

February 15, 2024

February 2024 Citizens Advisory Board Meeting Agenda

5:30 pm Call to order, introductions Review of agenda

DOE Comments

Federal Coordinator Comments

Liaison Comments

Administrative Issues

Presentations

PPPO 2023 Accomplishments DOE Paducah Budget 101

Public Comments

Final Comments

Adjourn



NAGEMEN

To complete the safe cleanup of the environmental legacy brought about from decades of nuclear weapons development and government-sponsored nuclear energy research.

PRIORITY #1: ACHIEVE SIGNIFICANT CONSTRUCTION MILESTONES

- Begin commissioning of Waste Isolation Pilot Plant (WIPP) Safety Significant Confinement Ventilation System
- Complete sinking Utility Shaft at WIPP to 2150-foot level
- Initiate melter 2 heat up at the Waste Treatment Plant at Hanford
- Complete construction of Savannah River Site (SRS) Saltstone Disposal Unit 8
- Complete steel structure for the Advanced Manufacturing Collaborative at SRS

PRIORITY #2:

EXECUTE KEY CLEANUP PROJECTS

- Complete 400 transuranic waste shipments at WIPP while ensuring there is no backlog of shipments from Los Alamos
- Initiate retrieval of Los Alamos drums from Waste Control Specialists
- Issue Final Environmental Assessment for disposal of contaminated process equipment at SRS
- Pretreat at least 800,000 gallons cumulatively of tank waste at Hanford
- Treat 2 billion gallons of groundwater at Hanford
- Complete processing of 100 sodium-bearing waste containers at IWTU at Idaho
- Complete all spent nuclear fuel transfers from wet to dry storage at Idaho
- Complete removal of a cumulative 14M tons of material from the Moab Site
- Begin early site preparation construction-start for the Oak Ridge On-site Waste Disposal Facility
- Complete removal of 1M pounds of hazardous refrigerant at Paducah
- Dispose of 9,000 tons of Main Plant Process Building demolition waste at West Valley

PRIORITY #3: REDUCE THE EM FOOTPRINT

- Complete demolition of four buildings at Test Cell C at the Nevada National Security Site
- Complete Old Town Demolition Phase VI Project at Lawrence Berkeley National Laboratory
- Initiate demolition of Building B251 at Lawrence Livermore National Laboratory
- Complete above-ground demolition of the Q-Complex buildings at Knolls Atomic Power Laboratory
- Complete demolition of the Low Intensity Test Reactor at Oak Ridge

PRIORITY #4: AWARD CONTRACTS THAT ENABLE ACCELERATED PROGRESS

- Award Hanford Integrated Tank Disposition Contract
- Award Portsmouth D&D Contract
- Award Portsmouth Paducah Project Office Operations & Site Mission Support Contract
- Award Small Business Nationwide Deactivation Decommissioning & Removal Contract

DRIVE INNOVATION AND SUSTAINABILITY AND **PRIORITY #5:** IMPROVE PERFORMANCE

- Meet 5% small business goal
- Award \$20M in competitive grants to Minority Serving Institutions
- Implement life-cycle alternatives analyses for two sites
- Complete 11 of 12 sites DHS Continuous Diagnostics and Mitigation software asset management projects
- Order at least 150 electric vehicles to support EM-wide fleet goals





To complete the safe cleanup of the environmental legacy brought about from decades of nuclear weapons development and government-sponsored nuclear energy research.

PRIORITY #1: ACHIEVE SIGNIFICANT CONSTRUCTION MILESTONES

- Complete construction of Savannah River Site (SRS) Saltstone Disposal Unit 9
- Install all the exterior walls and roof to progress construction of the Advanced Manufacturing Collaborative in Aiken, South Carolina
- Complete commissioning of the Waste Isolation Pilot Plant (WIPP) Safety Significant Confinement Ventilation System, and initiate the readiness review process
- Complete the Cold Commissioning Management Assessment of the Waste Treatment and Immobilization Plant at Hanford

PRIORITY #2: EXECUTE KEY CLEANUP PROJECTS

- Treat 100,000 cumulative gallons of radioactive sodium-bearing tank waste at the Idaho Integrated Waste Treatment Unit
- Transfer SRS landlordship from EM to the National Nuclear Security Administration
- Complete 40 transuranic (TRU) waste shipments to WIPP from Los Alamos
- Receive 450 total TRU waste shipments at WIPP, while ensuring there is no backlog of shipments at Los Alamos
- Process 35 canisters of material from the U-233 Disposition Project at Oak Ridge
- Complete removal of a cumulative 15 million tons of radioactive material from Moab
- Complete the size reduction and repackaging of 158 corrugated metal pipes at Los Alamos
- Complete disposition of 1 million pounds of R-114 refrigerant at Paducah
- Treat 2 billion gallons of groundwater at Hanford
- Dispose of a cumulative 20,000 tons of waste since starting the Main Plant Process Building demolition project at West Valley
- Complete pre-demolition abatement and hazard removal at Building 251 at Lawrence Livermore National Laboratory
- Initiate installation of Test Bed Initiative waste treatment equipment at Hanford
- Complete six spent nuclear fuel dissolutions at the SRS H-Canyon as part of the Accelerated Basin De-inventory mission
- Complete retrieval of 74 standard waste boxes to above-ground storage at Waste Control Specialists in Texas

PRIORITY #3: REDUCE THE EM FOOTPRINT

- Complete demolition of the remaining Accelerated Retrieval Project enclosures at the Subsurface Disposal Area at Idaho
- Initiate demolition of the Alpha 2 building at the Y-12 National Security Complex at Oak Ridge
- Complete below-grade demolition of the Q-Complex at Knolls Atomic Power Laboratory in New York
- Complete demolition of Building 3901 and four ancillary structures at the Engine Maintenance, Assembly and Disassembly Facility at the Nevada National Security Sites
- Complete dewatering and grouting of the K West Basin at Hanford
- Complete soil remediation under the former Gaseous Diffusion Plant (GDP) support facilities at the Oak Ridge East Tennessee Technology Park
- Complete deactivation of the X-333 uranium enrichment process building at Portsmouth

PRIORITY #4: AWARD CONTRACTS THAT ENABLE ACCELERATED PROGRESS

- Issue Naval Reactors Deactivation, Decommissioning and Removal Task Order
- Award Elemental Mercury Contract
- Issue Phase 1B Request for Proposal for West Valley Deactivation and Demolition

PRIORITY #5: DRIVE INNOVATION AND IMPROVE PERFORMANCE

- Meet 5% small business goal
- Award and distribute \$20 million in grants to Minority Serving Institutions
- Install 20 electric vehicle charging ports at EM sites
- Place orders for 175 zero-emission vehicles
- Select a carbon-free electricity project for development at Hanford

PPPO 2023 Accomplishments

PPPO 2023 Accomplishments (youtube.com)



DOE Paducah Budgeting

Citizens Advisory Board Meeting February 15, 2024 April Ladd, Paducah Site Lead & DDFO





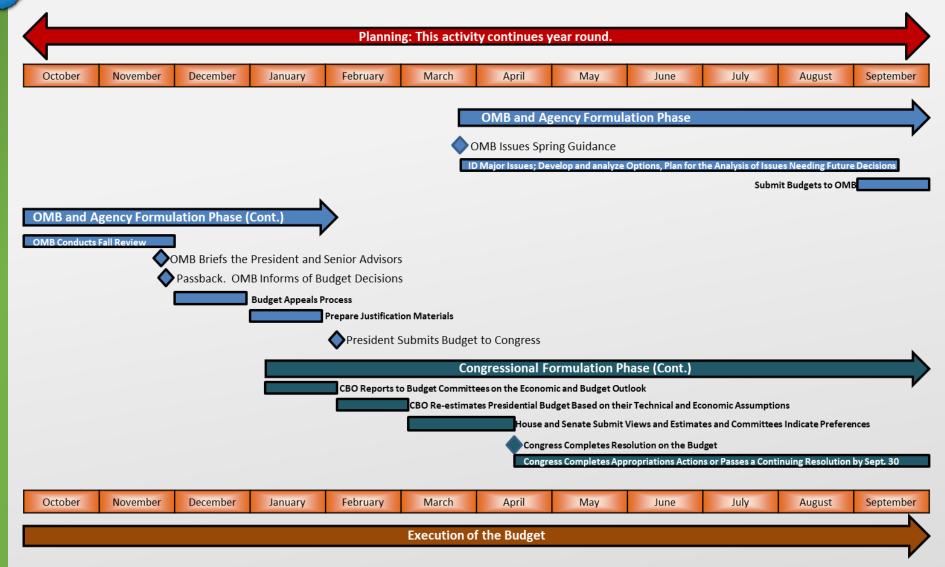
Quick Facts

- The federal government operates on a fiscal year (FY), which begins on October 1 and ends on September 30.
 - For example, FY24 began on October 1, 2023, and ends September 30, 2024.
- The U.S. federal budget is created annually through an intricate process that typically takes up to 10 or more months to complete.
- To complete the annual budget by October 1, the start of the new FY, the process must begin 18 months beforehand.

Continuing Resolution

- If Congress does not pass bills to fund government operations by October 1, they have to pass a Continuing Resolution or shut down the government.
- A continuing resolution is short term legislation passed by Congress to keep the Federal Government open.
- Funding is based on current year spending levels which may positively or negatively impact projects.
- The current continuing resolution ends on March 1 for DOE.

Budget Planning & Timeline



*OMB's Agency Formulation, Budget Allocations are Embargoed and <u>NOT</u> Releasable Outside of the Administration

Three Fiscal Year Budget Push: Status

FY 2024 Execution

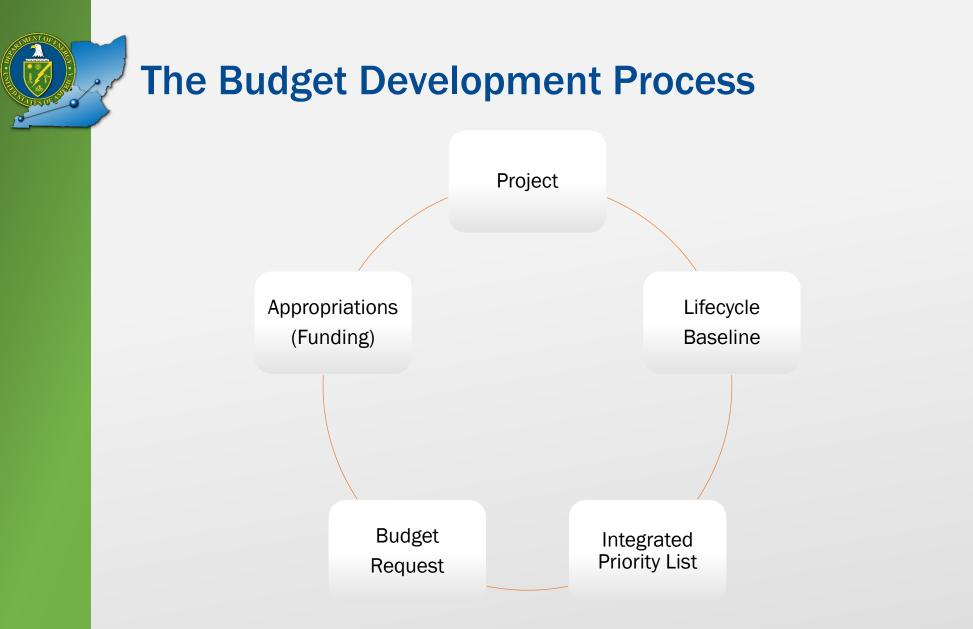
- H.R. 4394 Energy and Water Development and Related Agencies Appropriations Act, 2024 was passed by the U.S. House of Representatives on October 27, 2023.
 - On October 3, 2023, the president released a Statement of Administration Policy stating opposition to the passage of the bill and would veto, if presented to him.
- On January 19, 2024, the president signed a continuing resolution for FY24.
 - Remain on continuing resolution through March 1, 2024

FY 2025 Budget Request

• President's budget is typically announced in early February.

FY 2026 Budget Planning

- Budget development is in the beginning stages.
- Priorities will be determined for FY26.



The baseline development process is ongoing throughout the project lifecycle.

Site Budget Development

- In March and April, the IPL and the life cycle baseline are used to develop the site budget request.
- The request is forwarded to headquarters where, from May to September/October, it is compiled with other DOE EM sites' requests, aligned to match EM goals, and ultimately included in the complete Department of Energy Budget Request submitted to OMB.
- From October to January, OMB develops the President's formal budget request, which is submitted to Congress in February.

Integrated Priority List (IPL)

- Ranks Environmental Management (EM) projects for budget purposes.
- Uses the life cycle baseline as a starting point.
- Uses Risk Value Management and other factors to achieve the rank ordering of projects for funding purposes.
- Clarifies what will and will not be funded.
- Allows for sequencing based on a sound business analysis.

Paducah Integrated Priorities List

Imminent Threats

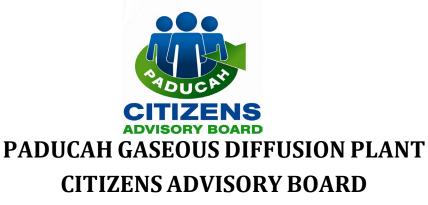
No activities at Paducah are currently identified in this category

Base Operations

- Security
- Surveillance and Maintenance
- Site Operations and Emergency Management
- Remediation Project Operations and Maintenance
- Environmental Monitoring
- Utility Operations
- Deactivation/Stabilization
- Infrastructure Management
- Waste/Landfill Operations
- Depleted Uranium Hexafluoride Conversion Operation and Maintenance

Paducah Integrated Priorities List

- Federal Facility Agreement Enforceable Commitments
 - C-400 Feasibility Study (D1)
- Other Priorities/Planning Packages
 - C-333 Process Building deactivation
 - R-114 disposition
 - First land transfer package
 - Ongoing activities



MINUTES OF THE THURSDAY, FEBRUARY 15, 2023, CAB BOARD MEETING • 5:30 PM.

Location: Emerging Technology Building, WKCTC, Paducah, Kentucky

Citizens Advisory Board (CAB) Members Present: Don Barger, Fran Johnson, Billy Bob Clark, Myron Wessel, Eric Butterbaugh, Ben Stinnett, Rodney Hill, Andrew Paul, Riley Willett, Gaye Brewer, Clint Combs (TEAMS), Reese Henderson (TEAMS)

CAB Members Absent: Elizabeth Wilson, Gaylon Grubbs, Reese Henderson

U.S. Department of Energy (DOE) and Contractors: April Ladd, Buz Smith, DOE; Hayly Wiggins, Julie Galloway, EHI Consultants; Zachary Boyarski, ETAS; Steve Christmas, Four Rivers Nuclear Partnership

Liaisons: April Webb (TEAMS), Sonja Smiley (TEAMS), Brian Lainhart (TEAMS), Mary Evans, Division of Waste Management; Victor Weeks (TEAMS), Environmental Protection Agency

Attendees: Aiden Walker

Facilitator: Eric Roberts, EHI

Approved by Don Barger, Board Chair

Signature on file

Don Barger

Call to Order: 5:31 pm Don Barger, CAB Chair.

Barger:

Welcome to the February Board Meeting. We appreciate your attendance this evening.

Attendees introduced themselves.

Review of Agenda

April Ladd provided DOE Comments: Excess facility demolition; we have completed the demolition of three facilities, C727, C710A, and C711. In total, we have disposed of over five million pounds of R-114 (Freon) and are on track to meet the FY24 goal.

Buz Smith provided additional comments: We have shipped over six hundred thousand pounds of our FY24 goal for r-114 disposal.

Hill: You have disposed of over half of the yearly goal in only the first two months? You should exceed the goal at that rate.

Buz: Our FY24 goal runs from October 1 to September 30.

Ladd: It is a bit confusing. From a Performance Plan standpoint, we run October 1 – September 30, but for Mission Goals, we run standard calendar years, January 1 – December 31. We track in Fiscal Years and Calendar Years depending on the type of activity.

Barger: Any liaison comments?

Weeks: None from EPA at this time.

Barger: Next, we have administrative issues.

Roberts: We have none.

We have included the DOE EM CY23 Missions & Priorities Scorecard in your packets. This is how the DOE accounts for the stated missions for the year and if it meets them. PPPO wanted to share the accomplishments of the Portsmouth and Paducah sites, so they produced the video we are about to watch. It shares much more about the Paducah site

Barger: Next on our agenda is the PPPO 2023 Accomplishments video.

CAB viewed PPPO 2023 Accomplishments (youtube.com).

Roberts: Some of the shots you saw in the video were taken by one of the summer interns, Aiden Walker, who is here taking photos for the CAB today.

Barger: Next, we have our presentation on DOE Paducah Budgeting with April Ladd.

April Ladd, Deputy Designated Federal Officer, DOE

Presentation-DOE Paducah Budgeting

| Question/Comment: | Answer: |
|--|---|
| Smith: One example of how Congress being in Continuing resolution instead of passing the budget affects us is that we have had to put off taking down the electrical towers. | Ladd: That is correct. |
| Butterbaugh : Is it possible to not pass a budget? | Ladd: It can happen. We could go into the next fiscal year under CR and even continue until a budget is passed. |
| Hill: Do you feel like the election is why Congress has not passed a budget? | Ladd: It very well could be. |
| If you don't get the 2024 budget this far into the year, would you just move into 2025? | If no 2024 budget passes, we continue operating using 2023 figures. That continues until a new budget passes. We constantly perform budget drills to ensure we are prepared for any budget scenario. We continue to fund the site contractors, but projects that require outside contractors could be delayed. |
| Barger: Do continuing resolutions consider inflation at all? The 2023 budget won't stretch as far in 2024, so, in effect, you are getting less money. | Ladd: No, the CRs fund at the exact previous year's amounts, with no adjustments for inflation. |
| How does this impact the contractors? | Ladd: We try to keep contractors funded for at least 3 - 4 weeks in advance for continuity's sake. We use forecasting from the contractors on what they will be spending. Some projects will be pushed out until we have the budget in place, for instance, road repairs and some maintenance. Our contractors are excellent |

| | at staying within their budget. Contractor employees still get raises as scheduled. |
|---|---|
| Barger: How does this affect worker morale? | Ladd: Workers are not directly involved in the budgeting process. |
| | Clark: The workforce is not aware of these issues. They continue to work and get paid. Project managers are acutely aware. |
| Butterbaugh: What if the budget is passed but is less than the CR figures? | Ladd: That can happen and is precisely why we run these budget scenarios. We review budgets and make choices in these scenarios to prepare for any budget we receive. |

Barger: If anyone thinks of questions later, please send them to Buz Smith at (270) 441-6821 or robert.smith@pppo.gov.

Barger: Were there any public comments?

Roberts: There were not. If anyone has public comments, you can email them to <u>robert.smith@pppo.gov</u>, and we will add them as attachments to the minutes.

Roberts: We should have the Paducah Top Priority slide for the Spring Chairs meeting for you next month. Our CAB meeting for March will be on PFAS.

Barger adjourned the meeting at 6:20 pm.



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

4810 Alben Barkley Drive • Paducah, Kentucky 42001 • (270) 554-3004 • <u>info@pgdpcab.org</u> • <u>www.energy.gov/pppo/pgdp-cab</u>

Paducah Gaseous Diffusion Plant Citizens Advisory Board Executive Committee Meeting Summary February 12, 2024 The Citizens Advisory Board (CAB) Executive Committee met at the West Kentucky Community and Technical College in Paducah, Kentucky, on Monday, February 12, 2024, at 2:30 p.m.

Board Members present: Don Barger, Fran Johnson, Ben Stinnett, Myron Wessel (TEAMS), Rodney Hill

U.S. Department of Energy (DOE) and related employees: Robert Smith, DOE; Zach Boyarski, ETAS; Eric Roberts and Hayly Wiggins, EHI.

Roberts shared since the January CAB meeting was postponed due to the WKCTC campus being closed for inclement weather, the January presentations on DOE Paducah Budget and Priorities have been shifted to the February Board meeting. The planned educational session of a hands-on budget process demonstration has been postponed. The March CAB meeting topic will be PFAS.

Roberts provided information regarding the EM SSAB Spring Chairs meeting in Chillicothe, Ohio. The Paducah Site Top Priority Slide was discussed. Suggestions included sharing more details on the internship program, including increasing application figures, multi-year interns, and interns hired by site contractors. The slide will be emailed to Executive Subcommittee members for further review.

Smith provided DOE comments. The DOE-sponsored Science Bowl took place in February. The high school competition was on February 2, with Calloway County placing first, Owensboro placing second, and Madisonville North Hopkins placing third. The middle school competition was on February 9, and Calloway County came in first, Heath placed second, and North Marshall placed third. Many excellent teams and volunteers made this event run smoothly for all. Congress has only approved a continuing resolution at this time, which has likely delayed the electrical tower project so we will continue to wait to start this project that involve outside contractors until that final budget is in place. Segmentation of the converters continues to run smoothly. The small building demos continue at the site and is running smoothly. Construction of the new security building is also moving along well.

The Paducah Chamber of Commerce has sent queries for data relating to the site redevelopment study they are conducting, which we respond to as needed.

Our yearly fiscal year goal is to remove 1 million pounds of R-114 (Freon). We are on target to meet this goal, having shipped 600,000 pounds off-site this year. Our original total was 8.5 million pounds of R-114, and we now have shipped 5 million pounds.

We are continuing to send materials to PACRO. We hope to have some surplus railcars ready to send them soon.

Roberts adjourned the meeting at 3:27 p.m.



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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Paducah Gaseous Diffusion Plant Citizens Advisory Board Executive Committee Meeting Summary

January 8, 2024

The Citizens Advisory Board (CAB) Executive Committee met at the West Kentucky Community and Technical College in Paducah, Kentucky, on Monday, January 8, 2024, at 2:30 p.m.

Board Members present: Don Barger, Fran Johnson, Ben Stinnett, Clint Combs (TEAMS), Myron Wessel (TEAMS), Rodney Hill (TEAMS)

U.S. Department of Energy (DOE) and related employees: Robert Smith, DOE; Zach Boyarski, ETAS; Eric Roberts (TEAMS) and Hayly Wiggins, EHI.

Roberts welcomed new Executive Subcommittee members Rodney Hill and Ben Stinnett and explained that in case of inclement weather, meetings are typically changed to virtual to air on the side of caution.

Roberts asked if there were any comments on the December Educational Session. All parties stated they enjoyed the meeting and hearing about the contractors' local outreach in the community.

Roberts shared the January meeting is a public Board Meeting and will focus on the DOE Paducah Budget and Priorities. February's educational session will be a hands-on demonstration of the budget process. Barger appreciated someone from Headquarters would come to Paducah to lead the demonstration.

Smith provided DOE comments. There is still no budget from Congress, so we are holding off on starting projects that involve outside contractors until that budget is in place. Once we take down the electric towers this year, the iron from the tower will go to PACRO.

Segmentation of the converts began before Christmas and went smoothly. It slowed due to vacations during the holidays, but has started up again.

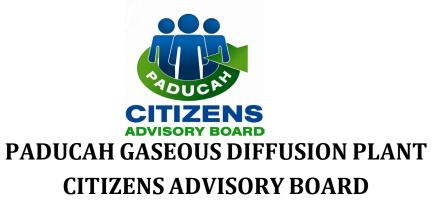
Our yearly fiscal year goal is to remove 1 million pounds of R-114 (Freon). We achieved that goal. In calendar year 2023, we disposed of 1.4 million pounds. We are limited by how much the vendor in Texas can receive.

One of the most impactful projects to come in 2024 will be removing the water tower. This requires explosives and is not yet scheduled.

Some large earth-moving equipment has been to PACRO. Also, we have transferred excess off-the-road diesel to PACRO.

Johnson asked if PACRO could share with the CAB how much money they have raised from the sale of transferred items and materials and what they have done with those funds. **Smith** said that he will ask PACRO to present to the CAB this year.

Roberts adjourned the meeting at 3:15 p.m.



MINUTES OF THE THURSDAY, NOVEMBER 16, 2023, CAB BOARD MEETING • 5:30 PM.

Location: Emerging Technology Building, WKCTC, Paducah, Kentucky

Citizens Advisory Board (CAB) Members Present: Don Barger, Fran Johnson, Billy Bob Clark, Myron Wessel, Gaylon Grubbs, Eric Butterbaugh, Ben Stinnett, Rodney Hill, Andrew Paul. Clint Combs (TEAMS), Riley Willett (TEAMS). Reese Henderson (TEAMS), Gaye Brewer (TEAMS)

CAB Members Absent: Elizabeth Wilson

U.S. Department of Energy (DOE) and Contractors: Buz Smith, April Ladd, Kelly Layne, Hayly Wiggins, EHI Consultants; Zachary Boyarski,

Liaisons: April Webb (TEAMS), Division of Waste Management, Victor Weeks (TEAMS), Environmental Protection Agency

Attendees: Dylan Nichols

Facilitator: Eric Roberts, EHI

Approved by Don Barger, Board Chair

Signature on file

Don Barger

Call to Order: 5:33 pm Don Barger, CAB Chair.

Barger:

Welcome to the May Board Meeting. We appreciate your attendance this evening.

Attendees introduced themselves.

Review of Agenda

April Ladd provided DOE Comments: The Material Sizing Area started up on November 6, 2023, at the plant. 54% of the R-114 (Freon) has been disposed of as of today. We are working on the FY2024 Small Facilities Structure Demolition, and we will show the facilities slated for demolition this year in the presentation tonight. We are working with KY and EPA on more holistically looking at our clean-up strategy, which we will discuss in tonight's presentation.

Buz Smith provided additional comments: Thanks for being here tonight.

Barger: Do we have any Liaison comments?

Webb: none

Weeks: none

Barger: You have a ballot before you with the nominees for Chair, Don Barger, Vice Chair, Fran Johnson. and Chair-Elect, Clint Combs and five names of members who have agreed to serve on the Executive Subcommittee, if elected. Are there any nominations from the floor for these positions? *None*

All in favor of approving this slate of officers signify by saying "Aye." Any opposition?

All present, both in person and virtually, voted Aye, motion passed unanimously. 13-0-0

Please pass in your ballots with the 3 names you have circled as your vote for Executive Subcommittee. Those of you participating via TEAMS meeting, please text Hayly with the three names you vote for in the Executive Subcommittee election.

Barger: Thank you to everyone willing to serve in Leadership roles and on the Executive Subcommittee.

Barger: Next on our agenda is to vote on the FY 2024 Work Plan before you. All in favor of accepting the Workplan as presented?

All present, both in person and virtually, voted Aye, motion passed unanimously. 13-0-0

Barger: Next, we have a recommendation that we have worked on through subcommittees presented here in its final edited form to be accepted and submitted as Recommendation 24-01.

Roberts: You will see that the recommendation is in multiple parts listed as a, b, c, etc. This is for ease of tracking so that DOE can come to us in future meetings and give us updates, such as Recommendation 24-01, part d has been implemented in this way.

Barger: Are there any questions or discussions on this recommendation? *None* All in favor of sending Recommendation 24-01 forward, please indicate by saying Aye.

All present, both in person and virtually, voted Aye, motion passed unanimously. 13-0-0

Barger: This takes care of administrative issues this evening.

Roberts: Buz and Hayly have tallied the votes, and our leadership team is Don Barger as Chair, Fran Johnson as Vice Chair, and Clint Combs as our Chair-Elect. The three new members of the Executive Subcommittee are Rodney Hill, Ben Stinnett, and Myron Wessel. All six will make up the Executive Subcommittee in 2024.

Barger: Next on our agenda is the PPPO 20th Anniversary Celebration video.

Smith: The CAB has encouraged DOE to celebrate successes, and this video is an opportunity for DOE to showcase these successes.

April: The 20th Anniversary Celebration was one of the first times that DOE and the contractors all gathered at the site. We had great feedback, and we hope to gather DOE and contractors again as we share continued cleanup successes.

CAB viewed PPPO 20th Anniversary Celebration video.

April Ladd, Deputy Designated Federal Officer, DOE

PBI Paducah Site Fiscal Year 2024 Projects Presentation

| Question/Comment: | Answer: |
|--|---|
| Stinnett : So, you say that we can save twenty-five years on the cleanup, but what is the current final cleanup date? | Ladd: This is preliminary, but the current date is 2060. |
| How will this affect your budget? | We have factored this change into our future budgets, including the fact that as Portsmouth finishes its cleanup, those funds will be coming into Paducah. All dates are funding-dependent from headquarters. |
| It's great to shave that time off the cleanup, but in terms of recruiting talent, won't that be a barrier? | Paducah is a nuclear-friendly town, and if reindustrialization is the city's goal, then having trained employees ready to work in the field will be an asset to future industries that want to employ folks here. |
| Brewer: I would like to know how the regulatory agencies feel about this change. | Weeks: It's a significant change in direction, and there are a lot of nuances to work out long term. I understand that DOE will develop a team with their contractors in the next couple of years to put this strategy in a more detailed framework that we can work together on. |
| | Webb: I agree with Victor. We have been working with DOE on this proposal and the change in direction and are committed to it. |
| | Roberts: We will have a more detailed discussion in January, where this will be the main topic. This change does create some legitimate questions on long-term employment, regulatory involvement, and other questions that will arise. The CAB will have a voice in the process. |

Kelly Layne, DOE

ASER 2022 Presentation

| Question/Comment: | Answer: |
|--|---|
| Hill: There were no notices of violations. Is that common? | Layne: It is not uncommon for us to have no notices of violations. |
| Butterbaugh: The 4.3 mrem dose to the public as reported in the ASER. Does that mean if I go to the site, I get that amount? | Layne: No, that 4.3 is for the entire year. Our evaluation is as if someone was standing next to a cylinder or in the wildlife management area frequently over the course of a year. |
| So, the chart you show here shows that the amount from the Paducah site is far less than the amount a person is exposed to in an x-ray and the other examples, right? | Yes, that is correct. |
| | Roberts: I think the big takeaway is that, based on the thousands of samples taken in 2022, the exposure for plant workers, who wear PNADS to check exposure levels, is fractional of the amount that the average person gets from their daily life, and the risk off-site is even less. |

Barger: If anyone thinks of questions later, please send them to Hayly at <u>hayly@pgdpcab.org</u> or 270-554-3004, and she will get them to the appropriate person for an answer.

Roberts: Billy Bob Clark works with USW and did some public outreach with middle schools recently.

Clark: For the past four years, I have been a part of Career Day at the Julian Carroll Convention Center, where local middle and high school students have come to check out all sorts of careers. Steve Christmas from Four Rivers Nuclear Partnership helps get employees to volunteer to man these booths, and we have hands-on activities for the kids to learn about the opportunities we have at the plant. It's a wonderful day, and the kids seem to enjoy it. Anyone who wants to, should come by and see what it is all about.

Stinnett: April Ladd is coming to the UK Engineering Campus tomorrow for Women in Engineering Day. We are excited to have her and the other women from the site join us for this event.

Smith: There were no public comments submitted.

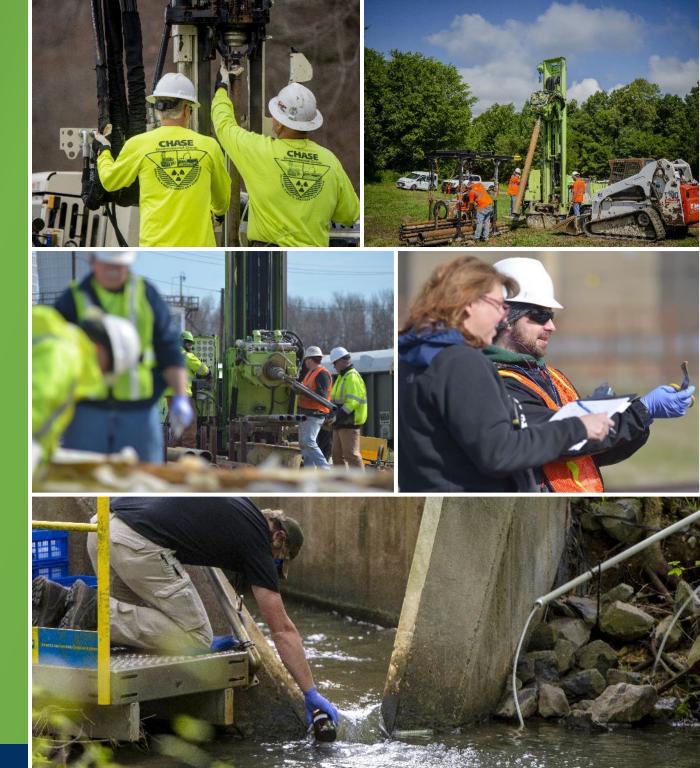
Barger: Thank you for your kind attention tonight and thankyou April and Kelly for the presentations.

Barger adjourned the meeting at 6:50 pm.



2022 Annual Site Environmental Report

Citizens Advisory Board Meeting November 2023 Presented by Kelly Layne





Annual Site Environmental Report



In accordance with DOE Order, *Environment, Safety and Health Reporting*, DOE prepares an Annual Site Environmental Report (ASER), which offers a detailed overview of environmental activities at Paducah

ASER Stakeholder Outreach

The ASER is a key component of DOE's effort to keep the public informed about environmental conditions at the Paducah site US Department of Energy Paducah Gaseous Diffusion Plant

2022

Annual Site Environmental Report

Paducah Site

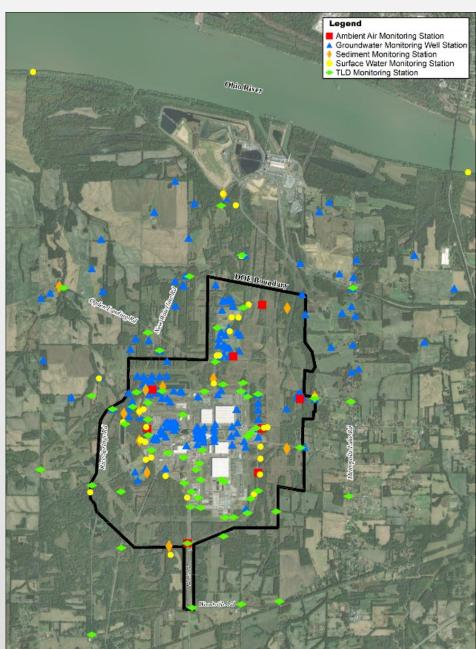
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2022 Environmental Monitoring Program

In 2022, more than 1,600 samples of air, sediment, and water were collected and analyzed:

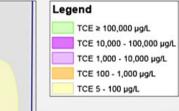
- Air: 36
- Sediment: 30
- Surface Water: 714
- Groundwater: 850





2022 Major Sampling Efforts - Groundwater





Concentrations of most contaminants detected in the groundwater plumes at Paducah were stable or decreasing in 2022.



2022 Major Sampling Efforts – Water Quality

- Monitoring for water quality was performed at locations where water flows into the Bayou and Little Bayou Creeks.
- More than 240 surface water samples were analyzed for multiple parameters as part of KPDES Permit monitoring during 2022.

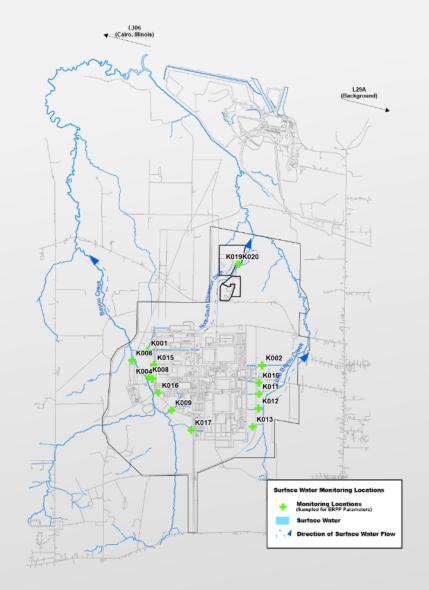
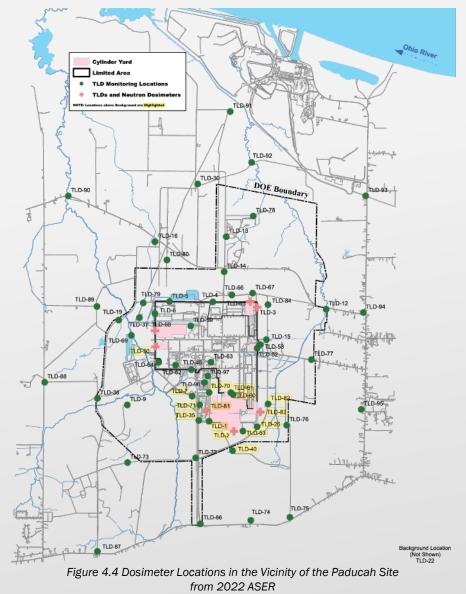


Figure 4.2 Surface Water Monitoring Locations from 2022 ASER



2022 Major Sampling Efforts - Rad



- External radiation was measured continuously at 64 locations.
- Ambient air was sampled at 9 locations (8 on-site and 1 background location located offsite) and analyzed for radionuclides.



2022 Dose Summary

The calculated radiation dose that could be received by a member of the public from activities at the Paducah site was 4.3 millirem (mrem), compared to the DOE annual dose limit of 100 mrem.

RELATIVE DOSES FROM **RADIATION SOURCES** millirem (mrem) Whole body CT scan All doses are from the (single procedure) National Council on 1.000 Radiation Protection & Measurements. Report No. 160 (unless otherwise noted) * A millirem is a unit of 1,000 mrem absorbed radiation. 700 Naturally occuring background radiation The average American is exposed to 620 millirem per year (annual) **310 mrem** 620 mrem 500 Mammogram (single procedure) U.S. Department of Energy *From the International Commission annual dose limit to public on Radiological Protection 2007 250 42 mrem 100 mrem Annual dose to public One way flight from Washington, D.C. to Seattle from Paducah as reported in the 2022 ASER 0 1.92 mrem 4.3 mrem





- The Paducah Site received no notices of violation from EPA and KDEP during 2022.
- Environmental monitoring data collected in 2022 are similar to data collected in previous years and continue to show a reduction in contaminants at the site, demonstrating the effectiveness of the cleanup efforts.



Paducah Site Fiscal Year 2024 Projects

Citizens Advisory Board Meeting November 16, 2023 April Ladd, DDFO



Paducah Strategic Vision

Planned Cleanup Scope Over the Next 10 Years

- Groundwater source remediation
- Prepare process buildings for demolition
- Continue conversion of DUF₆ material





REDUCE overall utility scope and cost at the Paducah Site to support the clean up mission by reducing/eliminating utility distribution systems where possible. **DECREASE** occupancy in buildings undergoing deactivation. CLEAN UP the Paducah Site and continue FOCUS on addressing source of groundwater contamination. DEMOLISH facilities. MINIMIZE the footprint requiring maintenance activities. Safely CONVERT cylinder tails to an oxide.



MANAGE the sampling, identification, packaging, and disposition of waste from the Paducah Site to ensure COMPLIANCE with ALL applicable laws and regulations.



FY 2024 Strategic Vision



- Continue C-333 Process Building deactivation
- Continue "rightsizing" the site's infrastructure to meet future deactivation and demolition needs
- Realign regulatory decision documents with long term cleanup mission



C-333 Deactivation Current Priorities

Over the next two years, the primary focus of the deactivation activity is of the segmentation of large components in the facility.

- Material-Sizing Area
- LINAS
- Bundle Crusher





C-333 Surge Drums



- Continue sampling and analysis of the the remaining 22 surge drums in the C-333 Process Building.
- Work includes:
 - Purging of drums and piping
 - Opening drums to atmosphere
 - Isolating selected drum bank from all remaining systems and piping
 - Removal and disposition of any identified deposits



C-333 Unit Bypass



- Continue sampling and deactivation of 60% of process gas equipment and piping that connected individual components, called a Unit Bypass, in the C-333 Process Building for equipment to be "demo ready."
- Complete analysis of sampling and enter data into database for tracking.
- Complete air gapping and isolation of piping and equipment.



Material Sizing Area: Segmentation

- Two converter segmentation areas have been constructed in the C-333 Process Building.
- Safety systems, including a dust collection system and modified cutting fixtures, implemented into process to improve cutting techniques and address potential hazards.
- Initiated segmentation of 1st converter on 11/6.







Material Sizing Area: Size Reduction



- Compact and reduce the size of internal components removed from process gas equipment in the C-333 Process Building.
- The project utilizes a 160-ton hydraulic compacter and storage containers for compacted internal components for future reuse or recycling.



Material Sizing Area: Lessons Learned



- Employee feedback and knowledge transfer from Portsmouth have been key.
- Modifications to the internal component size reduction equipment and the addition of a dust collection system improve the efficiency and safety of the Material-Sizing Area project.
- Project teams continue to interface with Portsmouth to share best practices.



FY 2024 Facility Demolition



C-611-Q Raw Water Line Booster Station







C-710-A Gas Cylinder Storage Building



C-711 Storage/Former Gas Manifold



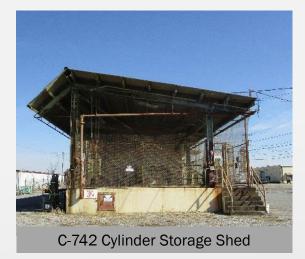
C-721 Gas Manifold Storage



C-732-1 Salt Facility



FY 2024 Facility Demolition





C-752-C Laydown Yard

Additional facilities not pictured

- C-301 Former Fire Training Building
- C-730-01 Office Trailer
- C-533 Northside Trailer



FY24 Infrastructure Initiatives

- C-211 Security Training Facility construction
- Final LED street light upgrade will complete an DOE sustainability initiative
- Complete Historical Records processing





- A priority project at Paducah is the removal of R-114, a refrigerant more commonly known as Freon.
- Since a multi year removal campaign began in 2020, the Paducah Site has shipped about 54% of the inventory off site.
- In 2024, we have committed to disposition of another 1 million pounds.







Decision 2029

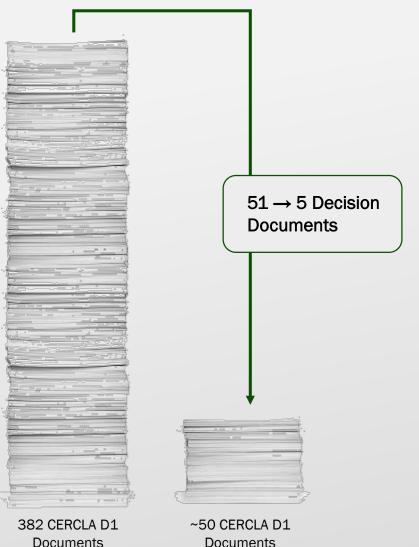
Working with stakeholders to change approach to a holistic strategy for cleanup decisions

- Maintain C-400 momentum through an explanation of significant differences or technical memo to the Northwest Plume Interim-Record of Decision;
- Make final D&D decision via Record of Decision or Action Memo;
- Combine multiple environmental media decisions (e.g., soils, surface water, groundwater, slabs, lagoons) into a single final decision; and
- Make a final on-site waste disposal facility decision.



Decision 2029

- Accelerates Final Cleanup Decisions by up to 25 years
- Streamlines the Regulatory Process to 5 Decisions
- Focuses Federal Facility Agreement Resources on Field Work instead of Paper
- Maintains Focus on C-400



Documents

FY 2023 Site Management Plan

51 Decision Documents (RODs/AMs)

Proposed 5 Decision Documents (RODs/AMs)

Environmental Remediation/Decision 2029

- PPPO is negotiating with US EPA and KY to restructure the Paducah Clean-Up consistent with the Portsmouth Clean-Up success.
- Integrates and Accelerates all Paducah Clean-Up Decisions for Environmental Media, D&D, and Waste Disposition to 2029.
 - ESD or Technical Memo in 2024: Maintain C-400 momentum by enhancing Pump & Treat of the NW Plume Centroid; In the field in 2025.
 - Environmental Media ROD in 2029: Establish FINAL clean-up levels for the entire Paducah Site based on anticipated future use of the site; Combine multiple environmental media decisions (e.g., soils, surface water, groundwater, slabs, lagoons) into a single FINAL decision; In the field in 2030.
 - Waste Disposal ROD in 2029: Evaluate a new CERCLA Cell in addition to the U-Landfill and off-site disposal options. Make a final comprehensive waste disposal decision; Construction Start in 2030; First Waste Emplacement 2032.
 - D&D Action Memo (or ROD) in 2029: Determine whether site structures will remain in place or be demolished; Combine multiple D&D decisions into a single final decision; In the field in 2030.
 - CSOU ROD in the End: Odds and Ends Off-Site Ditches.



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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Paducah Gaseous Diffusion Plant Citizens Advisory Board Executive Committee Meeting Summary November 13, 2023 The Citizens Advisory Board (CAB) Executive Committee met at the West Kentucky Community and Technical College in Paducah, Kentucky, on Monday, November 13, 2023, at 2:30 p.m.

Board Members present in person: Don Barger, Fran Johnson, Clint Combs (TEAMS)

U.S. Department of Energy (DOE) and related employees: Robert Smith, DOE; April Lad, DOE (TEAMS); Zach Boyarski; Eric Roberts and Hayly Wiggins, EHI.

Roberts The November's CAB meeting will include a video celebrating the 20th Anniversary of PPPO (Paducah Portsmouth Project Office) presentation on PBIs (Performance Based Incentives), the ASER (Annual Site Environmental Report) presentation, an election of officers, an election of members of the Executive Subcommittee, a vote to approve the 2024 Workplan, and a vote on the CAB Recommendation on the DOE Internship Program. January's CAB meeting presentation will be a Funding and Budgeting update and site spending priorities, Baseline projections, and an overview of Decision 2029, a consolidation of regulatory paperwork. **Barger** asked who compiled the ASER. **Roberts** said the site compiled it from the samples of air, water, and sediment in 2022, but it is reviewed by regulators and headquarters before it is approved and presented.

Smith provided DOE comments. The large Water Tower will be coming down this physical year, an exciting skyline change.

Ladd provided additional DOE comments. We have disposed of 54% of the 8.5 million pounds of R-114 (freon) the site has accumulated. We continue to send ISO containers for disposition. We anticipate completing the EM goal of 1 million pounds dispoed in FY 2024, as in FY 2023. We had a team from Portsmouth on hand this week to assist our team with the first cuts on converters for the MSA (Material Sizing Area). **Barger** asked how long it takes to make the end cap cut. Ladd answered that once the team is up and running, the end cap cuts should take about 15 minutes.

Roberts adjourned the meeting at 3:23 p.m.