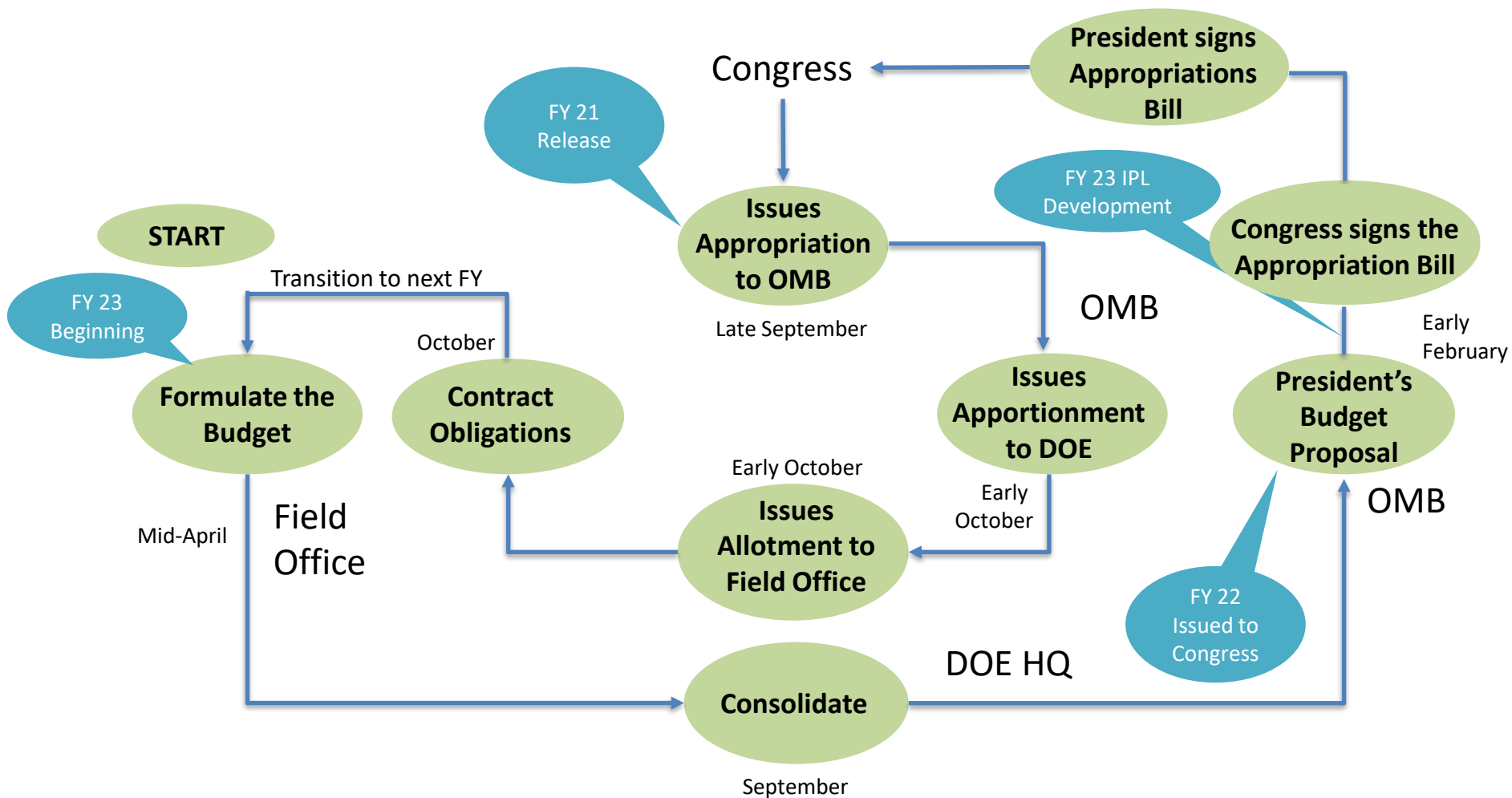


Paducah Tilghman High School Science Bowl Team



Murray Middle School Science Bowl Team

Fiscal Year Budget Process



Charge #1 - Advisory Board and Site Outreach

- Develop a best practices white paper that DOE could use as a guide to augment existing outreach programs and set expectations for future outreach activities.
 - Each Board shall identify existing outreach practices performed at their site by both the Site Specific Advisory Board (SSAB) and DOE.
 - Outreach data should include, but not be limited to, Science, Technology, Engineering, and Math (S.T.E.M.), budget prioritization, and events.
 - Determine if there are any gaps or need for additional outreach.
 - Each Board will present their results during the Spring 2021 Chairs meeting.
- The Chairs will collaboratively discuss the individual Board results and develop the requested white paper (Spring 2021 – Fall 2021).

Charge #2 – SSAB Expectations/ Guiding Principles

- Identify SSAB 10-year expectations and guiding principles that could be used as a complex-wide framework for DOE EM's interaction with stakeholders/communities
 - Utilizing the current EM 10-year Vision*, each Board will document their expectations for how DOE EM will interact with local stakeholders/communities to reach that 10-year vision (a template will be provided to each board)
 - Each Board will present their results during the Spring 2021 Chairs meeting
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- * 10-Year Vision can be found at [DOE-Strategic-Vision-LR.pdf \(energy.gov\)](#)

April 20, 2021 (12-4 pm ET / 8-12 am PT)

- Update from EM Leadership
- Round Robin
- Public Comment
- Break
- EM-4 Update
- Communications Briefing

April 21, 2021 (12-4 pm ET / 8-12 am PT)

- Charge #1 presentations and discussion
- Public comment
- Break
- Charge # 2 presentations and discussion
- Open discussion

CHAIRS ROUND ROBIN

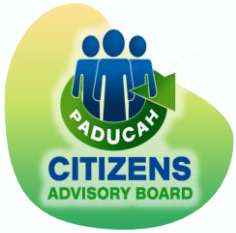
Spring
2021





Round Robin Guidelines

- During the EM SSAB National Chairs' Meeting, each of the 8 local boards has five (5) minutes and one (1) slide to present to EM Headquarters leadership as part of the Round Robin agenda item
- Things to remember/consider:
 - This is your opportunity to speak directly to leadership regarding what is important to the Board
 - Leadership is already aware of the site's accomplishments
 - Highlight the Board's top interest/concern and/or Board's accomplishment



PADUCAH CITIZENS ADVISORY BOARD

- Shipment of DUF6 oxide
- Deactivation
 - Constructed new electrical substation
 - Converted to Dry Hybrid fire suppression system to reduce building heating costs

Charge #1 - Advisory Board and Site Outreach

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SITE NAME: Paducah Gaseous Diffusion Plant											
			Conducted by:		Timing						
	Outreach Activity	Purpose/Driver of Outreach Activity	Frequency	SSAB	DOE	Contractor	Pre-COVID	Post-COVID	Level of Interest/Participation from	Notes/Comments	
2017	Media Releases	Each Year DOE releases approximately 10 to 12 press releases through various channels	ongoing		x		x	x	Medium	Public Involvement	
2017	DOE and Contractors Community Involvement	DOE and Site contractor personnel serve on various local boards such as chambers of commerce	ongoing	x	x	x			Medium/Local Community	Public Involvement	
CY 2018											
2018	DOE Contractor MCS Donated Educational Materials	MCS selected various schools (particularly S.T.E.M.-science, technology, engineering, and mathematics) to donate educational materials to	once				x		Medium/Local Community	Educational Development	
2018	DOE Contractor MCS Contributed to Scholarship Program	MCS provided an educational assistance program to our employees pursuing a Bachelor's degree	ongoing				x		Medium/Local Community	Educational Outreach	
2018	DOE Contractor MCS Sponsored and Participated in USW Workforce Development Program	MCS donated to USW workforce, and participated in the annual golf scramble	ongoing, yearly				x		Medium/Local Community	Community Outreach	
2018	DOE Student ASER Program	A group of Marshall County High School students summarized the technical ASER report	ongoing, yearly	x	x	x			Medium/Local Community	Public Involvement	
2018	DOE and Paducah Contractor FRNP Developed Presentation	In October, FRNP developed a presentation, and the Program Manager and the Business Development Manager presented to the Paducah Area Chamber of Commerce	ongoing, yearly				x	x	Medium/Local Community	Public Involvement	
2018	DOE and Site Contractors Hosted S.T.E.M. Event	DOE and Site Contractors volunteered to support groundwater presentations to the Paducah Area Chamber of Commerce	ongoing, yearly				x	x	High/Local Schools and Families	Educational Outreach	
2018	DOE and Site Contractors Volunteered and Sponsored the Paducah Area Chamber of Commerce Environmental Fair	DOE and Contractors volunteered and sponsored the Paducah Area Chamber of Commerce Environmental Fair	ongoing, yearly				x	x	High/Local Schools and Families	Educational Outreach	
2018	DOE Site Contractor FRNP Hosted Eco-Think Program	FRNP launched Eco-Think. The Eco-Think program enhances high school students' understanding of environmental issues	ongoing, yearly				x		Medium/Local Community	Educational Outreach	
2018	DOE Contractor FRNP Managers Sponsored NAACP Freedom Fund Banquet	On November 4, FRNP managers attended the NAACP Freedom Fund Banquet, which honors African American leaders	ongoing				x		Medium/Local Community	Community Outreach	
2018	DOE Hosted Regional Science Bowl	DOE hosted the Regional Science Bowl	ongoing				x	x	High/Local Schools and Families	Educational Outreach	
2018	DOE and Contractors Support Girl's S.T.E.M. Program	Supported Girl's S.T.E.M. program	ongoing				x	x	High/Local Schools and Families	Educational Outreach	
2018	FRNP Contractor Community Commitment Plan	FRNP Contractor Community Commitment Plan, is a public document that highlights FRNP's commitment to the community	ongoing, yearly				x	x	Medium/Local Community	Public Involvement	
2018	C-103 Project Fact Sheet	Informational fact sheet	once				x	x	Medium/Local Community	Public Involvement	
2018	Land Transfer Fact Sheet	Informational fact sheet developed to provide a status update of land transfer activities	once				x	x	Medium/Local Community	Educational Outreach	
2018	DOE Supported National Science Bowl	DOE supported the National Science Bowl	ongoing, yearly				x		High/Local Schools and Families	Educational Outreach	
2018	DOE Conducted 10 Public Tours	DOE hosted 5 public tour open to the community, and 8 tours open to specific groups	ongoing, scheduled				x	x	Medium/Local Community	Public Involvement	
2018	DOE Conducted FFA CRP Survey with EPA and KDFP	DOE worked closely with EPA and KDFP to develop the report for the on-line survey	once				x		Medium/Local Community	Public Involvement	
2018	DOE Site Contractor SSI Supported Local Education Summit "Life Skills"	Youth Summit "Life Skills"	once				x	x	Medium/Local Community	Educational Outreach	
2018	DOE Conducted Public CAB Briefing	At monthly meetings of the CAB and its committees and subcommittees, DOE provides updates on project progress	ongoing, yearly	x	x	x			Medium/Local Community	Public Involvement	
2018	D.C. Chamber Fly-in	DOE and site contractors supported and sponsored the Paducah Area Chamber of Commerce fly-in	ongoing				x	x	Medium/Local Community	Public Involvement	
2018	DOE Donates excess computer equipment to local schools	DOE supported local area schools and students by donating excess computer equipment	ongoing				x	x	Medium/Local Community	Educational Outreach	
2018	PACRO	DOE integrated site activities under the infrastructure and remediation department	ongoing				x	x	Medium/Local Community	Community Outreach	
2018	Media Releases	Each Year DOE releases approximately 10 to 12 press releases through various channels	ongoing				x	x	Medium	Public Involvement	
2018	DOE and Contractors Community Involvement	DOE and Site contractor personnel serve on various local boards such as chambers of commerce	ongoing	x	x	x			Medium/Local Community	Public Involvement	
CY 2019											
2019	DOE and Site Contractor FRNP Hosted Eco-Think Program	Through Eco-Think, students learn about important and relevant environmental issues	ongoing, yearly						High/Local Schools and Families	Educational Outreach	
2019	DOE Contractor FRNP Sponsored NAACP Dr. Martin Luther King, Jr. Essay and Poster Contest	FRNP sponsored the NAACP Dr. Martin Luther King, Jr. Essay and Poster Contest	ongoing, yearly				x	x	Medium/Local Community	Charitable Giving	
2019	DOE Hosted Regional Science Bowl	DOE Hosted Regional Science Bowl Event, a highly competitive science education event	ongoing, yearly				x	x	High/Local Schools and Families	Educational Outreach	
2019	DOE Site Contractor FRNP Hosted Eco-Think Program	FRNP hosted Eco-Think. The Eco-Think program enhances high school students' understanding of environmental issues	ongoing, yearly	x	x	x			High/Local Schools and Families	Educational Outreach	
2019	DOE Contractor FRNP Participated in the Paducah Area Chamber of Commerce Legislative Day	FRNP participated in the annual Paducah Area Chamber of Commerce Legislative Day	ongoing, yearly				x	x	Medium/Local Community	Community Outreach and Economic Development	
2019	DOE Supported National Science Bowl	DOE Supported National Science Bowl Event, a highly competitive science education event	ongoing, scheduled				x	x	High/Local Schools and Families	Educational Outreach	
2019	CAB Project Briefing	At monthly meetings of the CAB and its committees and subcommittees, DOE provides updates on project progress	ongoing, yearly	x	x	x		x	Medium/Local Community	Public Involvement	
2019	FRNP Contractor Community Commitment Plan	FRNP Contractor Community Commitment Plan, is a public document that highlights FRNP's commitment to the community	ongoing, yearly				x	x	Medium/Local Community	Public Involvement Plan	
2019	DOE Student ASER Program	A group of Marshall County High School students summarized the technical ASER report	ongoing, yearly				x	x	Medium/Local Community	Public Involvement	
2019	DOE Fed's Feed Families Giving Campaign	DOE and site contractors coordinated food drives and collected donations for various local food banks	ongoing, yearly				x	x	Medium/Local Community	Charitable Giving	
2019	DOE Public Tour	DOE host five public tour open to the community and 12 site tours hosted for a sponsoring organization	ongoing, scheduled						Low/Local Community	Public Involvement	
2019	DOE Regional Science Bowl	DOE hosted a regional science bowl competition for middle and high school students	ongoing, yearly						High/Local Schools and Families	Educational Outreach	

Contractor Summary Master Mission Outreach CAB

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Best practices:

DOE's relationship with the local community is respectful. Paducah embraces being a host community and this partnership between DOE, the CAB and local leaders/ elected officials is seen in events like the Paducah Chamber's DC Fly-In, the interactions between intergovernmental groups, and the local stakeholders' desire to celebrate DOE's successes.

Improvement Opportunities:

A prominent issue facing DOE is its reluctance to promote its success in cleanup and educating the community. This was evident when DOE shared the Charge #1 Spreadsheet and CAB members were unaware of the extent of DOE's outreach.

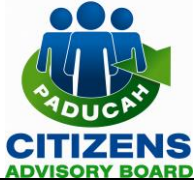
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Insert Delete Format		AutoSum Fill Clear		Sort & Filter Find & Select		Analyze Data		Editing	
H6									
2 SITE NAME:									
3 Description of site activity that needs to be completed What does completion of this activity mean to the SSAB? How would the SSAB like to see DOE EM interact with local stakeholders/communities to reach the completion vision?									
4 Paducah C-400 Complex Final Remedial Action. The C-400 complex is ~350,000 ft2 (8 acres). The intent is to address all contaminants (e.g., TCE, Rad, PCBs, metals and other facilities in the boundary. The Final Action will account for the disposition of waste and remediation of all affected media. The C-400 complex is the root cause for Paducah's largest environmental insult. TCE that leaked from the cleaning building has infiltrated the groundwater and migrated offsite. Pump and Treat systems have helped pull the plume back toward the site boundaries. In order to complete the remediation and prevent further offsite contamination, the source must be treated. The most effective way to get to the source is to remove the building and attack the DNAPL below the footprint. The CAB has long been a proponent of an aggressive approach to addressing the groundwater contamination. The CAB is working with DOE on a groundwater success story video. Additionally, educational outreach efforts are being made to help students of local families understand the mechanics of groundwater remediation.									
5 Paducah C-333 Process Building Deactivation. Characterize, remove, and disposition seal exhaust/ wet air system, cell servicing area and holding drums. Remove and disposition of asbestos cell housing panels. Characterize, remove and disposition loose process gas equipment within C-333. Deactivation of C-333A. Characterize, remove, and disposition 4 cells in support of design and construction of a material sizing area. The most "eye-catching" piece of the Paducah Remediation project will be the eventual demolition of the 4 large process buildings associated with the former gaseous diffusion plant. The ability to properly and safely prepare the buildings for demolition eliminates current hazards, saves on longterm standby, and reduces the overall contamination levels left at the site. The CAB has written recommendations about creating unique metrics to show progress. Additionally, the CAB is interested in communication progress as a means to maintain momentum and continue growing community faith in the program.									
6 Utilities Optimization. Completed swithyard catalogs. Completed raiological surveys supporting characterization for partial dismantlement scope in the C-535 and C-537 switchyards. Complete transition to new TVA substation. Initiate deactivation of C-531 switchyard. Begin dismantle C-535 and C-537 switchyards for metal recovery/ recycling. The CAB is very interested in right-sizing the site's utilities so that a greater percentage of site's budget can be applied to remediation work and not toward upkeep and maintenance costs. The CAB is interested in DOE doing more to communicate the cost of excess utilities and the benefits of downsizing the load.									
7									
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Top three suggestions for improving stakeholder interactions during the next 10 years:

- **Continue to develop and promote The Groundwater Success Story and comparable video series.**
- **Develop and share key metrics to help identify success and progress of the safe removal of contaminants as process buildings are prepared for demolition.**
- **Stand by DOE Paducah Site's hallmark of focusing on financial/ safety/ environmental successes by continuing to be good stewards of taxpayer dollars by downsizing infrastructure through utilities optimization.**



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes March 18, 2021

The Citizens Advisory Board (CAB) met using Microsoft Teams for a virtual meeting on Thursday, March 18th at 5:45 p.m.

Board members present: Bill Murphy, Mike Kemp, Victoria Caldwell, Fran Johnson, Celeste Emerson, Judy Clayton, Don Barger, Clint Combs, Bill Murphy, and Phil Brown.

Board Members absent: Patrick White, Shay Morgan, Blake Summarell, and Cindy Butterbaugh.

Board Liaisons and related regulatory agency employees: Brian Begley, Kentucky Division of Waste Management; Victor Weeks, Environmental Protection Agency; Stephanie Brock, Radiation Health Branch.

DOE Deputy Designated Federal Official: Jennifer Woodard, DOE.

U.S. Department of Energy (DOE) related employees: Robert Smith, DOE; Steve Christmas, Four Rivers Nuclear Partnership, LLC (FRNP); Michael Shilling, E-TAS; Eric Roberts, Julie Galloway, Jim Ethridge, EHI Consultants (EHI).

Public: Kelsey Shank, Phillip Guerrero, Carrie Dillard, Gary Younger, and Patty Olson.

Barger called the meeting to order. **Roberts** then did a roll call of the attendees and explained how the meeting would proceed. He then turned the meeting over to **Woodard** for comments.

DOE Comments: Woodard reported on a recent fire in one of the site's switchyards. She also reviewed the federal budget cycle. **Roberts** commented that the CAB provided recommendations on the priorities for the site during the budget cycle.

Federal Coordinator Comments: Smith said he was glad to finally have a formal meeting.

Liaison Comments: Begley indicated that the annual sampling plan had continued at the site. He also said that there were comments from the state turned in on the site's budget priorities. **Begley** added that there had been work on the informal dispute concerning the C-211-A project. **Murphy** asked if the C-400 project was progressing. **Begley** indicated that samples were being collected along with other work being performed. **Murphy** then asked if the FFA meeting to decide schedules on the C-400 project would be held this summer. **Woodard** said that that would not take place until next summer.

Murphy asked when the C-400 building be demoed and on the ground. **Woodard** said it would not be until late 2027 or early 2028. **Murphy** asked if the C-400 be the next major building to come down.

Woodard said that it was, but other smaller structures were also scheduled. **Brown** asked if the trichloroethylene issue was the problem with the C-400 building demo. **Woodard** indicated that the difference for C-400 was the fact that the basement would collect rainwater and would then have to be treated for contaminants and might cause delays in the project.

Brock reported on needing to work more in their office and lab to process samples but were working from home some.

Weeks indicated that the Kentucky staff were still able to perform work in the field.

Administrative Issues: **Roberts** then introduced materials that would be presented during the upcoming spring EM SSAB Chairs meeting. **Barger** then “previewed” his presentation on the Round Robin slide.

Murphy asked if the first cylinder produced from the process at the site was still located at the site. **Woodard** said that that was her understanding. She also committed to confirming that fact. **Murphy** suggested stating that fact during **Barger’s** presentation at the Chairs meeting. **Combs** and **Emerson** complimented **Barger** on his presentation. **Brown** suggested stating the date for completion of all the cylinder converted. **Woodard** indicated that that was 2057.

Roberts then introduced discussion on Charge #1 to be presented at the Chairs meeting. **Barger** then “previewed” his presentation on Charge #1. **Kemp** questioned what the intent of the first sentence of the “Improvement Opportunities” section of the Charge was. **Barger** indicated that the issue was how to promote work successes at the site. **Murphy** added that he thought the intent was for DOE to be more willing to promote successes. **Kemp** then suggested saying DOE’s “reluctance to promote its success.” **Roberts** asked **Galloway** to make the changes. **Brown** suggested removing the word “primary” as the adjective for “issue”. **Caldwell** suggested using the adjective “prominent”. **Clayton** asked is the goal was one or two issues being presented. **Barger** indicated that promoting cleanup was the first part and outreach was the second part. **Brown** suggested saying “two issues facing DOE”. **Roberts** committed to reworking the slide with **Barger** and sending back out to the Board for approval.

Roberts then introduced discussion on Charge #2. **Barger** then “previewed” his presentation on Charge #2. **Brown** asked is the budget provided for care of the roofs of the buildings. **Woodard** indicated that it was provided for in the future.

Public Comments: none.

Final Comments: **Johnson** complimented everyone’s work on developing the slides for the Chairs meeting.

Barger adjourned the meeting at 7:27 pm.

Approved by Don Barger, Chair


Don Barger