

Chair Ben Peterson

Vice-Chair Renie Barger

Board Members Cindy Butterbaugh Victoria Caldwell Judy Clayton R. Colby Davis Basil Drossos Eddie Edmonds Tom Grassham Mike Kemp Bill Murphy Kevin L. Murphy Cindy Ragland Richard Rushing Jim Tidwell Ken Wheeler Carol Young

Jennifer Woodard DOE DDFO

Buz Smith DOE Federal Coordinator

Board Liaisons

April Webb Division of Waste Management

Julie Corkran Environmental Protection Agency

Mike Hardin Fish and Wildlife Resources

Stephanie Brock Radiation Health Branch

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Agenda for the August Board Meeting

6:00 Call to order, introductions Review of agenda

DDFO Comments	15 minutes
Federal Coordinator Comments	5 minutes
Liaison Comments	5 minutes
 Presentations BWXT Conversion Services – John Woolery Fluor Federal Services – Con Murphy 	20 minutes
 Recommendation 15-XX : Review of Contracting Practices for Major Cleanup Activities EM SSAB Chairs Meeting Round Robin Top Issue 	r
Subcommittee Comments	10 minutes
Public Comments	15 minutes
Final Comments	10 minutes

Adjourn

August 27, 2015



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes August 27, 2015 The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky on Thursday, August 27th at 6:00 p.m.

Board members present: Ben Peterson, Ken Wheeler, Mike Kemp, Renie Barger, Bill Murphy, Cindy Butterbaugh, Tom Grassham, Kevin Murphy, Victoria Caldwell and Carol Young.

Board Members absent: Cindy Ragland, Colby Davis, Basil Drossos, Judy Clayton, Eddie Edmonds, Dick Rushing and Jim Tidwell.

Board Liaisons and related regulatory agency employees: Gaye Brewer (KDWM), Julie Corkran (EPA) on phone, April Webb (KDEP) on phone.

DOE Deputy Designated Federal Official: Jennifer Woodard, DOE

U.S. Department of Energy (DOE) related employees: Bill Murphie, Robert Edwards, DOE; Con Murphy, Cory Hicks, Fluor Paducah (Fluor); Matt LaBarge, Betsy Madru, Waste Control Specialists (WCS); Steve Wilkerson, John Woolery, Babcox-Wilcox Conversion Services (BWCS); Eric Roberts, Jim Ethridge, EHI Consultants (EHI).

Public: Tony Graham

Introductions:

Peterson opened the meeting at 6:00 pm, and asked for introductions and then reviewed the Agenda. He then turned the meeting over to **Woodard** for comments.

DDFO Comments

Woodard said that the transition from contractor LATA KY to Fluor went smoothly and was completed.

Federal Coordinator Comments – Smith was not present for comments.

Liaison Comments

Corkran said that she looked forward to meeting more of the Board members and listening to the meeting.

Webb indicated that she was looking forward to attending a Board meeting soon to meet the Board members.

Presentations

Peterson introduced John Woolery from BWCS to give a presentation about the status of the DUF6 conversion plant at the site. He then introduced Steve Wilkerson from BWCS who is responsible for all the day-to-day activities at the Paducah plant, for brief comments.

Murphy: You mentioned an injury. Was it serious?	Woolery: The employee ended up getting some potassium hydroxide in his eye and was air lifted to the Ohio State Trauma Center for treatment. He was kept overnight and released the next day. He suffered some minor chemical burns on his scalp. Because we were able to irrigate the eye, he suffered no permanent damage to his eye other than some irritation.
Wheeler: Can you comment on the contractual	Wastery: I have been in discussion with both
status of the operation of the plant?	USW union presidents at the two sites and we are working on a month-to-month extension. We are working to establish a more long term agreement to extend the contract with the union until December 2016. In the meantime, we will prepare to negotiate a combined contract to cover both the Portsmouth and Paducah sites.
Murphy: Is your oxide product being stored in	Woolery: Yes, we keep it separate from the
cylinders in the cylinder yard?	DUF6 cylinders, but right now we are storing them.
Murphy: What kind of prospects are there for	Murphie: Those cylinders are in a more stable
those cylinders going to some final disposition location?	condition than they were, so there is no urgency to get them off site. There are NEPA activities still going on and need to be completed to allow us to have access to final disposition. Frankly, that's not likely to be during his contract period right now. There is not an immediate plan to disposition the material even if we could.
Murphy: Is it considered more of an asset than a liability?	Murphie: Some people consider it to be valuable and some don't. It all depends on whose opinion it is.
Wheeler: Will the NRC have any role to play in the restart of the plants?	Woolery: No, they have no role to play. I am the startup authority, but I am working closely with Bill's (Murphie) folks to oversee what we do.

Woolery introduced Con Murphy from Fluor Federal Services for an update presentation on the work they are performing at the site. Murphy reported that employment levels were around 850 employees at that time. He indicated that he expected that to grow to between 1100 and 1200 employees over the next twelve months.

Murphy: Have you gotten any bites on your	Murphy: I will be addressing that a little later in
refrigerant 114?	the presentation.

	We have two pathways that we are pursuing. We	
	are looking at four options to break down the	
	material chemically. We have an RFP (Request	
	For Proposal) out to get some idea of cost to treat	
	this. We were supposed to start transferring the	
	Freon into storage today.	
Wheeler: Are these shipping containers?	Murphy: Yes, they can be shipped.	
Murphy: What is fissile waste?	Murphy: It is basically product, it's a	
	precipitation process.	
Murphy: Is this material coming out of the cells?	Murphy: It is coming out of support facilities.	
	An example would be the C-400 Cleaning	
	building where equipment was cleaned.	
Wheeler: Is the roofing contractor a local	Murphy: It is mixed. We put this out for bid and	
contractor?	the big roofing contractors are the main contractor	
	but they hired local labor.	
Murphy: With the package boilers, are you going	Murphy: We need the steam for the process	
to be able to heat the buildings?	piping. It is cheaper for us to put in the electrical	
	heaters to heat the buildings. The new roof will	
	help with heating because of the extra insulation.	
Wheeler: Do we have an estimate on when the	Hicks: We are working to incorporate the	
tours might resume?	comments from the CAB. We might be able to	
	resume the tours this fall sometime. If weather	
	begins to impact that time, it might be kicked into	
	the spring sometime.	

Administrative Issues

Peterson introduced *Recommendation 15-05: Community Guiding Principles for Prioritization* for consideration and vote by the Board. The CAB voted on the Recommendation and passed it by acclimation.

Peterson then presented the Top Issue from Paducah that will be presented at the EM SSAB Chairs meeting.

Subcommittee Comments

Roberts reported that with the upcoming Executive Planning Session, one of the things that the Board would consider is returning to a subcommittee structure to the CAB, instead of all members considered to be on all the subcommittees.

Public Comments

Madru: Hey, I'm Betsy Madru. I just wanted to
say hello and introduce myself. I work for a
company called Waste Control Specialists out of
Andrews, TX. My colleague is Matt LaBarge,
who some of you are familiar with. He is here
locally. I've been at WCS for about a year now,
and we are making a concerted effort to come and
interact more with the CAB. I really just wanted

	to come and say hello. Hopefully we will be
	seeing vou all a little more. WCS is in west Texas
	on the New Mexico border. We are a little unique
	facility. We have a federal disposal cell there and
	also a commercial disposal cell. So we're the only
	active disposal cell since 1985. We take material
	in our landfill that we call our compact facility
	which is a facility specifically for low level waste
	generated in the states of Texas and Vermont, but
	we do take in work from 36 other states there
	And then at 26 million cubic feet, we also have a
	Federal cell which is a little unique DOE will
	take title to that upon post closures. With 14 000
	acres in the middle of an arid location of the
	United States, we certainly are different than
	onsite facilities and other facilities that you are all
	probably familiar with We hope that you will ask
	us questions and continue to interact with us. We
	have been operating now for about two years so
	we really are the new kids on the block and new to
	the game, which is why you might not have heard
	or seen us before. Other than that. I am happy to
	answer any questions now, or we will stick
	around.
Wheeler: You'll be staffing this office full time?	Madru: Matt's here full time. I came in from
	Austin for today.
Murphy: When you say low level waste are you	Madru: The compact facility, Class A, B, and C,
talking about gloves, and PPE material or are you	the same as the Federal facility, so anything that
talking about pipes and tanks?	meets those characteristics, in addition to large
	quantities of depleted uranium.
Murphy: And when you talk about surface area,	Madru: It's not WIPP. It's not a salt cavern. It's
I presume it is an excavated cell type of facility?	not a traditional slip trench either. We're about 40
It's not an underground cavern sort of thing?	feet below grade, so we're actually a cell that is
	lined in concrete. It is different engineering than
	what you might be used to. Essentially, upon post
	closure, the topography will go back to the way it
	was before we ever excavated. So there is no slip
	trenching, there is no off-venting on our site.
	Everything is below grade.
Murphy: How many acres on your site?	Madru: We have 14,000 acres, built in New
	Mexico and Texas, but all our facilities are
	permitted in Texas.
Caldwell: Is it accessible by rail primarily, by	Madru: Both. We have a four mile rail loop
road?	around our facility. We do take some by rail, but
	most of what we get in right now is by truck. But
	we did take some large steam generators last year
	that came by rail. So, we have both options, but
	like I said most of it comes by truck, but the

Final Comments

Murphy: Since we have Mr. Murphie here, you had commented about some of the deliberations with General Electric. Could you fill us in on where those are going?	Murphie: I am actually recused from that discussion. Discussions are ongoing.Edwards: I'm just going to say that discussions are ongoing and that is all we are allowed to say at this time.
Caldwell: If there is any way when you have people from GE come into town to talk with the Hospitality Association. We have heard rumors that someone came in from GE or another large corporation, they went out to dine and were told that Paducah was boring and so they decided not to do business here. That was a rumor that went through the Hospitality Association. We'll send them to the good hotels and the good restaurants	
to make sure they know that Paducah is awesome. The Hospitality Association is the resource to make sure that any visitors to town are getting the red carpet treatment.	

The meeting adjourned at 7:13pm.



Fluor Federal Services, Inc., Paducah Deactivation Project

Deactivation Update to the Citizens Advisory Board Con Murphy, Program Manager August 2015

Deactivation Project 1-Year Update



Safety

- Fluor recently congratulated employees for working 1,000,000 hours without a lost time work injury.
- Held several safety meetings recently to review procedures and communicate expectations of safety to employees.

Fluor Paducah Deactivation Project Quarterly OSHA Rates - Cumulative



Deactivation Update

- Uranium Deposit Removal and Portable Cell Treatment Carts
- 14kV Power Redistribution
- Lube Oil Removal
- PCB Transformers
- R-114 Removal
- Fissile Deinventory
- C-600 Steam Plant Shutdown and New Package Boiler Startup
- Roof Repairs
- Southwest Soil Mixing Project
- D&D of Inactive Facilities
- FY 2016 Planned Work
- Community Involvement

Uranium Deposit Removal

- Improves worker safety by reducing the uranium mass while advancing the site toward future D&D.
- Facilitates placement of the piping/equipment in the potential on-site waste disposal facility.



Uranium Deposit Removal: How it works?



Arrival of the Portable Cell Treatment Carts



- A total of 10 systems will be built. First system arrived at the end of July. Remaining nine to be delivered this calendar year.
- Acceptance testing for the received system has been completed.
- Operational Readiness Review (ORR) preparation is in progress.
- Deposit Removal activities will commence after the ORR is completed.

14 kV Power Redistribution

Reconfiguring the electricity distribution will make the site more energy efficient, reduce maintenance costs, and save money to put back into the project.

- Consolidating four existing switchyards into one—C-531 Switchyard.
- Fluor is completing the work through a local subcontract with Beltline Electric.
- Project is ahead of schedule, under budget, and has a completion date expected in mid-September.



Lube Oil Disposition

To remove a fire hazard in the process facilities and prepare for D&D.

• Shipping of lube oil started 6/22/2015.

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- Drained, packaged, and shipped +160,000 gallons.
- Drained +10,000 gallons of lube oil from C-337 into totes, which will be re-used as the PCB transformer cleaning agent.
 - Using lube oil as a cleaning agent saves DOE ~\$400,000.

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PCB Oil Disposition

Removes a hazard in the building to protect workers and the environment, while meeting future waste acceptance criteria.

- Removing PCB oil from the last remaining 69 PCB transformers.
- Lube oil from C-337 has been approved by EPA to be used as a rise solvent.
- ~200,000 gallons of PCB oil and rinse solvent will be drained, package and shipped.
- ~11,000 gallons of PCB oil has been drained.



R-114 Refrigerant Removal

Environmental hazard reduction of the 8.6 million pounds of refrigerant located in the process buildings.

- Eight expressions of interest were received from businesses and are being evaluated.
 - Three recycle options
 - Five disposal options
- 3 out of the 15 purchased ISO containers have been delivered and tested.
- Evaluating the use of railcars for additional storage capacity.
- Removal of R-114 into ISO containers started the week of August 24th.
- Removal of the refrigerant makes deposit removal safer.



Fissile Deinventory

Reduces hazards to support future footprint reduction, while reducing costs for facility maintenance.

- Developed program to handle fissile material and trained over 100 people
- 128 pieces of fissile waste from the C-720 building have been packaged. 100 shipped for disposal.
- Started decontamination of fissile contaminated equipment in the C-409 building.



Steam Plant Shutdown and New Package Boilers

Make the site more efficient to save money.

- Steam plant was shut down May 14, 2015.
- To provide steam for future projects at the site, five new, smaller, modular package boilers were purchased.
- Install and tie-in of the new package boilers currently is being performed through a local subcontract to Morsey Constructors, LLC.





Roof Repairs

Stop roof leaks to protect equipment and maintain worker safety while deactivation continues.

- ~75 acres of roofing are scheduled to be replaced.
- ~500,000 square feet are complete, which is 50% of the C-337 process building.
- The roofing system will have the effect of holding in heat in the winter months.
- New roofing system has a 30 year warranty.





Deep Soil Mixing Project

Remove TCE contamination from the soil.

- Completed 148 borings as of August 27.
- 114 borings remaining.
- Soil mixing completion is expected in December. Overall project completion expected in July 2016.



D&D of Inactive Facilities

Reduce maintenance costs and support future footprint reduction.

- 11 facilities will undergo D&D activities including site preparation, removal of hazardous material, demolition, waste loading and transportation, and site restoration.
- Demolition subcontractor mobilizing in September.





FY 2016 Planned Work

- Continue Uranium Deposit Removal
- Continue Deactivation:
 - Refrigerant
 - Lube Oil

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- Utility Optimization
- Small, unused facility D&D
- Pump-and-Treat Operations
- Southwest and Northeast Plumes
- Regulatory documentation of the On-site Waste Disposal Option
- Waste Management and Removal from several facilities and areas

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Community Involvement

- Students graduating from the RadTech program this month.
- Delivered 100 backpacks packed with school supplies to area schools.
- Partnered with CSI to provide 20 laptops to the Boys and Girls Club of Paducah.
- Hosted 12 College summer Interns.

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 Sponsoring the West Kentucky Community and Technical College Scholarship Auction.



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The DUF₆ Mission



Convert approximately 800,000 metric tons of depleted uranium hexafluoride (DUF₆) into hydrofluoric acid for commercial reuse and stable uranium oxide for storage, reuse, or disposal

Paducah, KY •190 employees •Four conversion lines •Eight conversion units •45,000 cylinders



Current Paducah DUF₆ Status:

- Conversion line operations remain suspended pending completion of specific corrective actions identified to safely resume operations.
- Anticipate September 2015 re-start.

Plant availability:		
FY12	27%	
FY13	51%	
FY14	81%	
FY15 Q1-Q3	58%	



Cumulative MT DUF₆ Processed

Through Q2 FY 15, the sites combined have processed ~ 6.5% of the DUF6 inventory



Planned Improvements

Equipment replacement or process improvements to increase output

- Replacement Hydrogen Generation Technology
- Improve Autoclave and Conversion Unit Heating Control
- Streamline Cylinder Modification process and Cylinder Movement

- Reduce oxide flow restrictions (e.g., valve, blower and piping changes)
- Optimize Oxide transfer process

DUF₆ Conversion Project

