



# PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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## **Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes November 15, 2007**

The Citizens Advisory Board (CAB) met at the CAB office in Paducah, Kentucky, November 15, 2007, at 6 p.m.

**Board members present:** John Anderson, Allen Burnett, Judy Clayton, Shirley Lanier, Bobby Lee, John Russell and Jim Smart

**Board members absent:** Elton Priddy and Don Swearingen

**Board Liaisons and related regulatory agency employees:** Brian Begley, Mike Clark, Edward Winner, Kentucky Division of Waste Management (KDWM); David Williams, U.S. Environmental Protection Agency (EPA); and John Volpe, Kentucky Radiation Health Branch (RHB)

**Deputy Designated Federal Official (DDFO):** Reinhard Knerr

**DOE Federal Coordinator:** Mitch Hicks

**U.S. Department of Energy (DOE) related employees:** David Ashburn, Rich Bonczek, Russ Boyd, Tracey Brindley, Yvette Cantrell, Kim Crenshaw, Bruce Gardner, Guy Griswold, Jerry Mayes, Steve Manning, Eric Roberts, Scott Smith, Joe Tarantino and Barry Tilden

**Public:** Dustin Blankenship, Jeremy Mathis, Gary Vander Boegh and Kelly Vaughan

## Agenda

Mayes asked for modifications to the proposed November agenda. **The Board approved the agenda as submitted.**

## Minutes

Mayes asked for modifications to the draft September minutes. **The Board approved the minutes as submitted.**

## Deputy Designated Federal Official Comments

Knerr provided project updates to the Board. The presentation and the monthly project updates are available on the CAB Website at [www.pgpdcab.org](http://www.pgpdcab.org). Questions and answers (paraphrased) appear below.

Questions/Comments	Answers
<b>Burnett:</b> Is the Surface Water Operable Unit (SWOU) Engineering Evaluation/Cost Analysis (EE/CA) behind schedule?	<b>Knerr:</b> The EE/CA is currently scheduled for submittal to Kentucky and EPA in January 2008. It could be submitted in the November or December 2007 timeframe if the Site Investigation/Baseline Risk Assessment is approved by EPA.
<b>Smart:</b> What were EPA and Kentucky's major issues on the C-400 90% Design?	<b>Brindley:</b> Issues include installation of additional monitoring wells and enhancement of monitoring during and at the end of the process. Other issues include considering a phased implementation of the Electrical Resistance Heating (ERH) System, when the goal of asymptosis will be met and indicators used to meet the goal.
<b>Burnett:</b> Will the schedule change due to implementation of the comments from the Independent Review Team, Kentucky and EPA?	<b>Knerr:</b> The biggest impact on schedule will be the phased implementation. There are three distinct source areas for the C-400 Building. The ERH system will be installed for the two smaller source areas. The electrodes will be installed to demonstrate how the deeper boring electrodes will interact. This will cause a 3-4 month delay and have a \$1.7 million cost increase. The benefit is expected to be improved design to treat the larger source area.
<b>Lee:</b> What is the timeline for the first phase of implementation?	<b>Knerr:</b> Installation will begin in May 2008 and operations will begin in December 2008. The first phase of installation will stay on schedule. The conceptual plan may change.

## **Federal Coordinator Comments**

The projects updates have been redesigned. Comments and suggestions for improvement are encouraged. The CAB commended DOE and Paducah Remediation Services (PRS) on the new format and document schedule.

## **Liaison Comments**

### **Kentucky Division of Waste Management**

Winner represented the Kentucky Division of Waste Management with the following comments:

- Kentucky has approved the soil pile sampling plan.
- The 2007 Site Management Plan (SMP) has been approved and Kentucky is reviewing the 2008 SMP and the Risk Methods document.
- Kentucky approved the Surface Water Site Investigation/Baseline Risk Assessment (SI/BRA).
- Kentucky continues to work on the necessary steps to receive a “Yes” to the Government Performance Results Act (GPRA) milestone of having human health exposures under control.

### **U.S. Environment Protection Agency**

Williams represented the EPA with the following comments:

- EPA has sent DOE significant comments on the Surface Water SI/BRA.
- The Southwest Plume Site Investigation document is being reviewed by the EPA legal department.
- Comments were sent to DOE on the 2008 SMP.
- EPA wants to ensure that DOE agrees on the understanding and interpretation of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan that govern the environmental cleanup at the Paducah facility. EPA has questions on some of the documents that are being reviewed. EPA can no longer allow cleanup standards to be based at the property boundary; it must take place at the source of the contamination. After reviewing past documents, comments were made to help clarify EPA’s position. DOE, EPA, and Kentucky will meet the first week of December to discuss the issue.

Regarding EPA’s position on required treatment based on contamination levels at the source rather than at the boundary, Burnett asked if the meeting in December is to establish EPA’s position or will there be negotiation with Kentucky and DOE. Williams said it is not a negotiation. EPA head legal has established their interpretation of CERCLA and cleanup needs to be attempted at the source. There have been recent legal rulings in which EPA was challenged due to not requiring facilities to cleanup at the source. This has been allowed in the past due to interim and remedial actions. EPA Headquarters has made the decision that

this can no longer be allowed to happen and the feasibility studies for the treatments must be considered at the source.

### **Radiation Health Branch**

Volpe represented the RHB with the following comments:

- The RHB has issued comments to DOE on the body of the Risk Methods document and is now reviewing the appendices.
- The Branch is reviewing several other documents and the language on the signs for the GPRA milestone.
- The Branch is making progress on air monitoring data validations. The 2006 data is complete and the 2007 data is being reviewed.

### **Action Items**

The SWOU EE/CA will be available to the CAB following EPA approval of the SI/BRA.

The C-400 Implementation Plan will be sent to the CAB on November 16.

Lee asked that the Working Session action items be incorporated into the Board meeting action items for review.

### **Public Comments**

Vander Boegh said he had asked for two-foot contour maps for Area of Concern (AOC) 4 of the former Kentucky Ordinance Works (KOW) in past meetings and was told by Bill Murphie, DOE, that the CAB would be informed at this meeting if the requested maps exist and what he could be provided. Knerr said DOE has identified the contour maps and they are currently being reviewed by security. The property on the requested maps is not DOE property and the Kentucky Department of Fish and Wildlife Resources (KDRWR) will be contacted to ensure there are no problems with release of the maps. These maps will be available at the Environmental Information Center once approval from security and KDFWR is received.

Vander Boegh asked how far into the McNairy formation has DOE contamination been found. The C-400 dense nonaqueous-phase liquid (DNAPL) source goes down roughly 100 feet. Vander Boegh alleged that there are DOE documents that state contamination has been found down to 400 feet. Due to the time restraint, Mayes suggested that if Vander Boegh has specific questions, they should be addressed in writing. Winner said he would record Vander Boegh's question as to whether there is any analytical data indicating that DOE has contaminated the groundwater down to the McNairy.

Vander Boegh said the Board had decided at a previous meeting to recommend 500 feet of signage on Big Bayou Creek and Little Bayou Creek. He asked if that was an acceptable standard for fencing out the public to the two most contaminated ditches around the plant.

Winner said 500 feet is acceptable but if contamination is found that justifies fencing, then a fence will be needed.

#### DOE Findings on Area of Concern 4

Brindley provided a presentation on the DOE sampling at the U.S. Army Corps of Engineers (USACE) AOC 4. The presentation is available on the CAB Website at [www.pgpcab.org](http://www.pgpcab.org). Questions and answers (paraphrased) appear below.

Questions/Comments	Answers
<b>Burnett:</b> Other than the waste generated by the USACE in AOC 4, was any known plant waste found in that area?	<b>Brindley:</b> There are no known DOE activities in this area and sampling was conducted to verify this fact.
<b>Russell:</b> What was the waste generating activity by the USACE and when did it occur?	<b>Brindley:</b> No known records exist at the site concerning disposal activities, however, the manmade drainage ditches leading to the site could have flushed liquid waste during the operating life of the facility while it was the KOW. These ditches were identified in 1943 from aerial photographs. <b>Williams:</b> The USACE has a responsibility for investigation of formally used defense sites.
<b>Lee:</b> What were the levels of the metals in the USACE investigation and the DOE investigation?	<b>Brindley:</b> DOE findings were consistent with the USACE Final Radiation Survey Report for the Kentucky Ordinance Works at AOC 4. All of the levels are available in the USACE report at <a href="http://www.specproenv.com/KOW/index.htm">www.specproenv.com/KOW/index.htm</a> . <b>Clark:</b> The Kentucky Department of Environmental Protection sampled the same areas as DOE.

#### Committee Reports

##### Waste Disposition/Water Quality Committee

- Lee suggested that the CAB should draft a recommendation in support of EPA to require treatment based on contamination levels at the source rather than at the boundary. Lee also asked Knerr to discuss bioremediation in low-level trichloroethylene areas with PRS.
- Russell suggested an update at the December Working Session on the C-746-U Landfill monitoring of the leachate that is being treated.

##### Long Range Strategy/Stewardship Committee

- The FY07 SMP has been approved. Discussions will continue on the FY08 SMP.

- The Board will discuss potential recommendations later in the meeting.

### **Executive Committee**

- The Executive Committee thought the October Board meeting was repetitious of the September Working Session and is examining meeting content for improvement of future meetings.
- Potential recommendations and the budget were discussed.
- Two Board and one staff member represented the CAB at the Kentucky Research Consortium for Energy and the Environment (KRCEE) Symposium. Several of the presentations can be found on the KRCEE Website. Burnett requested that the link be added to the CAB Website.

### **Administrative Issues**

#### **Motions**

- Burnett presented two letters prepared in the Paducah Chairs Meeting. The first letter recommended long term stewardship incorporation into new Environmental Management (EM) projects and legacy waste decisions. The second letter recommended EM Site Specific Advisory Board participation in the EM budget process. **The Board approved adding Burnett's signature to both letters.** Burnett said he was informed by DOE that the Board would receive a form of the Integrated Priorities List. Smart suggested adding a committee to review the EM budget.
- Burnett identified the changes that were incorporated into the Operating Procedures. **The Board approved the Operating Procedures.**
- Burnett presented a recommendation to DOE regarding solicitation for disposition of nickel at the Paducah Gaseous Diffusion Plant (PGDP). After discussion the recommendation was amended to read:
  1. DOE should provide land/facilities on the DOE PGDP reservation for processing the nickel to reduce volumetric contamination or into final product form.
  2. DOE should extend coverage under its authority to possess radioactive materials until the successful bidder can obtain a Nuclear Regulatory Commission (NRC) license (if it does not already have an NRC license).
  3. DOE should heavily weight the solicitation evaluation criteria to encourage nickel processing in the Paducah area.
  4. DOE should include a statement of the potential for processing of additional classified and unclassified material resulting from the future Decontamination and Decommissioning of the Portsmouth and Paducah gaseous diffusion plants.**The Board approved the modified recommendation.**
- The Board discussed a recommendation regarding long term strategy for disposal of recyclable material. After some modification and considerable debate, the Board decided to table the recommendation for further discussion and approval at the January meeting.

- The Board suggested a future recommendation on the Scrap Metal Moratorium.

The meeting adjourned at 8:45 p.m.