



July 18, 2013

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*Environmental Protection  
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Stephanie Brock  
*Radiation Health Branch*

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## Agenda for the July Board Meeting

### 6:00

Call to order, introductions

Review of agenda

### Federal Coordinator Comments

-- 5 minutes

### Liaison Comments

-- 10 minutes

### Administrative Issues

-- 40 minutes

- Recommendation 13-XX: Seek Change to Budget Strategy and Funding Levels to Include Post Operations of the PGDP
- Recommendation 13-XX: Communications Strategy
- Recommendation 13-XX: Delay of Remedial Action Implementation for the Burial Grounds Operable Unit (BGOU)
- Recommendation 13-XX: Importance of Safety and Cost Benefits by Initiating Immediate D&D Using Current Workforce
- Election of Officers

### Subcommittee Chair Comments

-- 10 minutes

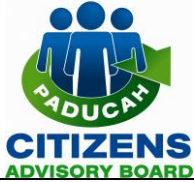
### Public Comments

-- 15 minutes

### Final Comments

-- 5 minutes

### Adjourn



# PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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## Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes July 18, 2013

*The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky on Thursday, July 18th at 6:00 p.m.*

**Board members present:** Judy Clayton, Ken Wheeler, Dianne O'Brien, Mike Kemp, Ben Peterson, David Franklin, Ralph Young, Richard Rushing, Jonathan Hines, Jim Tidwell, and Tom Grassham.

**Board Members absent:** Kyle Henderson, Eddie Edmonds, Glenda Adkisson, Roger Truitt, Renie Barger, Kevin Murphy, and Robert Coleman.

**Board Liaisons and related regulatory agency employees:** Todd Mullins, Kentucky Department of Waste Management (KDWM) (call in); Jennifer Tufts, Environmental Protection Agency (EPA) (call in); Stephanie Brock, Radiation Health Branch (call in)

**DOE Deputy Designated Federal Official:** Buz Smith, DOE

**U.S. Department of Energy (DOE) related employees:** Rob Seifert, DOE; Joe Walker, Bruce Ford, LATA Environmental Services of Kentucky (LATA); Gaye Brewer, KDWM; Jim Key, United States Enrichment Corporation (USEC); Gayle Kaler, Paducah Mayor; Eric Roberts, Jim Ethridge, EHI Consultants (EHI).

**Public:** Tony Graham

### Introductions:

**Young** opened the meeting at 6:00 pm, and asked for introductions and then reviewed the Agenda, which was approved by the Board. He then introduced **Seifert** for comments. Seifert indicated that subject matter experts were being lined up to answer the list of questions that they received from the CAB and would be providing answers soon.

<b>Wheeler:</b> You will submit in writing the answers?	<b>Smith:</b> It will probably be given in person.
<b>Wheeler:</b> I just want to make sure that we are not going to wait until the next CAB meeting to get the answers.	<b>Seifert:</b> That is not the intent.

**Federal Coordinator Comments:** None

**Liaison Comments:** **Mullins** reported that Steve Penrod from USEC had met with the Kentucky Secretary of the Division of Waste Management and had assured the Secretary that USEC was meeting their obligations under the lease agreement.

**Young** turned the meeting over to **Peterson** to present *Recommendation 13-05: Seek Change to Budget Strategy and Funding Levels to Include Post Operations of the PGDP*.

## **Recommendation 13-05: Seek Change to Budget Strategy and Funding Levels to Include Post Operations of the PGDP**

June 4, 2013

Revision 7– July 18, 2013

### **Background**

As legislated in the Energy Policy Act of 1992, the United States Enrichment Corporation (USEC) was formed as a government corporation to restructure and operate the United States government's uranium enrichment business and prepare it for privatization. In May 1999, USEC took over direct operation of the Paducah Gaseous Diffusion Plant (PGDP) enrichment facilities. The Department of Energy (DOE) owns the enrichment facilities and USEC leases the facilities from the DOE. At the time of lease, the DOE was well aware that the plant had a limited lifespan. According to the lease agreement, USEC was obligated to lease the operation for a period of 6 years after which, under qualifying circumstances, could be returned to DOE.

USEC ended enrichment operations on May 31, 2013. DOE has commenced planning for return of the facilities once USEC has completed commercial activities and lease obligations. As site landlord, DOE is responsible for environmental restoration and decontamination and decommissioning (D&D) of the site. In an effort to find an ongoing mission for the site, the DOE issued an Expression of Interest. Should another private company be interested in operating the PGDP, some costs associated with the return of the enrichment facilities to DOE could be deferred for a number of years. Additionally, the DOE recently issued a Request for Offer (RFO) for uranium assets at the site. A decision is expected in the fall.

Assuming there is no viable use of the operating facilities, the DOE must determine whether to take the PGDP directly into decontamination and decommissioning or initiate long-term surveillance and maintenance (S&M) and delayed initiation of D&D. Long-term surveillance and maintenance is not acceptable to our community. Immediate initiation of D&D will result in completion of near-term site remediation, the lowest overall lifecycle cost to DOE, minimize future safety hazards, and allow DOE to maximize the use of trained and qualified workers displaced from terminated gaseous diffusion plant (GDP) operations. Savings to the taxpayer for avoidance of long-term S&M of the GDP could be in the billions of dollars.

In light of the eminent return of the PGDP to the DOE, DOE should consider re-sequencing the current cleanup strategy for the PGDP. This change in strategy could result in better planning

and execution of cleanup work for the entire site as well as better support the community in optimizing future use of the site.

As stated in Recommendation 13-04: *Prompt Initiation of PGDP Operating Facility Decontamination and Decommissioning after Transition of Leased Buildings to DOE*, the CAB has recommended that DOE adequately fund the PGDP post operation shutdown and initiate immediate D&D of the enrichment facility upon return of the PGDP to DOE. The Citizens Advisory Board (CAB) feels that DOE should more aggressively support the community to create the next economic chapter for the PGDP site.

Support for the community includes:

- Adequate funding for full scale D&D of the PGDP in addition to the ongoing missions of DUF6 conversion and environmental restoration
- Re-sequencing the current clean-up strategy with the gaseous diffusion plant D&D to optimize cost savings and support near-term release of real property and site infrastructure to the community
- Remaining active in the community's quest to find an adaptive reuse strategy that supports reindustrialization of the PGDP site.

The community expects the DOE to support the goal of adaptive reuse including a strategy that supports reindustrialization of the site and fair evaluation of any proposal presented for reuse of the existing facility. The DOE should support the community's efforts to create an end state vision for the site, including near-term and long-term solutions, and support the effort to retain existing PDGP workforce for D&D activities.

*Portions of this background were borrowed from DOE document, BJC/OR-573; Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2013; and the Uranium Enrichment Decontamination and Decommissioning Report, Report to Congress, December 2010.*

### **Recommendation**

**Long-term S&M is not acceptable to our community. DOE should take the PGDP facilities not proposed for current or future operations directly into decontamination and decommissioning rather than long-term surveillance and maintenance. The community expects the DOE to complete its site cleanup including D&D of the GDP by the target date of 2040 which has been communicated to the community for the past decade as shown in Figures 1 and 2 below. Figure 1 shows the original Paducah site programmatic baseline and Figure 2 shows the funding impacted programmatic baseline schedules.**

- **The CAB recommends that adequate funding be authorized to fund this work. DOE's current long range funding plan for the Paducah Site, including the DUF6 facility and current remediation projects, will require at least \$400 M per year in order to facilitate the ongoing missions and D&D of the GDP. This level of funding should be maintained until the remediation and cleanup target date of**

**2040 is met as outlined in the 2010 UE D&D Report or until site remediation is complete.**

- **The CAB recommends that DOE commit to a comprehensive D&D and environmental remediation strategy that integrates the community's efforts associated with adaptive reuses. The community desires to accelerate D&D, which facilitates the following benefits: optimize potential benefits from soils and burial ground work, facilitate easier access to challenging, yet contained groundwater sources, and take full advantage of the community's skilled and trained work force.**
- **The CAB recommends that DOE support the community's goal of adaptive reuse including development and implementation of a strategy that supports reindustrialization. Specifically, DOE should align and sequence D&D and environmental restoration work to align with how and when the community has a need for property for reuse. The CAB understands that this will likely conflict with existing milestone cleanup strategy, however, the CAB feels that the community will realize a greater benefit by changing the budget strategy to post-GDP shutdown scope.**
- **Additionally, DOE and the regulatory agencies and stakeholders should ensure that flexibility is built into the overall strategy so that it can be modified to align with the implementation of adaptive reuse over time.**
- **The CAB encourages Kentucky DEP and EPA cooperate with DOE to support this change to align with the community's desire for reindustrialization while continuing to be environmentally responsible.**



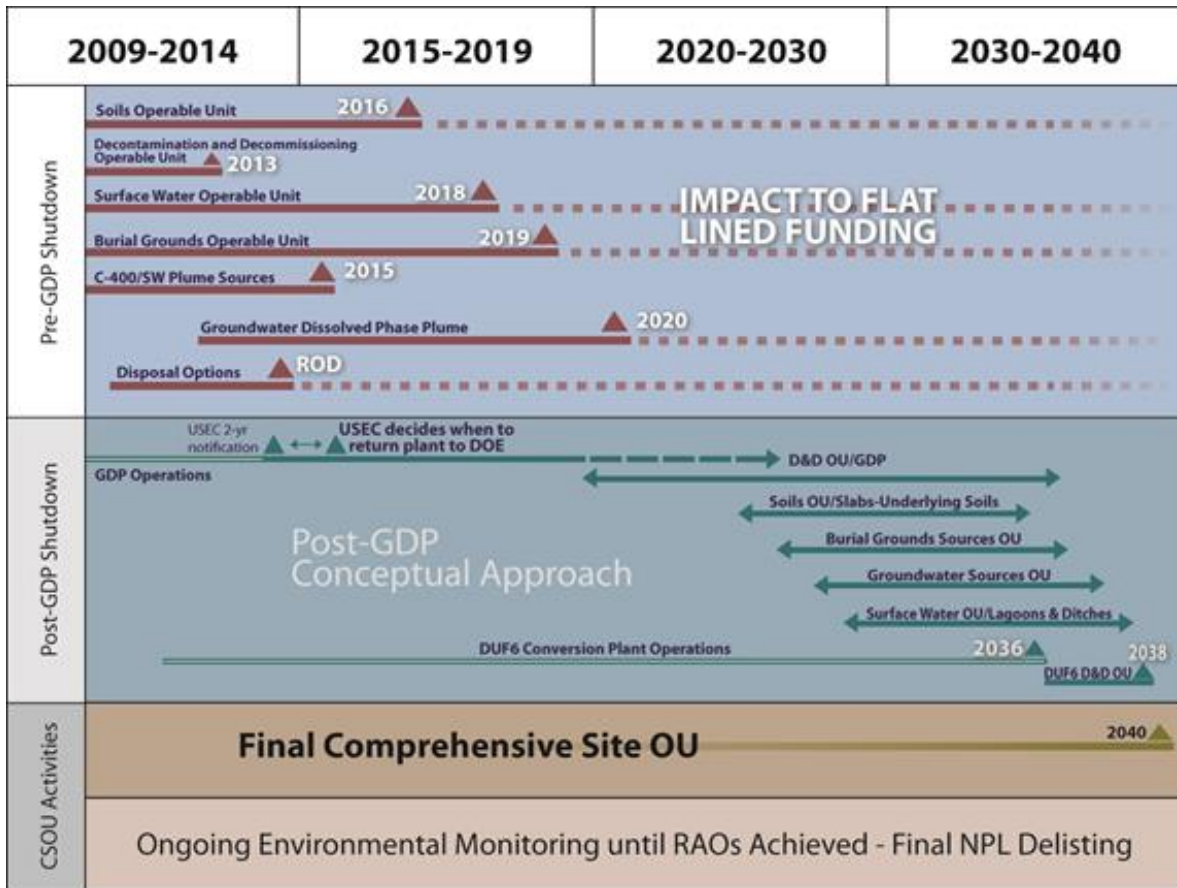


Figure 2. Budget: Impacted Paducah Site Programmatic Schedule

<p><b>Brewer:</b> The dates that you have in these milestone charts are not good. They are not correct.</p>	<p><b>Roberts:</b> They would have come out of the 2011 CAB Work Plan.</p>
<p><b>Brewer:</b> The 2013 Site Management Plan has the correct dates.</p>	<p><b>Peterson:</b> Our intent is to move from looking at it as several projects to a more site-wide approach.</p>

This Recommendation was approved by consensus.

**Young** turned the meeting over to **Clayton** to present *Recommendation 13-06: Communications Strategy*.

### Recommendation 13-06: Communications Strategy

June 17, 2013

Revision 6 – July 18, 2013

## **Background**

The Paducah Gaseous Diffusion Plant (PGDP) was built as part of a United States Government program to produce enriched uranium to fuel military reactors and produce nuclear weapons. The mission of the PGDP changed in the 1960s, when the plant began to enrich uranium for use in commercial nuclear reactors to generate electricity. The Paducah Plant has been in continuous operation since it first went on line in 1952 and has processed an estimated 1,000,000 tons of uranium.

As legislated in the Energy Policy Act of 1992, the United States Enrichment Corporation (USEC) was formed as a government corporation to restructure and operate the United States Government's uranium enrichment business and prepare it for privatization. In May 1999 USEC took over direct operation of the PGDP. USEC assumed responsibility for enrichment operations and currently leases the enrichment facilities from the Department of Energy (DOE). USEC recently ceased enrichment operations and has begun the task of shutting down the enrichment process equipment.

Recent meetings with senior DOE officials by a delegation of local elected officials, the governor of the Commonwealth, and others amply demonstrated that the current communications between the DOE and the community is inadequate.

## **Recommendation**

**The Paducah Citizens Advisory Board (CAB) feels it is vital that the DOE keep community stakeholders informed of ongoing activities and future strategies at the PGDP. The DOE should:**

- **Appoint local point(s) of contact for consistent messaging of DOE communications.**
- **Communicate, on at least a monthly basis, developments, decisions, and actions associated with the shutdown process, transition, and post-turnover of the PGDP. For example, stakeholders should be apprised of the condition in which the plant has been shut down, how and when the plant will be transitioned to the DOE.**
- **Communicate, on at least a monthly basis, the DOE's immediate and future plans for the site including processes for Expression Of Interest/Request For Offers, Indefinite Delivery/Indefinite Quantity, property transfer**
- **Provide monthly progress reports focusing on upcoming events according to the *2010 Uranium Enrichment D&D Fund Report***

**To keep community stakeholders adequately informed, the DOE should:**

- **Use communications bulletins and fact sheets, both electronic and hardcopy**
- **Use press briefings and press releases**
- **Conduct stakeholder meetings in local areas surrounding the plant, as warranted**
- **Develop a website or expand the <http://www.pgdpcleanup.com> website to include current information relevant to plant shutdown, transition, and post-turnover.**
- **Keep website current**
- **Make public aware of website and contents**
- **DOE should be transparent in all of its communications to stakeholders**

This Recommendation was approved by consensus.



Young turned the meeting over to **Kemp** to present *Recommendation 13-07: Delay of Remedial Action Implementation for the Burial Grounds Operable Unit (BGOU)*.

## **Recommendation 13-07: Delay of Remedial Action Implementation for the Burial Grounds Operable Unit (BGOU)**

July 18, 2013

Revision 2 – July 18, 2013

### **Background**

The BGOU consists of 10 burial areas (solid waste management units or SWMUs) containing waste materials from a variety of sources and contaminated with metals, organic compounds, and radionuclides. The depth of burial is typically less than 20 feet, although underlying soils and groundwater are contaminated in some areas as a result of waste disposal. Because of funding availability, site proximity, similarity of materials, and other factors, the BGOU was separated into five subprojects. For example, SWMU 5 and SWMU 6 were combined into one subproject, and work has proceeded on this project at a quicker rate than the other subprojects. Release of the proposed remedial action plan for SWMU 5 and SWMU 6 is imminent. Remedial action is scheduled to begin in mid-2015. Field investigations, feasibility studies, and remediation of the remaining SWMUs will occur over the next decade. Therefore, this recommendation, while pertinent to the entire BGOU, applies immediately to SWMU 5 and SWMU 6.

The most likely remedial alternatives for SWMU 5 and SWMU 6 are leaving the material in place and capping the site, excavating and disposing of the material at an offsite location, or excavating and disposing of the material in an onsite landfill that is being evaluated in a separate project. Therefore, complete evaluation of the alternatives is intertwined with the decision regarding the onsite landfill, which has not yet been made.

The Department of Energy (DOE), representatives of the Commonwealth, and representatives of the Federal government judge these alternatives primarily on the basis of risk reduction and protection of human health and the environment, with costs being a secondary factor. Potential reuse of the site is considered with respect to risk, but not with respect to economic development.

Shutdown of the Paducah Gaseous Diffusion Plant (PGDP) will ultimately result in the loss of more than 1000 jobs. Paducah, unlike Oak Ridge or Portsmouth, currently offers little opportunity for direct re-employment. Therefore, redevelopment of the site for industrial and other purposes is of utmost importance to the community. Redevelopment is extremely complicated because of uncertain funding availability for site shutdown, demolition and remediation; Federal requirements for environmental assessments and property transfer; and the procedures for accepting and evaluating proposals from interested parties.

The condition in which the site is left, i.e. the types and levels of remediation directly impact how the site can be redeveloped. For example, leaving material capped and in place might allow for a parking or storage area, but not for construction of a manufacturing facility. An onsite landfill, while less expensive than offsite disposal, interferes with reuse of a relatively large area. DOE has requested input from the community on how the site might be redeveloped, but given the aforementioned uncertainties and complexities, providing such input will require considerable time and effort.

## **Recommendation**

**The Paducah Citizen’s Advisory Board (CAB) understands that remedial investigation, feasibility study, and remedial planning are ongoing activities that must proceed. Remedial action for the BGOU, however, must be integrated with decisions yet to be made on the use of an onsite landfill for waste disposition, and more importantly, site reuse and redevelopment. Immediate selection and implementation of a remedial action for SWMU 5 and SWMU 6 is not warranted.**

**Therefore, the CAB recommends the following:**

- 1. The waste disposition study regarding use and location of an onsite landfill must be completed prior to selection and implementation of BGOU remedial actions.**
- 2. Selection and implementation of BGOU remedial actions that result in limiting land use options for redevelopment must be delayed until the community has had time to provide input to DOE relative to site redevelopment; until DOE and the community have had time to solicit and evaluate redevelopment proposals from interested parties; and until uncertainties in funding relative to plant shutdown, demolition, and remediation are resolved.**

This Recommendation was approved by consensus.

Young presented *Recommendation 13-08: Importance of Safety and Cost Benefits by Initiating Immediate D&D Using Current Workforce* to the Board for discussion.

## **Recommendation 13-08: Importance of Safety and Cost Benefits by Initiating Immediate D&D Using Current Workforce**

July 12, 2013

Revision 3 – July 18, 2013

### **Background**

The United States Enrichment Corporation ceased producing enriched uranium at the Paducah Gaseous Diffusion Plant (PGDP) on May 31, 2013. The once-operational uranium enrichment facility is in the process of shutting down. Highly trained and experienced workers,

knowledgeable in how to work safely in a massive industrial setting, will soon be terminated. In addition, DOE's current cleanup contractor, LATA-KY, is facing impending layoffs due to uncertain budgetary constraints. LATA-KY has recently surpassed 2 million safe work hours in the midst of complicated work within the C-340 and C-410 building complexes.

USEC and LATA-KY's skilled workforce is intimately familiar with the PGDP facility and decontamination and decommissioning (D&D) activities. USEC employees perform operations and maintenance tasks that are similar to process equipment preparation and removal tasks in D&D already being performed by LATA-KY personnel. All workers are also trained in Environmental Safety & Health issues that are important to the D&D effort. As a bonus, these workers have a safety culture mindset which has been promoted by their current employer. Their safety record at the PGDP is excellent. Workers that are available as a result of eminent layoffs would require a minimum of D&D-specific training and could move directly to D&D work. These workers also possess L or Q security clearances. By utilizing the current workforce, the DOE will realize significant savings in time and dollars in security clearing and training a new workforce. Current workers are uniquely qualified to become the labor pool for D&D of the PGDP operating facility.

*As previously stated in Recommendation 13-04: Prompt Initiation of PGDP Operating Facility Decontamination and Decommissioning after Transition of Leased Buildings to DOE, at the K-25 Oak Ridge Gaseous Diffusion Plant, more than 10 years passed before serious D&D work began. During that time, much plant knowledge that would have been useful at the beginning of D&D was lost. DOE could avoid this mistake at Paducah by beginning D&D of the GDP promptly after the plant is returned from USEC.*

As stated in Recommendation 13-05: *Seek Change to Budget Strategy and Funding Levels to Include Post Operations of the PGDP*, it is imperative that DOE adequately fund the PGDP post operation shutdown and move into the D&D phase of restoration of the site. DOE's FY 2015 budget for the Paducah site, including the DUF6 facility and current remediation, should be \$400 million in order to facilitate the ongoing missions and D&D the GDP. Long-term surveillance and maintenance (S&M) will result in the loss of a highly skilled, well trained, safety conscious work force who possess historical institutional knowledge. DOE must not repeat the mistakes of the 1985 K-25 shutdown.

Lessons learned from ongoing D&D of the Oak Ridge Gaseous Diffusion Plant and Portsmouth GDP illustrate the need to transition to immediate full scale D&D operations at Paducah. Several injuries or near-misses were directly related to delay of D&D activities and lack of worker knowledge.

- Deterioration of buildings due to long-term S&M lead to unsafe work environment.
- Serious safety events may have been avoided if a knowledgeable workforce with an ingrained safety culture had been utilized.
- DOE could have avoided the high cost of long-term S&M by initiating D&D of the GDP

## **Recommendation**

**The CAB recommends that DOE initiate immediate D&D of the operating facility upon return of the PGDP to DOE in order to maximize use of a knowledgeable and safety-conscious workforce. Utilization of this available workforce will return innumerable benefits to DOE, including:**

- **Safety-conscious workers use good work practices, which in turn contributes to lower project costs**
- **Experienced workers possess superior institutional knowledge and skillsets which contribute to a safer work environment**
- **Minimal training is necessary to prepare workers for D&D of the GDP**
- **Cost and time savings due to current workers possessing L or Q security clearances**

**Prompt initiation of D&D of the GDP rather than long-term S&M will:**

- **Minimize environmental risk to the host community**
- **Minimize lifecycle costs**

This Recommendation was approved by consensus.

**Young** adjourned the meeting at 7:45 pm.