



# PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

111 Memorial Drive • Paducah, Kentucky 42001 • (270) 554-3004 • [paducahcab@bellsouth.net](mailto:paducahcab@bellsouth.net) • [www.pgdpcab.org](http://www.pgdpcab.org)

<b>Chair</b>	<b>Tentative Agenda for the January 19, 2006 Meeting:</b>	
Chad Kerley	<b>5:30</b>	
<b>Chair-Elect</b>	Informal discussion	
Rhonda McCorry	<b>6:00</b>	
<b>Board Members</b>	Call to order, introductions	
John Anderson	Review of agenda	
Allen Burnett	Approval of November minutes	
Barry Eadens	<b>DDFO's Comments</b>	<b>-- 20 minutes</b>
Shirley Lanier	<b>Federal Coordinator Comments</b>	<b>-- 5 minutes</b>
Bobby Lee	<b>Ex-officio Comments</b>	<b>-- 10 minutes</b>
Linda Long	<b>Public comments and questions</b>	<b>-- 10 minutes</b>
Janet Miller	<b>Task Forces/Presentations</b>	<b>-- 60 minutes</b>
John Russell, Ph.D.	<ul style="list-style-type: none"> <li>▪ End State Vision – Rachel Blumenfeld</li> <li>▪ Waste Disposition/Water Quality Task Force</li> <li>▪ Community Outreach Task Force</li> </ul>	
Jim Smart, Ph.D.	<b>Public comments and questions</b>	<b>-- 10 minutes</b>
<b>Deputy Designated Federal Official</b>	<b>Break</b>	<b>-- 10 minutes</b>
William Murphie, DOE Ex-officio member	<b>Administrative Issues</b>	
<b>Ex Officio Members</b>	<ul style="list-style-type: none"> <li>▪ Preparation for February Presentation</li> <li>▪ Revisions to Bylaws and Operating Procedures</li> <li>▪ Budget Review</li> <li>▪ Review of Workplan</li> <li>▪ Review Next Agenda</li> </ul>	
Mike Hardin Fish and Wildlife Resources (Kentucky)	<b>Review of Action Items</b>	<b>-- 5 minutes</b>
David Williams Environmental Protection Agency	<b>Subcommittee Reports</b>	<b>-- 15 minutes</b>
Eric Scott Radiation/Environmental Monitoring Section (Kentucky)	<ul style="list-style-type: none"> <li>▪ Executive Committee</li> </ul>	
Jon Maybriar Division of Waste Management (Kentucky)	<b>Final Comments</b>	
<b>DOE Federal Coordinator</b>	<b>Adjourn</b>	
David Dollins		
<i>Additional information about contacting board members directly can be obtained by contacting the board office at (270) 554-3004.</i>		



# PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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## **Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes January 19, 2006**

The Citizens Advisory Board (CAB) met at the CAB office in Paducah, Kentucky, January 19, 2006, at 6 p.m.

**Board members present:** Allen Burnett, Barry Eadens, Chad Kerley, Bobby Lee, Linda Long, Rhonda McCorry, Janet Miller, John Russell and Jim Smart

**Board members absent:** John Anderson and Shirley Lanier

**Ex Officio members and related regulatory agency employees present:** Brian Begley, Nicole Burpo, Bill Clark, Jon Maybriar, Kentucky Division of Waste Management; Tim Kreher, Kentucky Department Fish and Wildlife Resources; David Williams, Environmental Protection Agency; and Winborn Gregory, Radiation Health Branch

**Deputy Designated Federal Official present:** William Murphie

**Portsmouth/Paducah Chief Operating Officer:** Rachel Blumenfeld

**DOE Federal Coordinator present:** David Dollins

**DOE-related employees present:** Rich Bonczek, Jeannie Brandstetter, Greg Cook, Kim Crenshaw, Bruce Ford, Bruce Gardner, Ashton Haus, Steve Kay, Jim Kannard, Jim McVey, John Morgan, David Senderling, John Sheppard, Elizabeth Trawick and Jack Zimmerman

Two members of the public attended the meeting.

## Agenda

Kay asked for proposed modifications to the agenda. There were none. **The Board adopted the agenda by consensus.**

## Minutes

Kay asked for proposed modifications to the draft November minutes. There were none. **The Board approved the minutes as submitted by consensus.**

### Deputy Designated Federal Official *Attachment 1*

Rachel Blumenfeld provided the project updates to the Board. Questions and answers (paraphrased) appear below.

Question/comment	Answer
<b>Ms. Miller</b> – What is the acreage of Phases 1-5 of the C-746-U Landfill?	<b>Ms. Blumenfeld</b> –DOE will provide that information.
<b>Dr. Russell</b> – The CAB has not been informed of any activity in Phase 4 and 5 of the U-Landfill.	<b>Ms. Blumenfeld</b> – The leachate collection system would be connected before Phases 4 and 5 could be utilized. <b>Mr. Dollins</b> – Phase 1 is complete, Phase 2 and 3 have a three-month life. According to the waste generation rates, only phases through Phase 17 would be utilized.
<b>Mr. Burnett</b> – What is the deadline for protests on the remediation contract?	<b>Mr. Murphie</b> – January 23 is the 10-day window for GAO, but legal action can be taken at any time to protest the contract.
<b>Dr. Smart</b> – Have there been any protests?	<b>Mr. Murphie</b> – I am not aware of any protests at this time.
<b>Dr. Russell</b> – The legend on the scrap metal removal chart is incorrect; can we see a chart that identifies actual versus projected?	Mr. Murphie asked Greg Cook to modify the chart for the next CAB meeting.
<b>Mr. Kerley</b> – What is the status on the permit for the leachate treatment system for the U-Landfill?	<b>Ms. Blumenfeld</b> – Based on conversations with the state, the permit will be issued soon.

### Federal Coordinator Comments

Dollins said he is working with the CAB to emphasize focus on big picture items, such as end state and other community type decisions. As a result, Blumenfeld would be providing a presentation on the End State Vision document. He said the CAB would be looking at one big topic at a time.

**Ex-Officio Comments**

Maybriar introduced Nicole Burpo and Bill Clark. Ms. Burpo will be located in Frankfort working on the project under the AIP. Mr. Clark would be replacing Gaye Brewer and will be located in the Paducah office.

**Task Forces/Presentations**

**Status of the End State Vision Process for the Paducah Gaseous Diffusion Plant**

*Attachment 2*

Blumenfeld presented an update on the End State Vision (ESV) document. Questions and answers (paraphrased) appear below.

<b>Question/comment</b>	<b>Answer</b>
<b>Mr. Murphie</b> – One of the weaknesses in the first ESV document is that there are other alternatives to be considered. The next document should focus on the whole spectrum and not be a one sided evaluation.	<b>Ms. Blumenfeld</b> – Agreed.
<b>Dr. Russell</b> – Can we get a land use map that shows the end condition of the entire site? The current map does not show areas that are excluded from certain types of remediation such as industrial levels and industrial use.	<b>Ms. Murphie</b> – Agreed. There needs to be clarification between industrial level and industrial use.
<b>Ms. McCorry</b> – It would be helpful to the Board in making recommendations to DOE to have a visual map that includes the end state vision of the entire site. It would also help the public.	<b>Ms. Blumenfeld</b> – I recommend the task force begin looking at what they would like to see, using the maps in the End State Vision document for a reference. <b>Mr. Murphie</b> – Multiple maps may be helpful showing different options to maximize alternatives.
<b>Ms. McCorry</b> – It was suggested at the Whitfield hearing that a reindustrialization position be funded. Would that be someone who could help with an end state vision map?	<b>Ms. Blumenfeld</b> – At the hearing, Whitfield seemed to be supportive of the idea. I do not know where it would go from that committee. <b>Mr. Dollins</b> – I will work on two or three maps for the February Waste/Water task force meeting.
<b>Dr. Russell</b> – When would the End State Vision document be updated? Can the next update include the Southwest Plume and C-746-S&T Landfill projects?	<b>Ms. Blumenfeld</b> – It is updated on a fiscal year basis, hopefully by the end of September. The recent clean-up activities would be included in that version along with any public comments that are received on the FY 2005 document.

<p><b>Mr. Williams</b> – CROET or PACRO usually focuses on reindustrialization; are they funded in Paducah?</p>	<p><b>Mr. Murphie</b> – Community reuse organizations are no longer funded by DOE.</p>
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**Waste Disposition/Water Quality Task Force**

Russell said the Waste Disposition/Water Quality task force established their regular meeting time as the third Thursday of each month at 4:30 p.m. Smart was elected Chair of the task force by acclamation. He declined to serve, and the task force will choose a new chair at its February meeting.

**Community Outreach Task Force**

Eadens said the task force interviewed three applicants for Board membership. After discussion, the Board agreed to recommend all three applicants – Judy Clayton, Elton Priddy and James Tidwell - to DOE for Board membership by consensus.

**Public Comments**

Jurka encouraged the Board to review the End State Vision document. She believed the first version of the document was incomprehensible and the latest version of the document has text that does not agree with the maps. She said members of the public that attended the End State Vision meetings were treated like their concerns were hypothetical. Jurka said “potential” is used several times in the presentation when referring to contamination and the contamination that exists at the site has been characterized. She said the law does not allow contamination that continues to migrate to be left in place yet the document speaks to natural attenuation for contaminants that continue to migrate. She said natural attenuation should not be included in this document if it does not comply with the law. Jurka said review of this document should be a high priority of the Board.

**Administrative Issues**

**Preparation for February Presentation**

Lee said she would like to review a set of maps from the End State Vision document at the February meeting. Dollins said he would provide a couple of maps showing recreational, residential, and industrial variations to the Waste/Water task force. McCorry recommended the task force review these maps and show the maps at the Board meeting. Murphie suggested sending Lee the maps in advance.

**Bylaws and Operating Procedures**

Kerley reviewed the revisions to the CAB’s bylaws and operating procedures. He said the Board would vote on the revised bylaws and operating procedures at the February meeting. He said the vote would require a two-third majority vote. Kerley asked all members to review the changes and send any comments to the support staff before the next Board meeting.

## **Budget Review**

Kerley said Dollins had informed the Board at the retreat that the final budget number for FY06 should be in the \$345,000 range. He said that number is not reflected on the current budget that is in the packet. Dollins said he would work with EHI to reflect the total amount in future budgets. Kerley said the issue would be discussed at the Executive Committee meeting next week.

Kerley asked how the CAB exceeded the administrative support and travel categories in this fiscal year. Trawick said she would research the invoices and report to the CAB at the Executive Committee meeting.

## **Review of Workplan**

Kay said the End State Vision topic will come back in March and the main presentation in February will be the Site Management Plan. McCorry suggested combining the Waste/Water task force issues on the workplan and deleting Long Range Strategy/Strategy.

## **Review of February Agenda**

Eadens said the Community Outreach task force would not have a report next month unless there is an update. He suggested removing the update from the agenda.

## **Action Items**

Kerley suggested moving the action for the land buy out study to the Executive Committee agenda. Blumenfeld said she would contact Eadens to decide whether there will be DOE participation in the Community Outreach task force and who it might be. Brandstetter said she would update the website with the ATSDR and other health links this month. She said she had attempted to contact Sandra Bastin and has had no response. Kay said all other actions are still pending.

## **Subcommittee Report**

### **Executive Committee**

Kerley said the Whitfield hearing was recorded. If anyone would like a copy, contact the support staff. He said the hearing also airs the following night on Channel 11 at 8 p.m.

Kerley said a response from Assistant Secretary for Environmental Management Rispoli, regarding the letter from all CAB chairs on recommendations and commitments on the EM project is in the packet.

Lee said there is a long list of documents available at the Environmental Information Center in the packet. She asked which documents would be placed on the Bechtel Jacobs Web site. Cook said none of these would be on the Web site.

The meeting adjourned at 8:20 p.m.

# Progress at the PADUCAH PROJECT

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Update to the Citizens Advisory Board

January 19, 2006





# Congressional Hearing

- Congressman Ed Whitfield's Oversight and Investigations Subcommittee of the House Energy and Commerce Committee met today in Paducah
- DOE and BJC made presentations and answered questions



# Scrap Metal Removal - Classified Scrap

- On schedule to meet or beat projected baseline timetable of March 30
- About 95 percent complete with shipment of D-Yard scrap
- All classified metal loaded for transport to NTS



Scrap removal in the Northwest Scrap Yards in early January



# Scrap Metal Removal

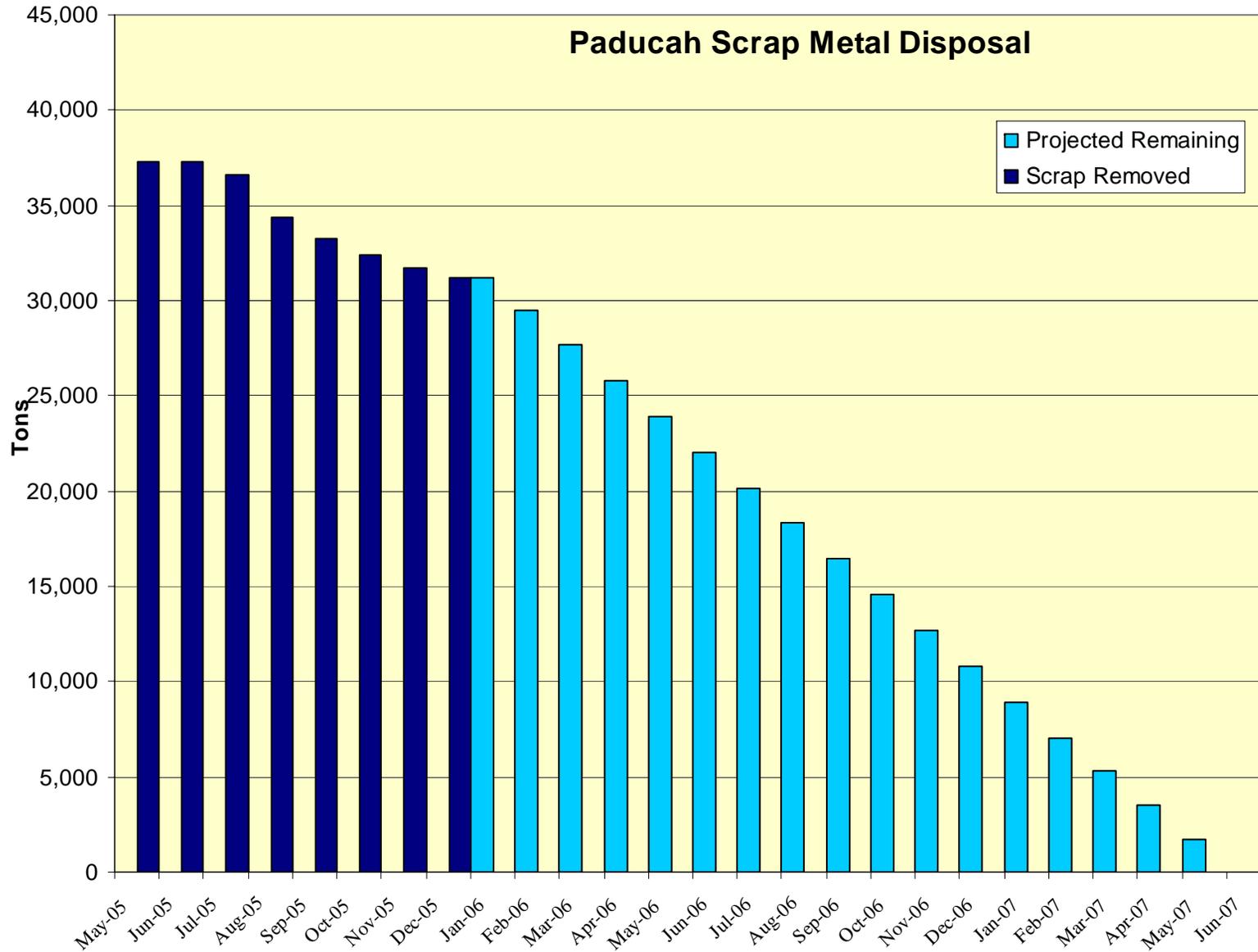
- Loaded 26 boxes for first unit train shipment to Envirocare under terms of new subcontract
- First shipment to Envirocare to leave by first week of February



Loading a container for shipment to Envirocare



# Scrap Metal Removal





# DUF<sub>6</sub> Conversion Project

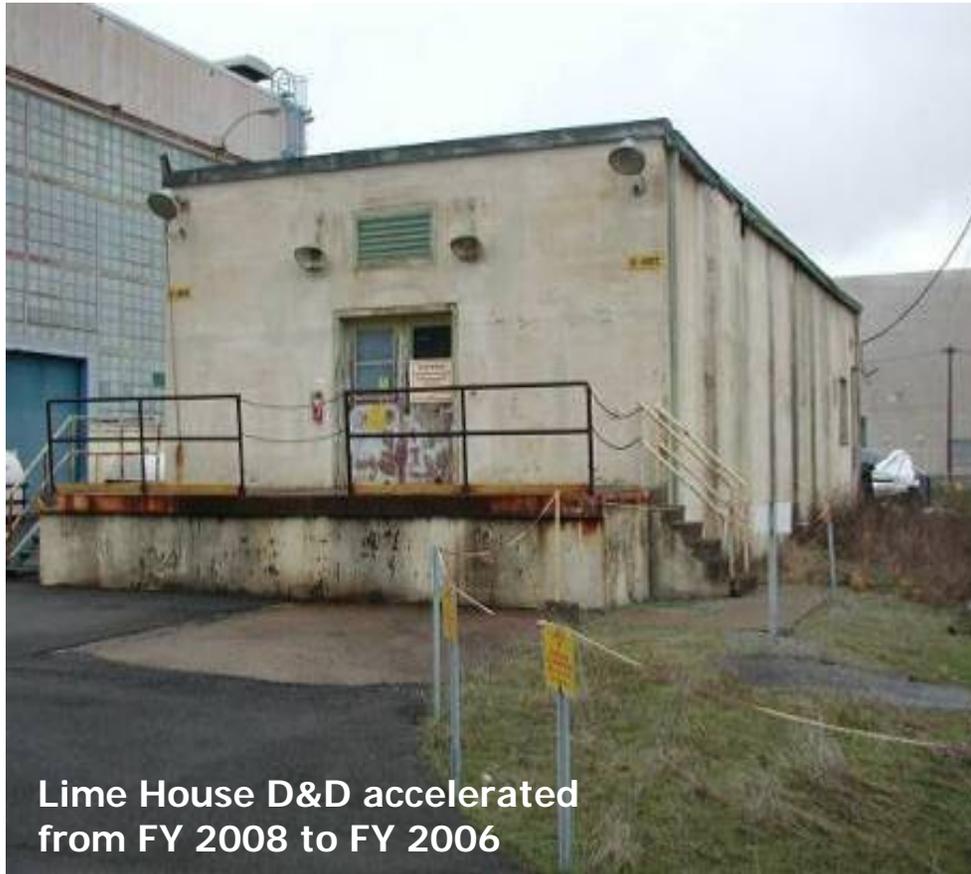
- Conversion Building foundation construction continuing; the first of several concrete pours was performed January 13
- Siding is being placed on the Maintenance and Warehouse building
- Sampling scheduled for 14 30A cylinders to begin this month to determine if phosgene gas present; sampling and analysis to be completed by mid-February. Remaining 1,810 cylinders cleared through records search





# Inactive Facilities D&D

## Lime House



Lime House D&D accelerated  
from FY 2008 to FY 2006

- D2 Action Memorandum approved
- Work package in preparation
- Demolition completion scheduled for Summer 2006



# DMSAs

- Continued downsizing of rail cars from DMSA OS-4 and OS-14



Moving tank after cut



Cutting wheels and chassis off tank car



# DMSAs

DMSA 333-31 before



- Continuing to characterize, package and dispose of materials from indoor DMSAs

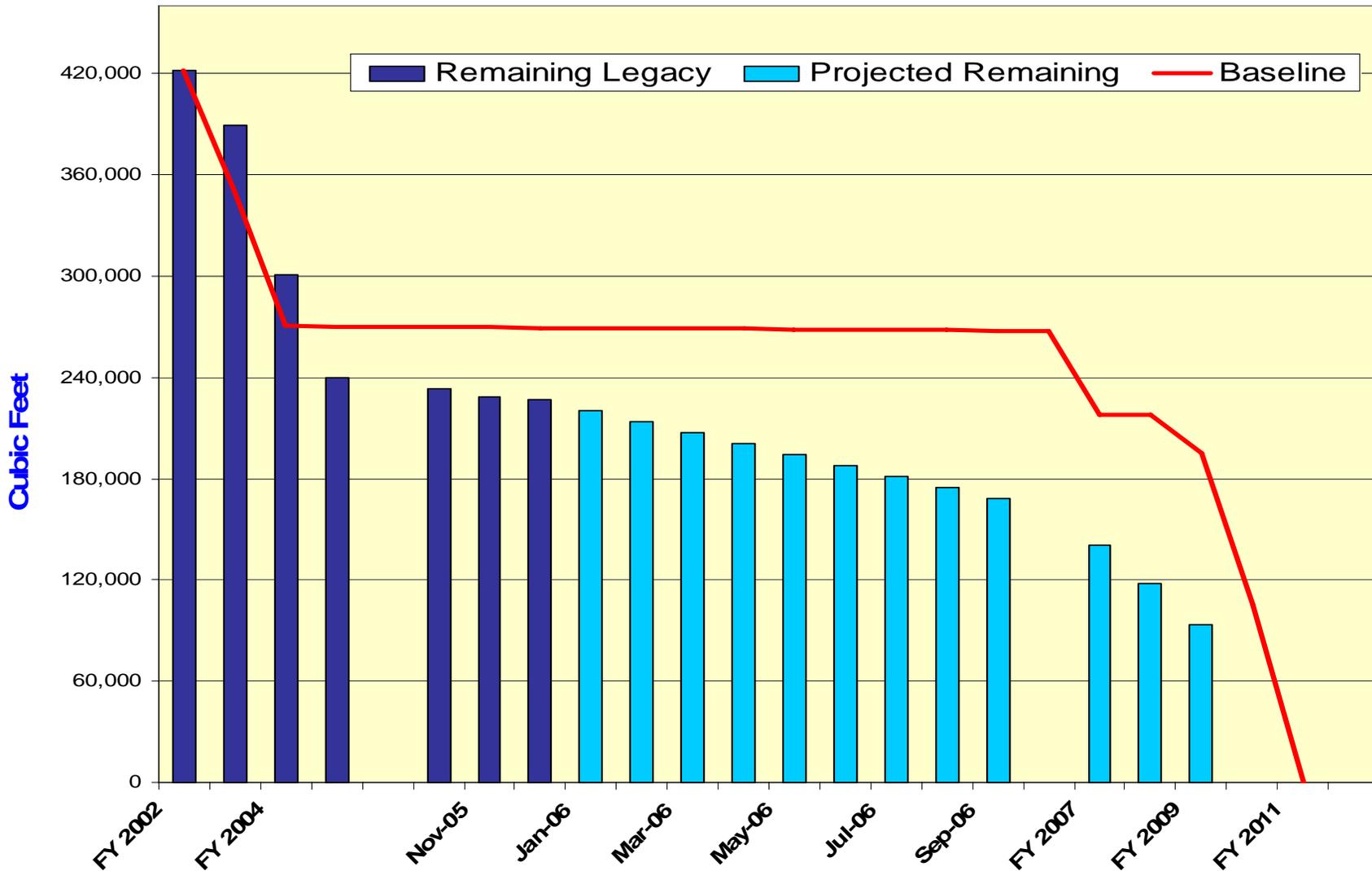
DMSA 333-31 as of  
December 2005





# Legacy Waste Disposition

Shipped 6,953 cubic feet of wastes in November and December to Envirocare, TSCA Incinerator, Perma-Fix and the C-746-U Landfill





# Legacy Waste Disposition

This month, DOE disposing of:

- Sewer sludge
- Waste stored in outside facilities
- Newly-generated mixed low-level waste

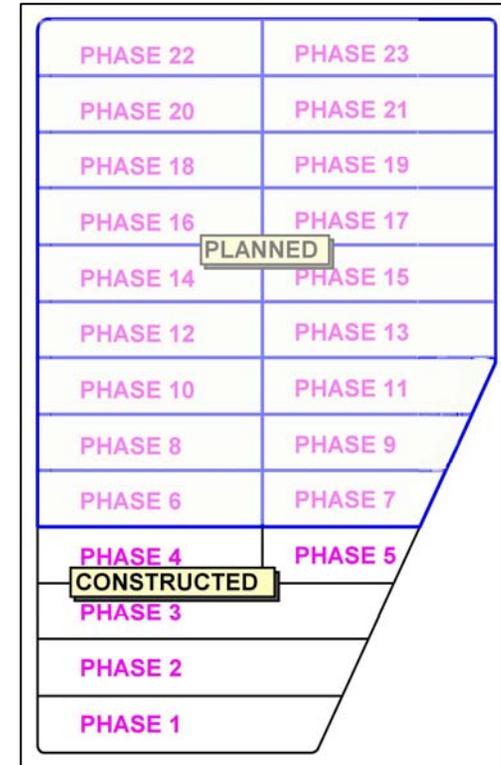


A shipment containing sewer sludge and other wastes prepares to leave PGDP for Envirocare on January 10, 2006



# C-746-U Landfill

- Preparing notification to regulators to connect Phases 4 and 5 to the leachate collection system
- Holocene Displacement Study final report expected March 2006



Phases 1-5 of the landfill are constructed. The site will accommodate the construction of 18 more phases.



# Environmental Projects

## Groundwater Operable Unit

### C-400 Source Removal

- D2 Remedial Design Support Characterization Plan submitted to EPA and Kentucky 12/2/05
- D2 Remedial Design Work Plan submitted to EPA and Kentucky 12/29/05; regulatory response due at end of January

## Burial Grounds Operable Unit

- D2 BGOU Work Plan submitted 12/19/05; preparing for regulatory approval



# Contract Transition

- Contract awarded December 27
  - Through September 30, 2009
  - No options
  - Cost-plus-incentive-fee
- Paducah Remediation Services LLC selected
  - Team led by Portage Environmental and Shaw Environmental
- Bidders debriefings held last week
- Transition period expected to last 60 to 90 days
- Will incorporate lessons learned from transitions at Portsmouth and Infrastructure transition to facilitate transition to ER contractor





*Status of the  
End State Vision Process  
for the  
Paducah Gaseous  
Diffusion Plant*

*Stakeholder Update  
January 19, 2006*



## *What is an End State?*

- The condition of the property after the cleanup ...
- That would be protective of human health and the environment ...
- Taking into account reasonably foreseeable future use of the property (i.e., industrial, recreational, residential) ...
- And potential contaminants and hazards



## *Why Define an End State?*

- Ensure today's cleanup actions are protective for tomorrow's foreseeable future uses of the site
- Start with the end in mind - know your destination



## *Document Description*

- A planning tool, updated annually, to assure today's environmental cleanup efforts are protective for tomorrow's reasonably foreseeable future use.
- The document is not a decision document.
- Identifies the potential contaminants and hazards as they currently exist.
- Identifies variances between currently planned end state and potential alternative end state.



## Major Variances

Current Planned End State Actions	End State Alternative Actions
Continuation of Water Policy (short-term agreements with existing property owners).	Enhanced Institutional Controls (e.g., legal deed restrictions, property purchases).
Reduce TCE concentration at primary and secondary sources (e.g., C-400, C-720, SWMU 1) using treatment.	Reduce TCE concentration at primary source of off-site contamination (i.e., C-400) using treatment.
Excavate some burial grounds and cap remaining. Continue monitoring and access controls.	Cap all burial grounds. Continue monitoring and access controls.
Soil Cleanup Levels - clean industrial areas to residential levels.	Soil Cleanup Levels - clean industrial areas to industrial levels.
Sediment Cleanup Levels - clean industrial areas to residential levels.	Sediment Cleanup Levels - clean industrial areas to industrial levels.
Characterization and on- and off-site disposal of legacy waste.	Same
D&D of facilities and infrastructure followed by on- and off-site disposal of debris.	Same



## *Document History - Summary*

- First draft issued January 31, 2004.
- Public Meeting to introduce End State Project held February 5, 2004.
- Public Workshops held February 26 and March 11, 2004.
- Second draft issued April 30, 2004.
  - Placed on EIC public web site on April 30, 2004.
  - Placed in EIC and McCracken County Public Library on April 30, 2004.
- DOE-PPPO letter sent to various organizations on June 1, 2004.
- Public Workshop offered June 3, 2004.
- DOE Workshop held October 6 and 7, 2004.
- 2005 End State Vision Annual Update for PGDP issued August 28, 2005.
  - Placed on EIC public web site on August 28, 2005 at this address:  
[www.bechteljacobs.com/pad\\_reports.html](http://www.bechteljacobs.com/pad_reports.html)
  - Placed in EIC and McCracken County Public Library on August 28, 2005.
- Public Meeting held on October 18, 2005

Full history of Public Participation,  
including lists of comments received, is presented in  
the Appendix to the 2005 End State Vision Annual Update.



## *Summary of FY 2005 Annual Update*

- Did not make substantive changes to the end state alternatives, variances, or risk balancing.
- Added discussion of dynamic nature of document and indicated it will be updated annually to reflect cleanup decisions from the ongoing CERCLA process and to incorporate public comments on the end state process.
- Updated Appendix to include notes from the DOE October 2004 Workshop and slides from presentations made since the release of the second draft of the End State Vision Document.
- Revised document title and related references to Risk-based End State to be consistent with notes from DOE October 2004 Workshop:
  - Changed title from "Risk-based End State" to "End State Vision" and the acronym "RBES" to "end state alternative."



## *FY 2006 Annual Update Process*

- Incorporate recent cleanup activities, such as:
  - ROD for C-400 Cleaning Building TCE Source Remediation signed, selecting Electrical Resistance Heating technology.
  - Field work initiated for the Site Investigation for On-Site Ditches and NSDD (outside the security fence).
  - Completed the Site Investigation of the Southwest Plume and issued report to EPA and Kentucky for review and approval.
- Incorporate any public comments received on FY 2005 document.
- Continue to notify public and solicit stakeholder comments on future updates to End State Vision Document.

**Project Status Update for DOE Paducah Citizens Advisory Board  
January 12, 2006**

**Project: Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Project Surveillance & Maintenance**

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**Contact Persons:**

DOE Site Office: John Sheppard  
Uranium Disposition Services: Dick Veazey  
Commonwealth of Kentucky:  
U.S. Environmental Protection Agency:  
Citizens Advisory Board:

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**Purpose:** Maintain safe storage of DOE DUF<sub>6</sub> cylinder inventory pending disposition.

**Description:** The Atomic Energy Act, as amended, gives DOE responsibility for the DUF<sub>6</sub> inventory, which is a by-product from enriching uranium for nuclear fuel. At Paducah, approximately 36,200 cylinders contain approximately 436,400 metric tons of DUF<sub>6</sub>. There are also 182 cylinders of low-enriched UF<sub>6</sub>, about 1,500 cylinders of "normal" UF<sub>6</sub> (which has not gone through the enrichment process), and 275 empty cylinders. The DOE inventory at Paducah includes the material generated from 1952 until the establishment of USEC in July 1993, and material transferred from USEC to DOE since that time.

***Surveillance and maintenance*** involves safely storing DUF<sub>6</sub>. Most of the 60-acre DOE cylinder yard complex now consists of concrete yards, which provide for improved storage and inspection. In recent years, DOE cleaned and painted 3,368 cylinders which had surface corrosion. DOE continually monitors and inspects its cylinder inventory to assure safe storage.

**Key Documents for surveillance/maintenance:**

- Handling and Inspection of DOE 48-Inch Diameter UF<sub>6</sub> Cylinders at Paducah (PA-2400)
- Agreed Order DWM-31434-030
- Final Environmental Impact Statement for the Construction and Operation of the DUF<sub>6</sub> Conversion Facility at the Paducah Site (DOE/EIS-0359)
- Record of Decision for Construction and Operation of the DUF<sub>6</sub> Conversion Facility
- Documented Safety Analysis for the DOE Cylinder Yards, BJC/PAD-459
- Technical Safety Requirements for the DOE Cylinder Yards, BJC/PAD-461

**Issues:** OIG Review of 30A Cylinders

**Recent accomplishments/activities:**

- An agreement with the Bonneville Power Administration (BPA) has been approved to transfer 672 cylinders of DUF<sub>6</sub> to BPA to supply power reactor fuel; a total of 360 cylinders have been transferred through December 2005
- Cylinder yards on the south side of the plant have been reconfigured to a Property Protection Area (PPA). Work in the PPA does not require security clearance; UDS controls access according to a DOE approved security plan
- An agreement with USEC has been approved to "clean up" 743 cylinders of off-spec "normal" UF<sub>6</sub>; a total of 272 cylinders have been transferred through December 2005
- Extensive review of 30A cylinder records in response to the OIG Management Alert and a sampling plan has been developed. Sampling to begin in late January 2006
- Supported DOE in preparation for January 19 Congressional field hearing

**Activity over next 60 days for surveillance/maintenance:**

- Continue transferring cylinders to USEC as per the two previously mentioned agreements.
- Sample 30A cylinders for which records do not clearly show there is no phosgene gas potentially present.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Conversion Facility**

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**Contact Persons:**

**DOE Site Office:** John Sheppard  
**Uranium Disposition Services:** Guy Griswold  
**Commonwealth of Kentucky:**  
**U.S. Environmental Protection Agency:**  
**Citizens Advisory Board:**

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**Purpose:** Design, build, and operate the DOE DUF<sub>6</sub> Conversion Facility.

**Description:** The Atomic Energy Act, as amended, gives DOE responsibility for the DUF<sub>6</sub> inventory, which is a by-product from enriching uranium for nuclear fuel. At Paducah, approximately 36,200 cylinders contain approximately 436,400 metric tons of DUF<sub>6</sub>. DOE selected Uranium Disposition Services LLC to design, build, and operate facilities in Paducah and Portsmouth to convert DUF<sub>6</sub> to a more stable form for disposal or recycling.

The project site occupies approximately 11 acres immediately adjacent to DOE's DUF<sub>6</sub> cylinder storage yards. The completed capital costs for the facility at Paducah are estimated to be ≈ \$91,000,000. The major facilities on the DUF<sub>6</sub> project include the Conversion Building, Administration Building, Warehouse and Maintenance Building, KOH Regeneration Building, and the HF Neutralization Building. The project work also includes a railroad connection, rail sidings, load out facilities, roads, storage areas for full and empty cylinders, and all utilities.

Groundbreaking occurred in July 2004 and construction has continued since that time. At the conclusion of construction, all systems will be tested and the plant will undergo an Operational Readiness Review. The facility is expected to commence conversion operations in 2007.

**Key Documents for the Conversion Project:**

- Final Environmental Impact Statement for the Construction and Operation of the DUF<sub>6</sub> Conversion Facility at the Paducah Site (DOE/EIS-0359)
- Record of Decision for Construction and Operation of the DUF<sub>6</sub> Conversion Facility
- Paducah Conversion Facility Preliminary Documented Safety Analysis, DUF6-C-G-PSA-001, Rev. F

**Issues:** None

**Recent accomplishments/activities:**

- Ground Modifications for Conversion Building – Work complete November 16, 2005 – all piles placed – subcontractor demobilized
- Conversion Building foundation – under-slab utilities installed, rebar 98% placed, scheduling concrete placement for January 2006
- Warehouse Building – steel received and erected
- Construction prep for offsite rail spur continued
- Place gravel around Conversion Building – 95% complete

**Construction activity scheduled over next 60 days:**

- Award and begin construction of the Administration Building
- Begin construction of offsite rail spur
- Award contract and begin construction of balance of plant foundations S-39
- Fabricate and begin erection of Conversion Building panels and columns
- USEC to begin connection to PGDP utilities
- Complete placement of concrete for Conversion Building foundation

- Begin construction of Power Feed to Facility

**Procurement activity planned next 60 days:**

- Award HVAC package - S-42
- Award Piping/Mechanical Equipment package - S-40
- Award Electrical Distribution and Instrumentation - S-43
- Award process pre-engineered buildings - S-31
- Bid Conversion Building Roof – S-23
- Bid Structural Steel Installation – S-33
- Bid Major Equipment RFPs

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: Solid Waste Contained Landfill**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Jim Ehlers/Steve Davis  
**Commonwealth of Kentucky:** Todd Hendricks  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** John Russell

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**Purpose:** Waste Disposition

**Description:** The operating landfill and support facilities are located on 60-acres of DOE property near Ogden Landing Road, operating under a permit from the Kentucky Division of Waste Management (KDWM). Landfill disposal operations began in 1997. DOE uses the landfill for disposal of solid waste generated from its operations at the Paducah site. Examples of wastes accepted include non-hazardous soil and debris from environmental cleanup and other DOE projects, protective clothing worn by workers, paper, packaging, and landfill office wastes. No waste classified as hazardous or radioactive is accepted.

**Key documents:**

- Environmental Assessment for the Construction, Operation and Closure of the Solid Waste Landfill at the Paducah Gaseous Diffusion Plant (DOE/EA-1046)
- Environmental Assessment on the Implementation of the Authorized Limits Process for Waste Acceptance at the C-746-U Landfill (DOE/EA-1414)
- Waste Acceptance Criteria for the Department of Energy Treatment, Storage, and Disposal Units at the Paducah Gaseous Diffusion Plant (BJC/PAD-111R4)
- C-746-U Landfill Solid Waste Disposal Facility Permit Number 073-00045

**Issues:**

- The Kentucky Division of Waste Management (KDWM) issued a letter of withdrawal on July 6, 2005 for the S, T and U permit modification due to an administrative error. The public comment period had not expired and the permit was issued prematurely. Currently the landfill facility is operating on the existing permit which expires in 2006. Permit was reissued for public comment on July 11, 2005. Permission to construct Leachate Treatment Facility was withdrawn pending reissuance of the Permit. The comment period closed August 10, 2005. KDWM is addressing comments received.
- As of January 11, 2006 there has been no indication from KDWM of when the permit modification for the C746-U landfill will be approved.

**Recent accomplishments/activities:**

- Subcontractor for construction of leachate treatment facility (A&K Construction) was issued a suspension of work to minimize costs until KDWM issues permit
- Field portion of the Kentucky Research Consortium for Energy and Environment Holocene Displacement Study completed October 3, 2005
- Ordered prefabricated steel building for C-746-U Leachate Treatment Unit

**Activity over next 60 days:**

- Continue disposal of construction debris and other non-hazardous solid waste streams
- Support the Kentucky Research Consortium for Energy and Environment Holocene Displacement Study. Kentucky Research Consortium for Energy and Environment Holocene Displacement Study project final report due at the end of January or first week of February.
- Initiate construction of leachate treatment facility within two weeks of reissuance of Permit

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: Waste Disposition**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Greg Shaia  
**Commonwealth of Kentucky:** Jon Maybriar  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** John Russell

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**Purpose:** Waste Disposition

**Description:** DOE is responsible for disposal and/or recycling of legacy wastes (wastes generated at the PGDP prior to establishment of USEC on July 1, 1993); wastes generated from ongoing DOE projects; and a limited amount of waste generated by USEC. After characterization to assure selection of the appropriate disposition method, non-hazardous and non-radioactive wastes are disposed of in the DOE Solid Waste Contained Landfill. (*Please see landfill update sheet.*) Hazardous and radioactive wastes are treated if necessary and shipped off-site to approved DOE or commercial disposal facilities. Wastewater (collected from sumps in diked areas in DOE waste storage facilities at PGDP) is treated and discharged in accordance with the Kentucky Pollutant Discharge Elimination System permit.

**Key documents:**

- Paducah Waste Acceptance Criteria (BJC/PAD-11, Revision 4)
- Final Environmental Assessment for Proposed Disposition of Waste from the Paducah Site (DOE/EA-1339 and Addendum DOE/EA-1339-A) (FONSI)
- Agreed Order DWM-31434-042
- Site Treatment Plan (STP) DWM-30039-42

**Issues:**

- None

**Recent accomplishments/activities:**

- Completed repackaging activities for Sewer Sludge (PCB/low level waste) for January shipments to Envirocare
- Continued repackaging activities for waste stored in outside facilities for January shipments to Envirocare and disposal at C-746-U Landfill, as appropriate
- Shipped newly-generated mixed low-level waste for treatment/disposal

**Activity over next 60 days:**

- Complete shipment of UF<sub>4</sub> from Duratek to Envirocare
- Complete disposition of ~ 4,750 containers of Agreed Order “no-longer contains” waste at Envirocare or the C-746-U Landfill, as appropriate
- Ship mixed low-level waste to Perma Fix facilities and Envirocare for treatment/disposal
- Complete disposition of approximately 3,000 containers of Sewer sludge and LLW stored in outside facilities
- Send letter to Kentucky documenting completion of characterization of STP Table 8 waste (milestone 1/31/06) and submit treatment plan for same (milestone 7/1/06)

**Project Status Update for DOE Paducah Citizens Advisory Board  
January 12, 2006**

**Project: Decontamination & Decommissioning (D&D)**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Brad Montgomery  
**Commonwealth of Kentucky:** Jon Maybriar  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** John Russell

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**Purpose:** Environmental Cleanup/Waste Disposition

**Description:** The D&D project has completed development of Comprehensive Environmental Response, Compensation, and Liability Act regulatory documentation and has initiated actual D&D of the C-410/420 Feed Plant Complex. The current scope of D&D includes infrastructure removal on the C-410/C-420 complex, as well as ongoing surveillance and maintenance of the C-410/C-420 complex and the C-340 Metals Plant complex. Scope also included development of Safety Basis Documentation for the removal of equipment, piping, and stored material from the C-410 Complex. Operations at both complexes ended in 1977.

**Key documents (C-410):**

- Engineering Evaluation/Cost Analysis (EE/CA)
- Action Memorandum
- Removal Action Work Plan (RAWP)
- Cultural Resources Assessment of C-410 Complex
- Agreed Order DWM-31434-042

**Issues:**

- None

**Recent accomplishments/activities:**

- Continued removal of fluorine cell stands and platforms in Sector 2
- Completed blasting fourth fluorine cell
- Removed cold box (tower) and nitrogen tank from C-603 Nitrogen Generating Facility
- Completed D&D of Sector 1
- Shipped three intermodals of debris for disposal

**Activity over next 60 days:**

- Continue packaging of loose materials in C-410 Complex
- Ship asbestos waste to Envirocare of Utah for disposal
- Ship C-411 (Sector 1) demolition debris to Envirocare of Utah for disposal
- Initiate characterization sampling of C-402 Lime House
- Initiate fixative application to exterior stacks
- Package demolition debris for shipment to Envirocare of Utah
- Continue paint removal from breached fluorine cells

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: DOE Material Storage Areas (DMSAs)**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Rick Keeling  
**Commonwealth of Kentucky:** Jon Maybriar/Mike Guffey  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** John Russell

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**Purpose:** Environmental Cleanup/Waste Disposition

**Description:** The 160 DMSAs are non-leased areas inside buildings, as well as outdoor areas. DOE accepted the return of the areas, and the material and equipment they contained from USEC on December 31, 1996, to facilitate NRC certification of the gaseous diffusion plants. At that time, most of the contents needed detailed inventory, characterization, and disposition. Since that time, DOE and contractors have been documenting contents, resolving environmental concerns such as draining and disposing of oils from old equipment, and segregating and disposing of wastes.

**Key documents:**

- PGDP Department of Energy Material Storage Area Characterization/Remediation Plan (BJC/PAD-186/R4), April 2001
- Agreed Order DWM-31434-042
- Documented Safety Analysis (DSA)

**Issues:**

- Increased rigor in characterizing painted items for PCB content has impacted characterization, packaging, and disposal activities. Effort is under way to resolve different requirements and allowances between Kentucky and EPA regulations for solid waste disposal of painted items.

**Recent accomplishments/activities:**

- Removed DMSA boundaries for OS-02, OS-04, and OS-15
- In December, 336 ft<sup>3</sup> was characterized, 7,300 ft<sup>3</sup> was packaged for disposal and 4,700 ft<sup>3</sup> was disposed
- Stored material continues to be characterized, packaged, and disposed

**Activity over next 60 days:**

- Continue disposition of the remaining DMSA OS-15 material
- Continue the sizing, packaging, and disposition of OS-4 and OS-14 rail cars
- Continue characterization of "Priority B" DMSAs under the Agreed Order
- Pursue Kentucky approval for approximately 20 DMSA RCRA Closures

## Project Status Update for DOE Paducah Citizens Advisory Board

January 12, 2006

### Project: Groundwater Operable Unit

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#### **Contact Persons:**

**Bechtel Jacobs Company LLC:** Bryan Clayton/Lance Fleming

**Commonwealth of Kentucky:** Jon Maybriar/Todd Mullins

**U.S. Environmental Protection Agency:** David Williams

**Citizens Advisory Board:** Jim Smart

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**Purpose:** Environmental Cleanup

**Description:** This project addresses environmental remediation of groundwater contamination on a site-wide basis at the Paducah Gaseous Diffusion Plant. The main contaminants of concern are trichloroethylene (TCE) and technetium-99 (<sup>99</sup>Tc). Remedial actions will be designed and implemented after completion and signing of Records of Decision (RODs).

#### **Key documents:**

- Feasibility Study of the Groundwater Operable Unit at PGDP (DOE/OR/07-1857)
- Agreed Order DWM-31434-042
- Six-Phase Treatability Report (DOE/OR/07-2113)
- Proposed Remedial Action Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/OR/07-2114)
- Southwest Plume Site Investigation Workplan (DOE/OR/07-2094)
- S&T Landfill Site Investigation Workplan (DOE/OR/07-2098)
- Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/OR/07-2150&D2/R2); Remedial Design Work Plan (DOE/OR/07-2214&D2); Remedial Design Support Investigation Characterization Plan (DOE/OR/07-2211&D2)
- Site Investigation Report for the Southwest Groundwater Plume (DOE/OR/07-2180&D1)
- Site Investigation Report for the C-746-S&T Landfills (DOE/OR/07-2212&D1)

**Issues:** Discussions with the State of Kentucky and EPA are continuing concerning the use of degradation factors utilized in groundwater modeling to support risk assessment development.

#### **Recent accomplishments:**

- Issued D2 Remedial Design Support Characterization Plan and D2 Remedial Design Work Plan to support development of the C-400 Remedial Action December 2, 2005, and December 29, 2005, respectively.
- Evaluated proposals from contractors responding to the Request for Proposal for a remediation contractor to design, build and operate the Electrical Resistance Heating at the C-400 Building.
- Issued D1 Site Investigation Report for the C-746-S&T Landfills for review on 9/30/05. State of Kentucky comments received on 11/1. USEPA comments received on 12/12/05. Incorporation of comments is underway.

#### **Activity over next 60 days:**

- Issue D2 C-746-S&T Landfill Site Investigation Report
- Issue D1 Land Use Control Implementation Plan for the C-400 Remedial Action
- Continue resolution of TCE degradation factors issue

#### **FFA Milestones:**

- Submit D2 Southwest Plume Site Investigation Report by 2/4/06 and D1 Remedial Action Plan by 3/6/06. (Milestone being modified pending resolution of the degradation factor use in groundwater models.)

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: Surface Water Operable Unit (On-Site)**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Dave Guyan/Lance Fleming  
**Commonwealth of Kentucky:** Jon Maybriar/Brian Baker  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** Jim Smart

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**Purpose:** Environmental Cleanup

**Description:** The Surface Water Operable Unit (On-Site) Project includes a site investigation to identify hot spots in ditches and outfalls, including Sections 3, 4, and 5 of the North-South Diversion Ditch. The site investigation scope also includes an evaluation of whether additional sediment control measures are needed, as well as actions for potential legacy releases associated with the storm sewer system. The results of the site investigation will be documented in a Site Investigation/Baseline Risk Assessment Report and non-time-critical removal action documentation, as appropriate.

**Key documents:**

- Sampling and Analysis Plan for Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site), DOE/OR/07-2137&D2/R2.

**Issues:** None

**Recent accomplishments:**

- Developed alternate Step 3 storm sewer sampling plan
- Continue data validation

**Activity over next 60 days:**

- Implement alternate Step 3 storm sewer sampling
- Prepare draft Site Investigation/Baseline Risk Assessment Report

**FFA Milestones:**

- Issue Site Investigation/Risk Assessment Report by August 16, 2006
- Issue Removal Notification by October 12, 2006.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**January 12, 2006**  
**Project: Scrap Metal Removal Project**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Wes Bass/Chris Marshall/Craig Jones

**Commonwealth of Kentucky:** Jon Maybriar

**U.S. Environmental Protection Agency:** David Williams

**Citizens Advisory Board:** Jim Smart/John Russell

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**Purpose:** Environmental Cleanup/Waste Disposition

**Description:** About 36,000 tons of scrap metal exists at the PGDP, excluding nickel ingots. This project involves the removal of 26,700 tons of general scrap metal, 2,000 tons of aluminum ingots, and approximately 7,000 tons of classified scrap. The project does not include the recycling or disposal of 9,700 tons of nickel. Note the classified scrap total has been revised downward based on field experience.

**Key documents:**

- Engineering Evaluation and Cost Analysis
- Action Memorandum
- Removal Action Work Plans
- Agreed Order DWM-31434-042
- Documented Safety Analysis (DSA)

**Issues:** None

**Recent accomplishments:**

- 780 tons of scrap metal were shipped by truck in November and December from C-746-D yard to NTS. Since recertification of the waste shipping program by NTS in July 2005, BJC has shipped 2,728 tons of scrap to NTS
- Loaded 205 tons of scrap in northwest yards during November and December
- Transferred WESKEM LLC scrap metal subcontract to Envirocare of Utah LLC in November
- Initiated Envirocare shipments on December 22

**Activity over next 60 days:**

- Continue disposition operations by inspecting, sorting, size-reducing and packaging scrap metal
- Continue shipment of scrap metal to NTS

**Project Status Update for DOE Paducah Citizens Advisory Board  
January 12, 2006  
Project: Burial Grounds Operable Unit**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** John Young/Lance Fleming  
**Commonwealth of Kentucky:** Jon Maybriar  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:** John Russell

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**Purpose:** Environmental Cleanup/Waste Disposition

**Description:** A Remedial Investigation/Feasibility Study (RI/FS) Scoping Document and the RI/FS Work Plan for the investigation of the Burial Ground Operable Unit (BGOU) at PGDP have been developed. The documents utilize a compilation of sampling information collected on and around the PGDP over the course of the last ten years. The BGOU includes Solid Waste Management Units (SWMUs) 2, 3, 4, 5, 6, 7, 30, and 145.

**Key documents:**

- Scoping Document for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky.
- Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2179.

**Issues:** None

**Recent accomplishments:**

- BGOU D2 RI/FS Work Plan was completed and distributed to the Commonwealth of Kentucky and the EPA on December 19, 2005

**Activity over next 60 days:**

- Receive regulator approval of the RI/FS Work Plan