

**Paducah Gaseous Diffusion Plant  
Citizens Advisory Board  
Meeting Minutes  
April 21, 2005**

The April 21, 2005 Citizens Advisory Board (CAB) meeting was held at the CAB office in Paducah, Kentucky at 5:30 p.m.

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

**Board members absent:** Shirley Lanier

**Ex Officio members and related regulatory agency employees present:** Brad Holland and Jon Maybriar, Kentucky Division of Waste Management; David Williams, Environmental Protection Agency; and Doug Dawson, Kentucky Department Fish and Wildlife Resources

**Deputy Designated Federal Official present:** David Dollins for William Murphie

**DOE Federal Coordinator present:** David Dollins

**DOE-related employees present:** Linda Beach, Jeannie Brandstetter, Greg Cook, Kim Crenshaw, Jim Ethridge, Greg Felts, Bruce Ford, Jacqui Gaines, Steve Kay, Reinbaud Kuerr, Joe Tarantino, Glenn VanSickle, and Dick Veazey

### **Introductions**

McCorry called the meeting to order at 6 p.m. Board facilitator Steve Kay introduced Burnett, a new member of the Board.

### **Agenda**

Kay asked if there were any proposed modifications to the agenda. McCorry said Joe Tarantino, Camp Dresser McKee (CDM), would provide a short presentation to the Citizens Advisory Board (CAB) prior to the task force reports. **The Board adopted the agenda as modified by consensus.**

### **Minutes**

Kay asked if there were any proposed modifications to the draft March minutes. There were no modifications. **The Board approved the minutes as submitted by consensus.**

### **Deputy Designated Federal Official's Comments**

Dollins welcomed Allen Burnett to the CAB.

## Progress of the Paducah Project

Dollins reported March progress as follows:

- Site preparation work is substantially complete at the Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Conversion Facility. Facility 90% design work was complete in March. Construction of warehouse and administration buildings is scheduled to begin in May.
- Drummed material at the U.S. Department of Energy (DOE) Material Storage Area (DMSA) is being removed, sorted, characterized, segregated, and repackaged. 632,000 of 866,000 ft<sup>3</sup> of DMSA material has been characterized over the project life. 269,000 ft<sup>3</sup> has been packaged and 229,000 ft<sup>3</sup> has been shipped over the project life.
- Scrap metal shipments continued to be suspended during March. D-Yard field crews continue to downsize scrap with over 1,700 tons backlogged and ready for loading and shipment. More than 30 percent of metal turnings have been processed and ready for disposal pending approval of a security plan. 620 of 3,000 drums of machine turnings have been processed through the end of March. 3,000 drums of machine turnings are to be disposed at Envirocare by October 2005.
- At the C-410 Decontamination and Decommissioning (D&D) complex, non-friable asbestos abatement activities have been completed. Low-Level waste scrap metal is being prepared for shipment from the Hydrogen Fluoride Tank Farm to Envirocare. The work package, sampling plan, and request for proposal for D&D of the Nitrogen Facility are in preparation. The removal notification for the Limehouse, Contaminated Item Incinerator, and West End Smelter was issued to the Environmental Protection Agency and to the Commonwealth of Kentucky.
- 190 ft<sup>3</sup> of Legacy mixed low-level waste was shipped offsite for treatment and disposal. 3,779 ft<sup>3</sup> of newly generated waste and 953 ft<sup>3</sup> of Agreed Order waste was disposed in the C-746-U Landfill. DOE is continuing to process Agreed Order waste for the landfill and Envirocare.
- The C-400 Source Removal Record of Decision (ROD) is under review by the Commonwealth of Kentucky. Approval is anticipated in May or June. The Southwest Plume Site Investigation/Risk Assessment Report was submitted to regulators on February 17, 2005. The Proposed Plan is scheduled to be submitted to the regulators by July 2, 2005.
- DOE submitted the Surface Water Operable Unit (SWOU) Sampling and Analysis Plan (SAP) to the regulators on December 15, 2004. The SAP is currently in formal dispute to resolve Kentucky conditions. Mobilization activities for the site investigation is tentatively planned to begin in the Spring.
- A meeting was held on March 17 to discuss regulator comments on the Burial Grounds Operable Unit Scoping Document. The Remedial Investigation/Feasibility Work Plan is scheduled to be submitted to the regulators by June 30, 2005.
- The Paducah Infrastructure contact award to Swift & Staley Mechanical, Inc. was announced on March 16, 2005 and is scheduled to complete transition by June 23, 2005. All protests that were filed

staying execution of the Paducah Remediation cleanup projects were dismissed and/or withdrawn. Final resolution is forthcoming. Bechtel Jacobs Company is currently continuing work on cleanup projects.

Dollins said there are two deadlines to meet for protest of a contract. If a protest is made before the first deadline, a re-evaluation is conducted and the selected contractor must cease transition activities, which happened with the selected remediation contractor. If a protest is made after the first deadline but before the second deadline as was done with the infrastructure contract, then DOE will perform a re-evaluation in accordance with the General Accounting Office but the selected contractor continues transition activities.

### **Federal Coordinator Comments**

Dollins said DOE is working on a response to the End State Vision recommendation.

Dollins said Ladd had asked a question at the previous Board meeting regarding the concern of the C-720 sump leaking into the groundwater. He said there are no identified releases from the sump on the east side of C-720. Several shallow borings have been taken around the sump which indicate non-detects. The liquid within the sump was sampled and it does have contamination, which could have migrated from other release points in that area. The Remedial Investigation for Waste Area Grouping 27 and the Site Investigation Report for the Southwest Plume identify the sample results from the investigation. A proposed remedial action plan for the eastern end of C-720 is currently being planned and developed for future submission.

### **Comments**

Russell inquired about the Legacy Waste Disposition slide indicating no work being completed August 2005 through Fiscal year 2007. VanSickle said the schedule is based on the plan for available funding. He said the schedule is based on imminent threats, environmental insult, and regulatory milestones that receive priority over other projects. He said the plus up money that DOE received this fiscal year will change the schedule and work will continue on Legacy Waste Disposition next fiscal year. Russell said he would like to see other projects completed other than Sections 1 and 2 of the North-South Diversion Ditch.

Ladd said Murphie had previously said the transition date for the scope of cylinder management work transferred from Bechtel Jacobs Company LLC (BJC) to Uranium Disposition Services (UDS) was moved from March to May. VanSickle said a few prerequisites still require DOE headquarters approval. He said Murphie has indicated he is hopeful the approval could be obtained within the next two months and the transition could proceed. VanSickle said BJC and UDS are working together to plan transition and in the interim BJC will continue to execute the work.

### **Ex-Officio Comments**

Williams said the dispute over the SWOU SAP is a three party dispute to resolve conditional approvals. He said the SAP had previously entered into informal dispute and moved to formal dispute last week. If the issues are not resolved, the dispute will move to super formal.

Maybriar said a 15-day extension was filed on the C-400 ROD by the Commonwealth of Kentucky. He said Kentucky has requested specific language be used in the document requiring DOE approval. He said the language has been approved by DOE and Kentucky will approve the document the following week.

Maybriar said the conditional approval of the SWOU SAP allows DOE to get contractors in place for minor fieldwork even if there are outstanding activities. Kentucky is very close to approval on the SAP.

### **Paducah Area Chamber of Commerce Washington, D.C. Fly-In**

Tarantino presented a review of the federal priority projects that the Paducah Area Chamber of Commerce discussed during the Washington, D.C. Fly-in. A list of the projects and initiatives, participants, and the agenda is attached to the minutes.

Tarantino said the group met with Energy Secretary Samuel Bodman to discuss the remediation and infrastructure contract awards, the DUF<sub>6</sub> Conversion Facility funding, Paducah Area Community Reuse Organization (PACRO) funding, and the United States Enrichment Corporation (USEC) initiatives beyond closing of the plant. Bodman said an internal panel was established to evaluate and help in the procurement process because of the unacceptable time limits for award of the infrastructure contract. Tarantino said Secretary Bodman was unable to speak to the remediation contract due to protests filed.

McCorry asked if a representative of the CAB could attend the next trip along with the Paducah Chamber. Tarantino said the Board is welcome to attend and suggested the CAB contact Elaine Spalding, President of the Paducah Chamber for details on the next trip. Kay suggested adding this topic to the Executive Committee agenda.

### **Task Forces/Presentations**

#### **Waste Disposition Task Force**

Russell said the Waste Disposition task force received a very informative presentation from Ricky Keeling, BJC on the DMSA project and a member of the task force will give a short presentation to the Board at the May meeting.

#### **Water Quality Task Force**

Smart said the Water Quality task force discussed the Kentucky Pollutant Discharge Elimination System (KPDES) permit with Danny Guminski, BJC. He said the task force received updates on the Southwest Plume Site Investigation Report, SWOU SAP and the C-400 Source Removal ROD.

Smart said leachate from the C-746-U Landfill was sent back to a sanitary sewer treatment before discharge to the outfall. Russell asked what treatment the leachate received at the sanitary sewer. Maybriar said the leachate is sampled and characterized before it is treated. VanSickle said the leachate from the U-Landfill is collected and sampled and an annual report is sent to the Commonwealth of Kentucky showing constituents. He said solid waste regulations require all leachate collected from the landfill be run through a municipal treatment system, and that DOE uses the C-616 treatment system operated by USEC before discharge to Outfall 001 meeting outfall standards, which is monitored on a regular basis. VanSickle said

a permit modification has been submitted to the Commonwealth of Kentucky to treat the leachate at the landfill.

Smart said DOE has had chronic toxicity issues at Outfall 001 in the past. Maybriar said DOE has passed the Toxicity Reduction Evaluations on Outfall 001 and Outfall 017, which required monthly sampling instead of quarterly. VanSickle said the toxicity issues were resolved finding that the toxicity was caused by a plasticizer in the tubing used for sampling. Teflon-coated tubing is now being used. Lee asked if regular sampling on the outfalls should be monthly instead of quarterly. Maybriar said the previous permit required monthly sampling, but based on the data when the current permit was written, DOE was allowed to sample on a quarterly basis. Miller said fewer problems could have surfaced in the past due to detection levels being higher than currently required. She said more frequent sampling could be beneficial. Maybriar said the detection levels have not changed on the poly-chlorinated bi-phenyls but if the CAB feels strongly on this issue, comments should be submitted to the Division of Water before a new permit is issued. Lee requested the list of organics that are tested in the outfalls. Maybriar said the data is located in the KPDES Permit and in the Annual Site Environmental Report. He said Isco samplers packed with ice are used for real time sampling. VanSickle said most outfalls discharge storm water run-off and Outfall 001 discharges process water run-off. He said the processes that feed into the treatment systems and into that outfall are sampled daily. Smart requested the daily sampling process. VanSickle said Guminski could provide this information to the CAB and contact USEC for their operations. Burnett asked if USEC and DOE share results and information on the outfalls. VanSickle said all of DOE sampling data is sent to OREIS database every six weeks and he is unsure if USEC data is published. Kay suggested adding this item to the Water Quality task force agenda for further discussion.

### **Long Range Strategy/Stewardship**

Kerley said the task force discussed member orientation and a site tour for new members. He said the group decided to table this issue until all members had been appointed to the Board.

Kerley presented the key issues for the Paducah CAB to be presented at the Chairs meeting in Savannah River. He said the information had changed since the slides were submitted to DOE Headquarters.

Ladd asked if provisions exist in contract procurement for the infrastructure and remediation contracts for public input for selection of a potential contractor. Dollins said he cannot address this instance specifically but he has been part of other procurement processes where the agency is under no obligation to solicit public input. He called the process a fair evaluation of technical acceptability and cost effectiveness. He said this contract is procurement sensitive. Ladd said if there are known safety issues with certain companies in the process of selection that the public is aware of and DOE is unaware, there should be some way for people of the community to raise an issue. Dollins said DOE holds safety as top priority and addresses all issues when evaluating a prospective contractor.

Kerley said the task force discussed making Membership Ad Hoc subcommittee a standing committee or combining the subcommittee with another task force to keep the membership pool established. Lee suggested merging Membership Ad Hoc with the Community Outreach task force. Kay suggested adding this issue to the Executive Committee agenda for discussion.

Lee asked if the elimination of PACRO would involve discussions at the LRSS task force. Ladd said he is concerned about potential conflict of interest discussions that the Board may be heading for. Long asked if PACRO was losing its funding. Ladd said they were losing DOE funding but they can rename themselves and seek funding from other government agencies.

Russell said he had requested that the Long-Range task force develop an end-state graphical/visual map in order to see how decisions change the end condition of the site. Kerley said in his research the only map that could be developed was a color-coded map indicating industrial inside the fence and recreational outside the fence. Russell said he believed additional information such as institutional controls and other information is available for most of the SWMUs. Kerley said he would research the issue and add this to the Long Range agenda for discussion. Russell suggested if the task force could not get this information, a recommendation should be submitted to DOE.

### **Community Outreach**

Eadens provided a Speakers Bureau overview from the comments received from the Board.

Long said the date for DOE's first major site investigation to determine groundwater contamination was incorrect. She said she would research the correct date. Kay requested suggests and comments be sent to the support staff. Dollins said the task force had done a very good job on the presentation. Russell asked how the group planned to market the presentation. Eadens said the task force is working on letters to send out to local organizations and businesses for audiences.

McCorry presented the first Speakers Bureau presentation to the International Supply Chain Management group earlier in the week. She said several members of the group are employed by USEC and gave additional information on the presentation, which she would share with the task force. She said handouts soliciting membership were provided to all interested.

Eadens was elected chair of the Community Outreach task force by acclamation during the April task force meeting.

### **Review of Workplan**

Kay asked if there were any proposed modifications to the workplan. Ladd suggested adding a DUF<sub>6</sub> Conversion Facility update to the workplan.

### **Review of May Agenda**

Lee requested adding a Web site update to the May agenda for the Community Outreach task force. Ladd suggested adding a DUF<sub>6</sub> Conversion Facility update to the June agenda.

### **Action Items**

Dollins said responses have been issued to both of Ladd's questions about beryllium in metal turnings from the scrap metal project and contamination from a sump pit at C-720; those action items are closed.

## **Subcommittee Reports**

### **Executive Committee**

McCorry said the Annual Planning Retreat is scheduled for November 4 and 5 at the Moors Resort.

McCorry said the April 26 Executive Committee meeting has been postponed due to the Chairs meeting. The meeting is May 3.

Lee suggested the Board discuss the possibility of including non-members on task forces. She said the task force meetings are where most of the work occurs. She suggested inviting individuals that have specific expertise or interest in projects to the task forces and establish a more formal way to target these individuals. McCorry said the Community Outreach task force discussed generating letters to area churches for membership. She said letters can be sent to any individuals or organizations, such as Watershed, that may have interest in the task force discussions. She asked the Board to contact the support staff to generate specific invitation letters for task force attendance.

Kerley said the Long-Range Strategy/Stewardship task force discussed student members from local high schools. He said this could generate public interest. McCorry said the Oak Ridge site has provided a Stewardship Education Resource Kit to all sites. This could be used to educate the schools or used for a Board workshop. Kerley suggested adding this topic to the Long-Range Stewardship task force agenda.

The meeting adjourned at 8:20 p.m.

# Progress at the PADUCAH PROJECT

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Update to the Citizens Advisory Board

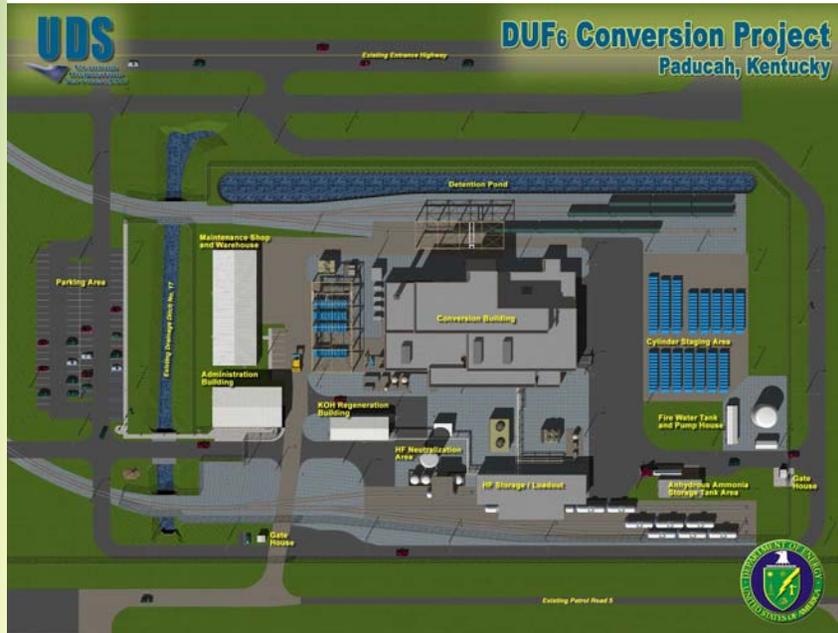
April 21, 2005



**Dave Dollins**  
**U.S. Department of Energy**  
**Federal Coordinator**  
**Portsmouth/Paducah Project Office**



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



- Site preparation work substantially complete
- Underground utilities installation in progress
- Construction of warehouse and administration buildings to begin May 2005
- Facility 90% design work completed in March 2005 and undergoing DOE review and approval





# DMSAs

- Drummed material being removed, sorted, characterized, segregated, and repackaged.

	<b>March</b>	<b>Project Life</b>
• Characterized	1,400 cubic feet	632,000 of 866,000 cubic feet
• Packaged	1,200 cubic feet	269,000 cubic feet
• Shipped	6,900 cubic feet	229,000 cubic feet

Loading waste from DMSA OS-17



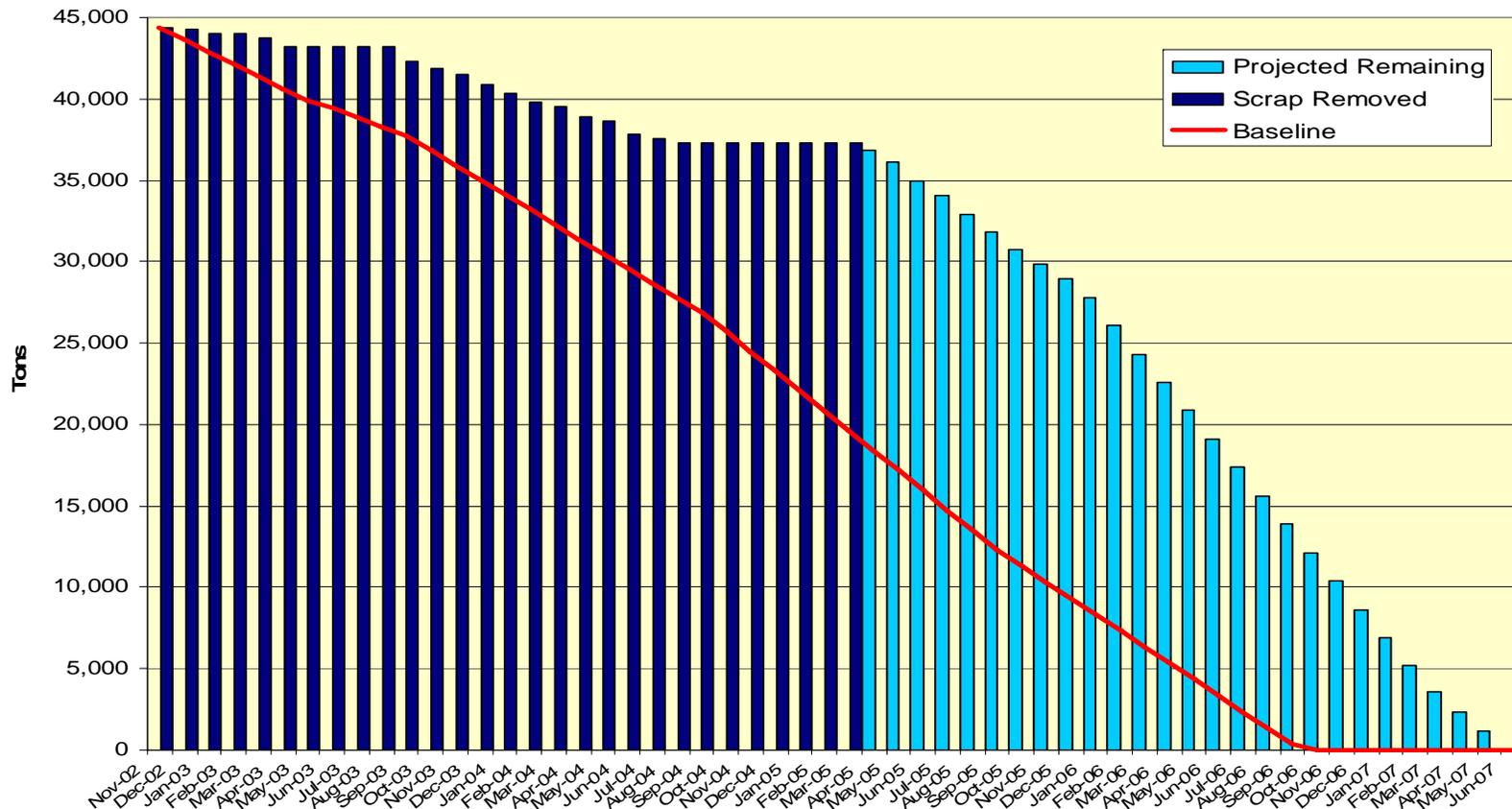
DMSA OS-17 waste leaving PGDP





# Scrap Metal Removal

- Scrap metal shipments continued to be suspended during March
- D-Yard field crews continue to downsize scrap; over 1,700 tons backlogged and ready for loading/shipment
- More than 30% of metal turnings have been processed and ready for disposal pending approval of security plan



\* A revised forecast will be presented once transportation issues are resolved



# Scrap Metal Turnings

- Approximately 620 of 3,000 drums of machine turnings processed through end of March
- All 3,000 drums to be disposed at Envirocare by October 2005



1



2



4



3



5

Processing drums  
of metal turnings

5



## C-410 D&D

- Completed demolition and packaging of material from Zone 19, Electrical Switchgear Room
- Completed approximately 70% of demolition in Sector 1, Zone 21
- Completed non-friable asbestos abatement activities in C-410 (floor tile and mud from piping insulation)
- Preparing to ship low-level waste scrap metal (platforms, railings, walkways, structural steel) from the HF Tank Farm to Envirocare



Before & after removal of Zone 19 switchgear



# Inactive Facilities D&D

Nitrogen Facility



- The work package, sampling plan and RFP for D&D of Nitrogen Facility are in preparation
- Regulatory notification of work within a SWMU was issued to EPA and KDEP

Incinerator



Limehouse



- The removal notification for the Limehouse, Contaminated Item Incinerator, and West End Smelter was issued to EPA and KDEP
- The Engineering Evaluation/Cost Analysis for the three facilities is being developed

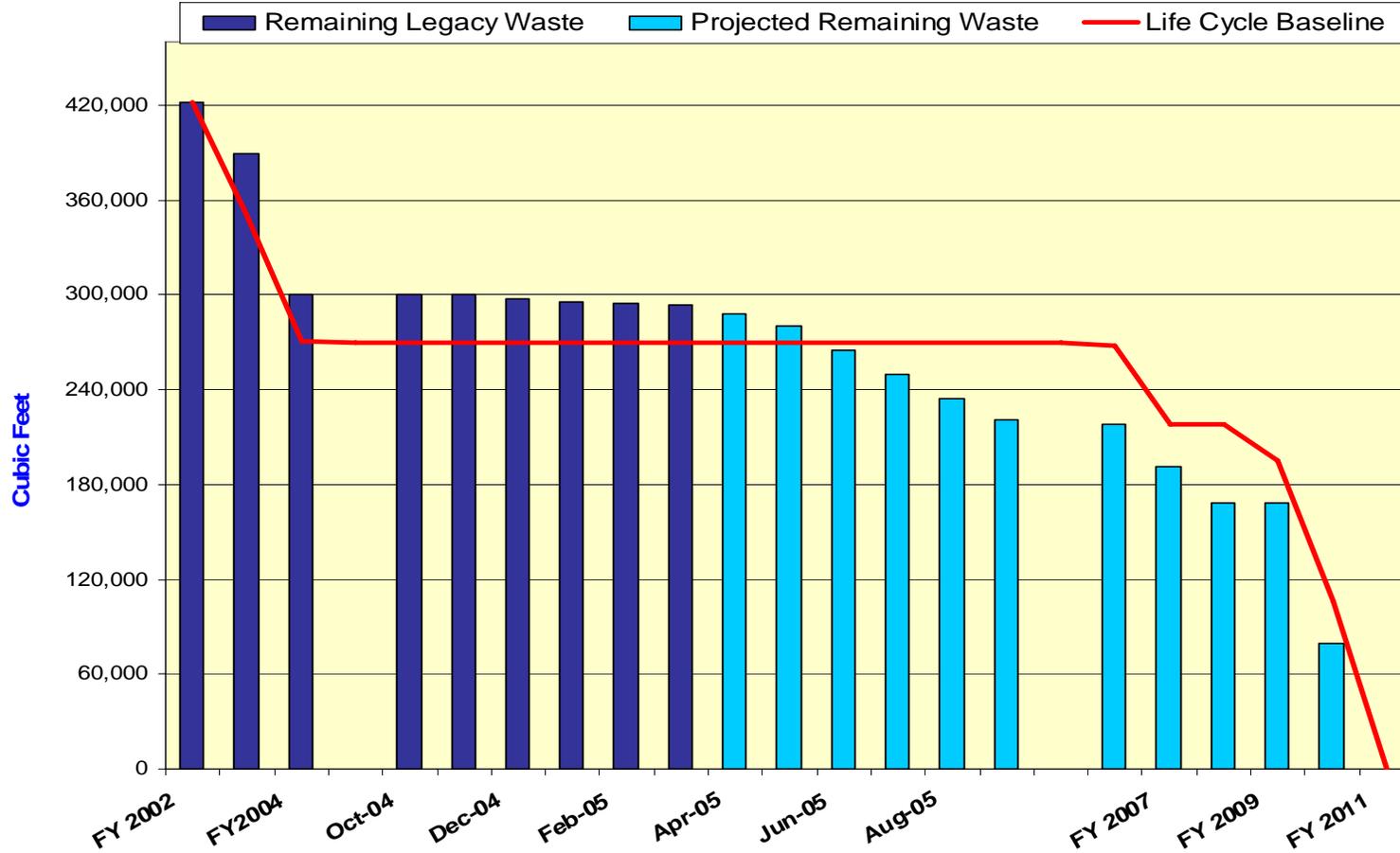


West End Smelter



# Legacy Waste Disposition

- Shipped 190 cubic feet of mixed waste offsite for treatment/disposal
- Disposed 953 cubic feet of Agreed Order waste and 3,779 cubic feet of newly generated waste in the C-746-U Landfill
- Continued processing Agreed Order waste for landfill and Envirocare





# Groundwater Operable Unit

## **C-400 ROD**

- EPA notified DOE March 16 that the revised D2 ROD satisfied their comments; Kentucky comments pending
- ROD approval anticipated in May-June

## **Southwest Plume**

- D1 Site Investigation/Risk Assessment Report submitted to regulators on February 17, 2005
- D1 Proposed Plan to be submitted to regulators by July 2, 2005



# Surface Water Operable Unit

## Project Status

- D2 Sampling and Analysis Plan (SAP) submitted to regulators on December 15, 2004
- EPA approved D2 SAP; Kentucky conditionally approved
- SAP is currently in formal dispute to resolve Kentucky conditions
- Mobilization activities for site investigation tentatively planned to begin in the Spring



# Burial Grounds Operable Unit

## Project Status

- Meeting held March 17 to discuss regulator comments on Scoping Document; comments will be incorporated into RI/FS Work Plan
- D1 RI/FS Work Plan to be submitted to regulators by June 30, 2005



The burial ground at SWMU 6  
-- below DMSA OS-17



# Transition to New Contractor

## Transition Status

### -- Infrastructure

- Infrastructure awards announced March 16, 2005
- Swift & Staley Mechanical Contractors, Inc. awarded Paducah contract to complete transition by June 26, 2005

### -- Remediation

- An award was initially announced naming North Wind
- Unsuccessful bidders filed protests
- The protests were dismissed and/or withdrawn
- Final resolution forthcoming
- Work on cleanup projects continuing



**Project Status Update for Paducah DOE Citizens Advisory Board  
April 21, 2005**

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

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**Contact Persons:**

**DOE Site Office:** John Sheppard  
**Bechtel Jacobs Company LLC (surveillance/maintenance):** Don Ulrich/Craig Dowdy  
**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. Approximately 739,000 metric tons of DUF<sub>6</sub> is stored in solid form in metal cylinders at the DOE Paducah site as well as the Portsmouth, Ohio, and Oak Ridge, Tennessee, DOE sites. At Paducah, approximately 38,000 cylinders contain approximately 437,000 metric tons of DUF<sub>6</sub>. 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. ***Conversion*** is expected to begin in 2006. 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. DOE is reviewing draft conceptual design reports for the conversion facilities. Construction began in July 2004.

**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:** (none)

**Recent accomplishments/activities:**

- Completed 2186 cylinder inspections and 845 radiological surveys in March
- Resumed relocating cylinders from gravel C-yard to new concrete K-yard
- Completed 324 cylinder relocations and 11 valve changes
- Cleaned 570 cylinder skirts
- Site preparation for the DUF<sub>6</sub> Conversion Facility substantially complete
- Preparations ongoing to establish DOE cylinder yards as Property Protection Area (PPA)
- Facility 90% design under DOE review

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

- Continue cylinder relocations
- Continue cylinder inspections
- Continue installation of underground utilities
- Complete storm drains and final grade for DUF<sub>6</sub> Conversion Facility
- UDS preparing to award contracts for Warehouse and Administration Building; construction to begin in May 2005.

**Project Status Update for Paducah DOE Citizens Advisory Board**  
**April 21, 2005**  
**Project: Solid Waste Contained Landfill**

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**Contact Persons:**

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

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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:**

**Recent accomplishments/activities:**

- Resumed full operations capability
- Disposed of 171 tons of waste in March
- Submitted Annual Survey for the C-746-U Contained Landfill to Kentucky Division of Waste Management

**Activity over next 60 days:**

- Continue disposal of construction debris and other non-hazardous solid waste streams
- Receive permit modification for construction of a leachate treatment facility
- Support the Kentucky Research Consortium for Energy and Environment Holocene Displacement Study

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**April 21, 2005**  
**Project: Waste Disposition**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Pat Gourieux/Greg Shaia  
**Commonwealth of Kentucky:** Mike Guffey  
**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 DWM-30039-42

**Issues:**

- Because of transportation related issues at Paducah, BJC self-suspended off-site shipments in September 2004 pending a review of the shipping program. Waste Disposition Project schedules are being revised as effort continues in developing the corrective actions necessary to resume safe, compliant shipments. Off-site shipments have resumed with management approval on a case-by-case basis after in-depth review.

**Recent accomplishments/activities:**

- Disposed 953 cubic feet of Agreed Order waste in the C-746-U landfill
- Processing of Agreed Order waste for landfill disposal and shipment to Envirocare continues
- Disposed 3,779 cubic feet of newly generated waste in the C-746-U landfill.
- Shipped 190 cubic feet of mixed waste for treatment/disposal to Permafix

**Activity over next 60 days:**

- Continue shipment of mixed low-level waste to PermaFix facility and Envirocare
- Continue disposition of solid waste in the C-746-U Landfill
- Continue disposition of ~ 5100 containers of Agreed Order "no-longer contains" waste at Envirocare or the C-476-U Landfill as appropriate

**Project Status Update for DOE Paducah Citizens Advisory Board  
April 21, 2005**

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

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Brad Montgomery  
**Commonwealth of Kentucky:** Todd Mullins  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:**

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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:**

- Commonwealth of Kentucky permit regulations are more stringent than Federal Regulations, and will not allow disposition of scrap metal from tank farm demolition in the C-746-U Landfill due to levels of PCBs in the paint.
- Disposition of HF Tank Farm Residuals was delayed during the transportation suspension
- Schedule for feed plant equipment demolition and removal has been impacted as a result of minimizing waste generation while shipment issues are being resolved.

**Recent accomplishments/activities:**

- Demolition of equipment and material in Sector 1, Zone 21 continues, and is now approximately 70% complete. This area will be developed into a permanent boundary control station for personnel entry and exit.
- Continued installation of temporary power and emergency lighting in C-420.
- Completed non-friable asbestos abatement (floor tile and mud from piping insulation) in Sector 1, Zone 21
- Completed demolition and packing of material from Zone 19, Electrical Switchgear Room
- Submitted Notification of Work in a SWMU and began RFP preparation for accelerated D&D of the C-603 Nitrogen Facility
- Issued Removal Notification and began development of Engineering Evaluation/Cost Analysis for C-402 Limehouse, C-405 Incinerator and C-746-A West End Smelter.

**Activity over next 60 days:**

- Continue packaging of loose materials in C-410 Complex
- Continue installation of temporary power and emergency lighting in C-410 Complex
- Complete asbestos insulation abatement and other demolition in Zone 21.
- Develop landfill package and disposition material from C-410-A Hydrogen Holder in landfill
- Complete repackaging and shipment of scrap metal from HF Tank Farm for disposition at Envirocare.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**April 21, 2005**  
**Project: DOE Material Storage Areas (DMSAs)**

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**Contact Persons:**

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

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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 that are now the DMSAs, 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:**

- Because of recent shipment difficulties at Paducah, BJC self-suspended shipments pending a programmatic review. This review included transporting waste to the C-746-U Landfill and off-site disposal facilities. Case-by-base authorization is now available for shipments to the Landfill and to off-site facilities except the Nevada Test Site.

**Recent accomplishments/activities:**

- A total of 1,400 cubic ft. of material was characterized during March, including approximately 500 cubic feet sampled and awaiting results. Approximately 632,000 cubic ft. of material has been characterized to date.
- 1,200 cubic ft. packaged for disposal in the month of March; 268,000 cubic ft. over project life
- 13,800 cubic ft. repackaged in March to meet revised packaging requirements for shipping to disposal facilities (not counted in project progress statistics)
- 6,900 cubic ft. disposed in March, including 1,200 transferred for reuse/recycle
- Drummed material being removed, sorted, characterized, segregated, and repackaged
- Characterizing materials in Priority "B" DMSAs

**Activity over next 60 days:**

- Complete disposition activities in DMSA OS-17
- Pursue disposition of OS-4 and OS-14 material
- Pursue boundary removal of OS-02, C-331-04, -07, and -20
- Continue characterization of "Priority B" DMSAs under the Agreed Order
- Obtain approval and ship LLW to Envirocare

**Project Status Update for DOE Paducah Citizens Advisory Board  
April 21, 2005**

**Project: Groundwater Operable Unit**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Bryan Clayton/Craig Jones

**Commonwealth of Kentucky:** Todd Mullins

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

**Citizens Advisory Board:**

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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 Removal Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/OR/07-2150)

**Issues: (none)**

**Recent accomplishments:**

- Continued development of the Southwest Plume Site Investigation Report
- Submitted D2 ROD edits to regulators April 20, 2005; Kentucky requested extension of review period to May 6, 2005
- Completed 90% contracting package for RFP for selecting a remedial contractor for the implementation of electrical resistive heating/direct heating at the C-400 area

**Activity over next 60 days:**

- Continue development of the Remedial Design Work Plan to support development of the C-400 Remedial Action design and construction specifications for submission in early 2005
- Initiate development of the C-746-S&T Landfill Site Investigation Report
- Obtain C-400 ROD signature in Spring 2005

**FFA Milestones:**

- Submit the D1 C-400 Record of Decision by August 3, 2004 (complete).
- Submit the D1 Southwest Plume Site Investigation/Risk Assessment Report by February 17, 2005 (complete).
- Submit the D1 C-400 Remedial Design Work Plan within 30 days after signing of ROD
- Submit the D1 S&T Landfill Site Evaluation Report by September 30, 2005.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**April 21, 2005**  
**Project: Surface Water Operable Unit (On-Site)**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** Dave Guyan/Craig Jones  
**Commonwealth of Kentucky:** /John Maybriar  
**U.S. Environmental Protection Agency:** David Williams  
**Citizens Advisory Board:**

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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)

**Issues: (none)**

**Recent accomplishments:**

- On December 15, 2004, DOE submitted to the regulators the D2 Sampling and Analysis Plan (SAP) of the Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site).
- EPA issued unconditional approval of the sampling proposed in the D2 SWOU SAP on January 18, 2005.
- On February 3, 2005, DOE received conditional concurrence from KDEP, dated January 31, 2005, of the D2 SAP for the SWOU (On-Site). KDEP's conditional concurrence set forth certain changes to the SAP that KDEP would require before approving the document. One of the five conditions set forth in KDEP's letter included changes to the SAP to require DOE to include Total Polycyclic Aromatic Hydrocarbons (PAHs) as an indicator chemical for all Activity 1 samples collected during the implementation of the SWOU (On-Site) project. Previously, DOE, the U.S. Environmental Protection Agency (EPA), and KDEP have discussed this issue without reaching an agreement. Pursuant to these discussions, DOE considered additional indicator chemicals, however, based on review of historical analytical data and the intent of the sampling strategy proposed, DOE determined that including these additional indicator chemicals would not be consistent with the project goals and would not be cost effective. SAP is now in formal dispute.
- Completed brush clearing activities at outfalls and ditches in preparation of implementing the sampling activities out lined in the D2 SWOU SAP.

**Activity over next 60 days:**

- Work to resolve formal dispute regarding KDEP's comments on the D2 Sampling and Analysis Plan of the Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site).
- If comments are resolved and the SAP is unconditionally approved, start mobilization activities for the site investigation of the Surface Water Operable Unit.

**FFA Milestones:**

- Issue Site Investigation/Risk Assessment Report by May 27, 2006.
- Issue Removal Notification by June 23, 2006.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**April 21, 2005**  
**Project: Scrap Metal Removal Project**

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**Contact Persons:**

**DOE Site Office:**

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

**Commonwealth of Kentucky:** Tony Hatton/Mike Guffey

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

**Citizens Advisory Board:**

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**Purpose:** Environmental Cleanup/Waste Disposition

**Description:** About 54,000 tons of scrap metal exists at the PGDP. This project involves the removal of 26,700 tons of general scrap metal, 2,000 tons of aluminum ingots, and 15,600 tons of classified material. This project does not include the recycling or disposal of 9,700 tons of nickel.

**Key documents:**

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

**Issues:** Several sealand containers packaged for transport of general scrap to NTS leaked moisture prior to shipment. Container inspections identified the presence of circuit boards and other electronic devices that conflict with the NTS waste acceptance criteria. Currently shipments to NTS are suspended and scrap metal waste has not been shipped off site in several months.

**Recent accomplishments:**

- Approximately 881 drums of machine turnings (of an estimated 3,000) have been processed and packaged for shipment and disposal through the end of March.

**Activity over next 60 days:**

- Complete development of corrective actions and begin implementation to resume general scrap metal shipments to NTS. NTS audit scheduled for the first week of May.
- Continue disposition operations: scrap metal will be removed from the pile, inspected, size-reduced as necessary. Packaging and shipment for disposition will resume upon completion of corrective actions and certification by NTS.
- Continue inspection, segregation, and packaging of machine turnings waste
- Ship containers of machine turnings waste to Envirocare for treatment and disposal.
- Continue downsizing of classified scrap metal from the Kellogg pad.

**Project Status Update for DOE Paducah Citizens Advisory Board**  
**April 21, 2005**  
**Project: Burial Grounds OU**

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**Contact Persons:**

**Bechtel Jacobs Company LLC:** John Young/Craig Jones  
**Commonwealth of Kentucky:** Tony Hatton/Mike Guffey  
**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 has been developed to assist in preparation of the RI/FS Work Plan for the investigation and possible subsequent remediation of the Burial Ground Operable Unit (BGOU) at PGDP. The document utilizes a compilation of sampling information collected on and around the PGDP over the course of the last ten years. The subject of this scoping document is the BGOU (Solid Waste Management Units [SWMUs] 2, 3, 4, 5, 6, 7, 30, and 145).

**Key documents:**

- D1 Burial Grounds OU Scoping Document
- D1 Burial Grounds Work Plan

**Issues:**

**Recent accomplishments:**

- D1 Burial Grounds OU Scoping Document was issued 11/23/04.
- State and EPA comments were addressed in a series of meetings, including one on March 17, 2005.

**Activity over next 60 days:**

- D1 Work Plan is scheduled to be completed and distributed on June 30, 2005
- State and EPA Scoping Document comments will be addressed in Work Plan