

**Paducah Gaseous Diffusion Plant  
Citizens Advisory Board  
Meeting Minutes  
May 19, 2005**

The May 19, 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, Ricky Ladd, Shirley Lanier, Bobby Lee, Linda Long, Rhonda McCorry, Janet Miller, John Russell, and Jim Smart

**Board members absent:** Chad Kerley

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

**Deputy Designated Federal Official present:** Rachel Blumenfeld for William Murphie

**DOE Federal Coordinator present:** David Dollins

**DOE-related employees present:** Doug Atkinson, Jeannie Brandstetter, Greg Cook, Kim Crenshaw, Jim Ethridge, Greg Felts, Tim Forden, Phil Grant, Steve Kay, Chris Lee, Jim McVey, Gene Perry, Steve Polston, Glenn VanSickle, Dick Veazey, and Jack Zimmerman

## **Agenda**

Kay asked if there were any proposed modifications to the agenda. There were no modifications. **The Board adopted the agenda by consensus.**

## **Minutes**

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

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

### **Progress of the Paducah Project**

Blumenfeld reported April progress as follows:

- Electricity is now available to the Depleted Uranium Hexafluoride (DUF<sub>6</sub>) Conversion Facility site. The boundary change is complete and the Facility 90% design work was completed in March and is undergoing the U. S. Department of Energy (DOE) review and approval. Construction of warehouse and administration buildings is scheduled to begin soon.
- Drummed material at the DOE Material Storage Area (DMSA) is being removed, sorted, characterized, segregated, and repackaged. 635,000 of 866,000 ft<sup>3</sup> of DMSA material has been characterized over the project life. 272,000 ft<sup>3</sup> has been packaged and 238,000 ft<sup>3</sup> has been shipped over the project life.
- Scrap metal shipments continued to be suspended during April. D-Yard field crews continue to downsize scrap with over 2,100 tons backlogged and ready for loading and shipment. Nevada Test Site (NTS) provided an assistance visit on waste disposition issues the week of May 9. The NTS recertification audit will be scheduled no later than June 30. Approximately 1,800 of 3,000 drums of machine turnings have been processed and ready for disposal pending security approval. All 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, asbestos abatement activities have been completed in Zone 21 and clearance samples have been collected. Packaging of low-level waste scrap metal has been initiated for shipment from the Hydrogen Fluoride Tank Farm. Regulatory agency approval has been received to remove the Nitrogen Facility as a Maintenance Action. The removal notification for the Limehouse, Contaminated Item Incinerator, and West End Smelter has been approved by the Environmental Protection Agency and the Commonwealth of Kentucky.
- In Legacy Waste disposition, 2,183 ft<sup>3</sup> of newly generated and Agreed Order waste was disposed in the C-746-U Landfill. 8,497 ft<sup>3</sup> of Agreed Order waste was shipped to Envirocare. 226 ft<sup>3</sup> of newly generated waste was sent off-site for treatment and disposal. 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 late 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.
- The Surface Water Operable Unit (SWOU) Sampling and Analysis Plan (SAP) has been approved by the Commonwealth of Kentucky, following resolution of issues. Sampling will

be initiated in June. The North-South Diversion Ditch (NSDD) Final Remedial Action Report was submitted to the regulators in May.

- The Burial Grounds Operable Unit 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 26, 2005. The procurement process is continuing for the Remediation contract. Bechtel Jacobs Company LLC(BJC) continues to perform the remediation work.

### **Federal Coordinator Comments**

Dollins said two new members have been appointed to serve on the Citizens Advisory Board (CAB), John Anderson and Gary Reside. He said the reappointments for Board members that terms expire in June have been sent to DOE Headquarters for approval. He said Headquarters has said that the reappointment packages will be expedited.

### **Comments**

Russell said last month he had inquired about the Legacy Waste Disposition slide indicating no work being completed August 2005 through Fiscal year 2007. He said there is now a substantial change in the slide. Blumenfeld said the schedule change is due to a reflection in the plus up funds that DOE has received.

Russell said the burial grounds are suspected to be one of the contributing sources for contamination of the Southwest Plume. He said a Proposed Plan is being submitted for the Southwest Plume but the remedy of the burial grounds has not yet been established. He asked why the projects are not linked. Blumenfeld said the projects are linked and the impact of one operable unit is considered on other operable units. Dollins said the projects teams and regulators are knowledgeable in both operable units in order to investigate all data gaps and avoid duplication of effort. He assured Russell DOE would look at the complete picture for full evaluation and options before moving forward.

Smart asked if DOE had received comments from the Commonwealth of Kentucky on the Southwest Plume Risk Assessment. Maybriar said a 15-day extension has been filed by the Commonwealth of Kentucky on the review of the document.

Ladd asked when the construction of the DUF<sub>6</sub> warehouse and administration buildings would begin. Zimmerman said the contract for the foundation of the warehouse will be awarded within the week and mobilization will begin within the month. Preparation for the administration building will follow after a couple of weeks.

Ladd asked Blumenfeld to explain the Maintenance Action mentioned in the Inactive Facilities D&D slide. Blumenfeld said a maintenance action has regulatory significance and is part of the RCRA permit under general counsel activities. Ladd asked if the D&D workers presently at the

site would execute removal of the Nitrogen Facility. VanSickle said a subcontractor is being solicited to execute that work.

Maybriar said a new state law in effect July 1 known as the Environmental Covenant will require deed restriction language in all documents. He said the new legislation is being studied to determine how it will affect DOE documents. Blumenfeld said the legislation calls for the deed restriction specifics to stay with the piece of property even if transferred.

### **Ex-Officio Comments**

Maybriar was named the Supervisor for the Paducah Gaseous Diffusion Plant (PGDP) effective May 1 and his position as acting ex-officio becomes permanent.

Williams said he is concerned with the public perception of activities at the PGDP due to the language used in documents, noting that even DOE and the regulators often have difficulty discerning meaning. Williams said concise meaning in document text might have pre-empted the recent move to dispute between DOE and the regulators to settle a perceived difference of opinion.

### **Task Forces/Presentations**

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

##### **Scrap Metal Removal Project**

Eadens provided a presentation on the Scrap Metal Removal project.

Smart asked if the 7,000 tons of scrap metal disposed to date includes the nickel ingots. VanSickle said no, the nickel ingots have not been disposed of.

Russell asked about the future expectation of the site when all of the scrap metal has been removed. He said undesignated burial grounds are suspected underneath some of the scrap metal. He asked what would be the ongoing actions at the site. Blumenfeld said the site would be investigated after the scrap metal is removed. She said burial grounds are suspected under the old drum mountain. Russell asked if hot spots would be identified before remediation of the soil. Blumenfeld said a hot spot removal activity is not planned but the site investigation sampling activities will determine if there are hot spots. Dollins said this investigation will be included with the Surface Soils Operable Unit. Russell said he has requested a graphic of the entire site that shows the end state and how each site is affected by different activities. Williams said technology, such as 3-D modeling, is very beneficial for the projects showing interaction and helping to determine where remedial actions are needed. Kay recommended the task force draft a recommendation requesting cleanup measures for the site in order for DOE to issue a written response to this issue.

##### **DOE Material Storage Area Project**

McCorry provided a presentation on the DMSA project.

Lee asked how the shipping problems have been corrected. VanSickle said when the shipping operations were suspended; a top to bottom review was conducted on all programs involving waste characterization, packaging, shipping, manifesting, Department of Transportation regulations, and several more. A complete review of processes was initiated with training, procedures, subcontractors, coordination with disposal sites, internal auditing procedures, quality assurance, engineering procedures, etc. He said modifications have been made and shipments have resumed to all disposal sites except NTS. He said the recertification from NTS should be finalized in June.

### **Water Quality Task Force**

Smart said the Water Quality task force discussed the Kentucky Pollutant Discharge Elimination System permit. He said the task force would like to be part of the discussion when the new permit is written. He said the Surface Water Operable Unit sampling will be initiated in June 2005.

Smart said the Commonwealth of Kentucky has filed for another 15-day extension on the C-400 Source Removal ROD. Maybriar said the extension was filed to modify language and concern of some details. He said the deed restriction language has slowed down the approval of the document. He said all parties are working together to resolve the issues.

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

The Long-Range Strategy/Stewardship did not meet in May.

### **Community Outreach**

#### **Web Site Update**

Brandstetter presented the new CAB Web site. She said the previous web address links to the new web address, which is [www.pgdpcab.org](http://www.pgdpcab.org). Lee requested that project updates be added to the new web site. Brandstetter said she would work with BJC to make this possible.

### **Review of Workplan**

Kay asked if there were any proposed modifications to the workplan. McCorry suggested that Polston provide a brief presentation in August or September on the infrastructure role and their intentions on interaction with the CAB. Russell requested adding the presentation of the 3D model and an overview of the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study Workplan. Cook said an additional line needs to be incorporated on the Workplan to include the Limehouse, Contaminated Item Incinerator, and the West End Smelter.

## **Review of June Agenda**

McCorry said she would provide a brief overview of the Chairs Meeting held in Savannah River for the June Board meeting.

## **Action Items**

All action items are closed.

## **Subcommittee Reports**

### **Executive Committee**

McCorry said at the Chairs Meeting held in Savannah River a letter was drafted to Energy Secretary Bodman recommending that DOE direct the offices and agencies where former Environmental Management (EM) sites will be transferred to develop policies establishing local advisory boards and other public participation opportunities similar to those that currently exist within EM. The letter also requests development of a mechanism whereby the local advisory boards, regardless of their affiliation within DOE, can continue to meet in a national setting to discuss issues of common concern and to share lessons learned. McCorry requested approval of the Board for her signature to be added to this letter. **The Board approved McCorry's signature to the letter by consensus.**

Dollins said McCorry did an excellent job representing the Paducah CAB.

## **Final Comments**

Lee requested the project charts that were prepared for the CAB be updated quarterly and distributed to all Board members. Dollins said it would be provided at the June meeting.

The meeting adjourned at 8:10 p.m.

# Progress at the PADUCAH PROJECT

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Update to the Citizens Advisory Board

May 19, 2005



**Rachel Blumenfeld**  
**U.S. Department of Energy**  
**Chief Operating Officer**  
**Portsmouth/Paducah Project Office**



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

- Boundary change complete
- Site preparation work substantially complete
- Electricity is now available to the site
- Construction of warehouse and administration buildings to begin soon
- Facility 90% design work completed in March 2005 and undergoing DOE review and approval



Underground utility connection points rise from DUF<sub>6</sub> plant site



# DMSAs

- Drummed material being removed, sorted, characterized, segregated, and repackaged
- Completed shipments for disposal of DMSA OS-17 LLW

## April

- Characterized 2,400 cubic feet
- Packaged 2,800 cubic feet
- Shipped 9,400 cubic feet

## Project Life

- 635,000 of 866,000 cubic feet
- 272,000 cubic feet
- 238,000 cubic feet



Coolers in DMSA OS-15

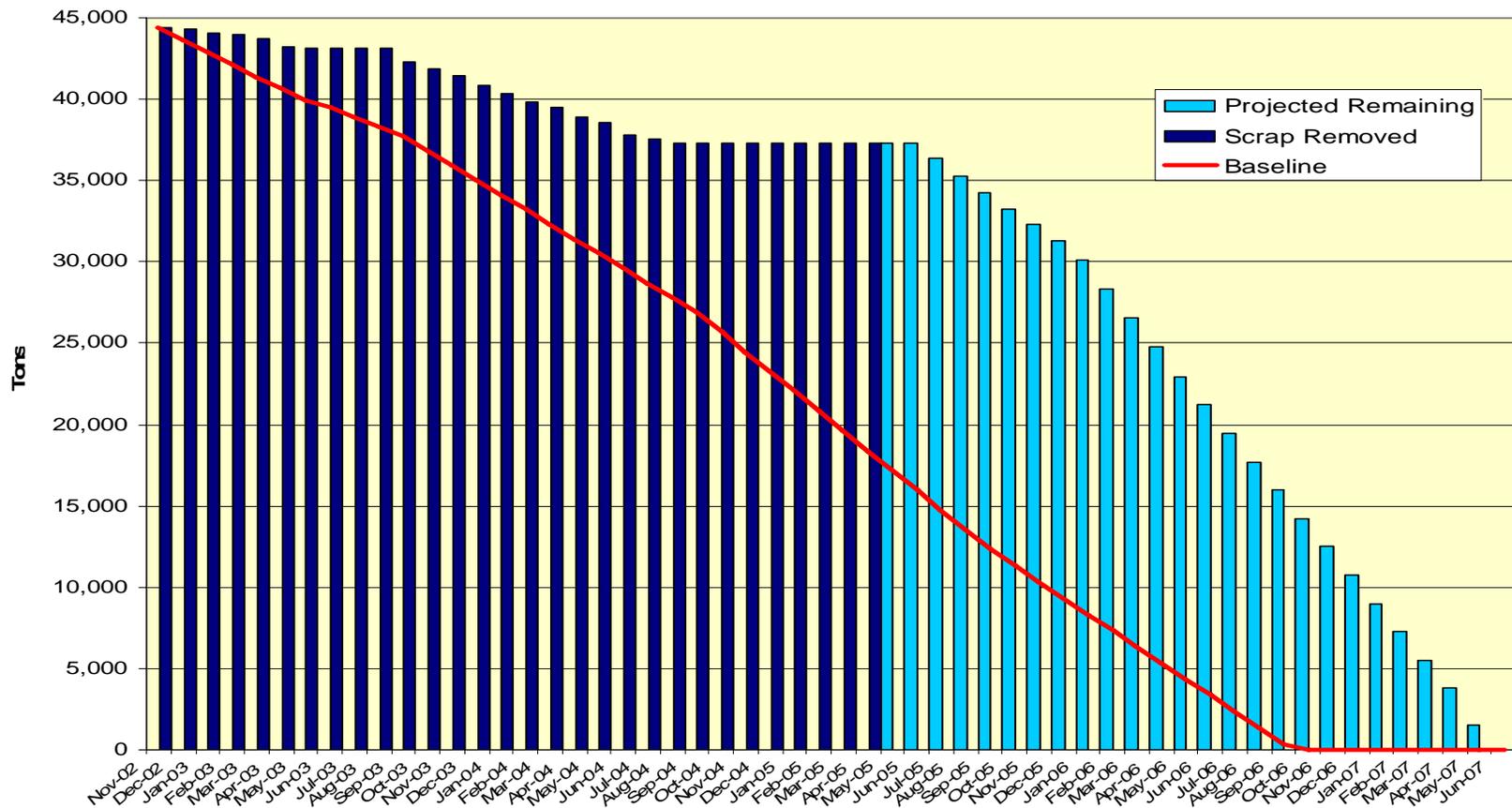


Cutting down coolers for packaging



# Scrap Metal Removal

- Scrap metal shipments continued to be suspended during April
- D-Yard field crews continue to downsize scrap; over 2,100 tons backlogged and ready for loading/shipment
- NTS provided an assistance visit on waste disposition issues week of May 9
- NTS recertification audit scheduled not later than June 13



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



# Scrap Metal Turnings

- Approximately 1,800 of 3,000 drums of machine turnings processed through April 13, and ready for disposal pending security approval
- All 3,000 drums to be disposed at Envirocare by October 2005



Processing drums  
of metal turnings



# C-410 D&D

- Completed equipment demolition in Sector 1, Zone 21
- Completed asbestos abatement activities in Zone 21, and collected clearance samples
- Completed extension of construction power to one of five cranes in building for supporting D&D
- Initiated packaging of low-level waste scrap metal (platforms, railings, walkways, structural steel) from the HF Tank Farm



Cutting piping using hydraulic shear



Glovebagging asbestos in Zone 21



# Inactive Facilities D&D

## **Nitrogen Facility**

- Received regulatory agency approval to remove as a Maintenance Action; developed RFP for removal

## **Limehouse, Contaminated Item Incinerator, and West End Smelter**

- Received KDEP and EPA approval of the Removal Notification
- Engineering Evaluation /Cost Analysis under review
- Initiated development of Action Memorandum

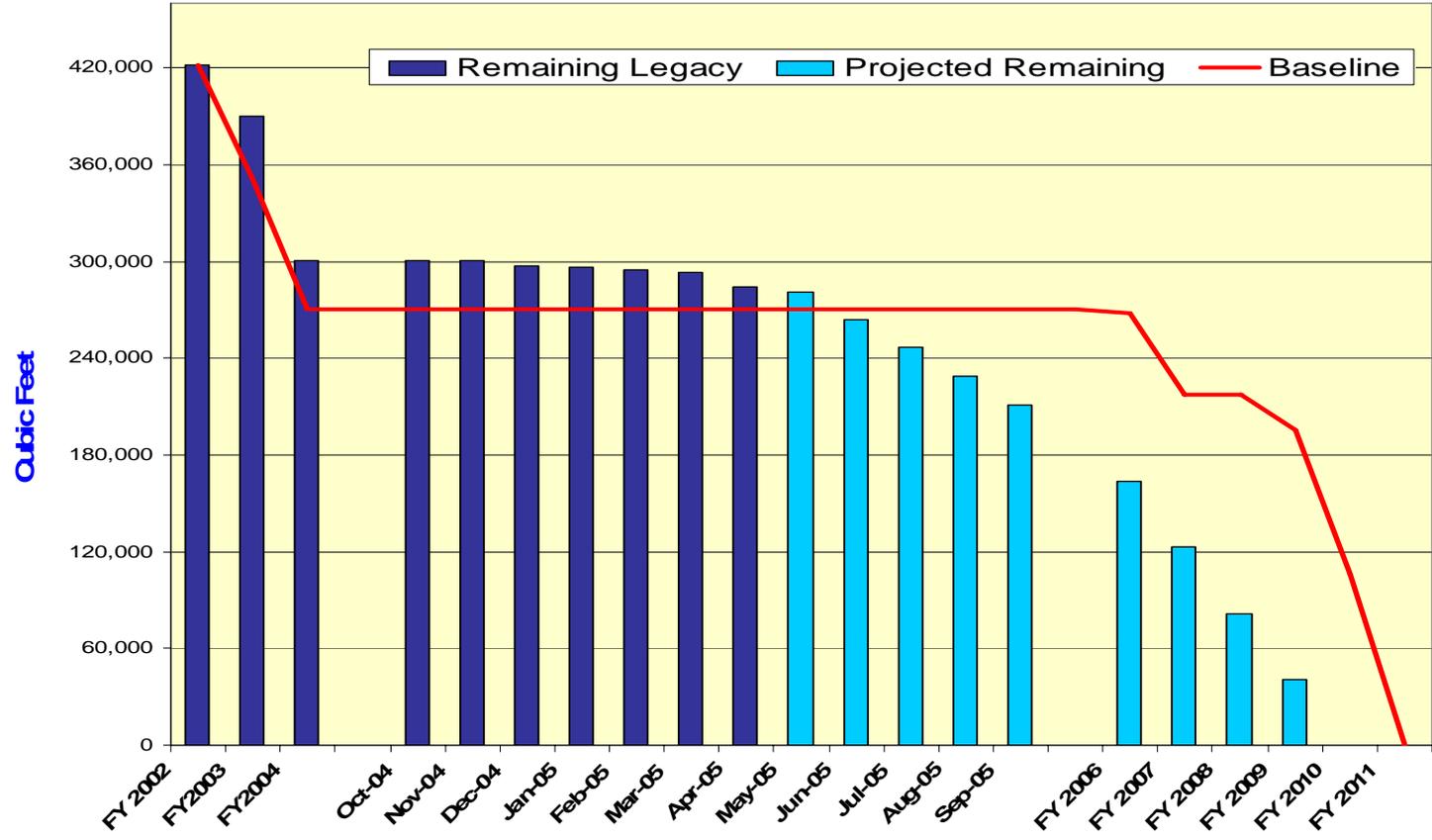


C-746-A West End Smelter



# Legacy Waste Disposition

- Disposed 2,183 cubic feet of newly generated and Agreed Order waste in the C-746-U landfill
- Shipped 8,497 cubic feet of Agreed Order waste to Envirocare
- Shipped 226 cubic feet of newly generated waste to off-site treatment/disposal
- Continued processing Agreed Order waste for landfill and Envirocare





# Groundwater Operable Unit

## **C-400 ROD**

- ROD approval anticipated in late 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

## Surface Water OU

- D2 Sampling and Analysis Plan (SAP) approved by Kentucky, following resolution of issues (previously approved by EPA)
- Sampling to be initiated in June

## North-South Diversion Ditch

- D1 Final Remedial Action Report submitted to regulators May 12, 2005
- Field work completed August 17, 2004



# Burial Grounds Operable Unit

## Project Status

- All regulator comments will be incorporated into RI/FS Work Plan
- D1 RI/FS Work Plan to be submitted to regulators by June 30, 2005



The C-404 landfill



# Transition to New Contractor

## Transition Status

### -- Infrastructure

- Infrastructure awards announced March 16, 2005
- Swift & Staley Mechanical Contractors, Inc. awarded Paducah contract
- Transition underway, to be completed by June 26, 2005

### -- Remediation

- The procurement process is continuing
- Bechtel Jacobs continues to perform the remediation work





# **Scrap Metal Removal Project**

**Presented by Barry Eadens  
Waste Operations Task Force  
May 19, 2005**



# Scrap Metal Description

- A previously estimated 54,000 tons of scrap metal existed at the PGDP after disposal of Drum Mountain.
  - Includes about 9,700 tons of nickel ingots
  - About 7,000 tons disposed to date
- This projects involves the removal of an estimated 26,700 tons of general scrap metal, 2,000 tons of aluminum ingots, and about 8,000 tons (current estimate) of classified material.





# Scrap Metal Turnings

- Turnings are the shavings from the machined metal.
- Metal turnings are about 80% hazardous, so all are being managed as hazardous waste to save cost of segregating and packaging separately.
- A current estimate of 3,000 drums of machine turnings (previously estimated at 3,900) to be disposed at Envirocare by October 2005.





# Scrap Metal Turnings

- A drum of turnings is picked up and placed in a front loader and the contents are dumped onto an inspection table.
- The turnings are sorted to ensure there is no inappropriate content. The table is then dumped into the container for shipment to and disposal at Envirocare of Utah.





# Scrap Metal Issues

- Several sealand containers packaged for transport of general scrap to Nevada Test Site (NTS) leaked moisture prior to shipment.
- Container inspection identified the presence of circuit boards and other electronic devices that conflict with the NTS-approved Paducah Scrap Metal Profiles.
- Current shipments to NTS are suspended and scrap metal waste has not been shipped off site in several months.





## Recent Accomplishments

- Approximately 1,800 drums of machine turnings have been processed and packaged for shipment and disposal through the end of April.
- More than 60% of metal turnings have been processed and ready for disposal pending approval of security plan.
- Visits have been made to Ohio (Fernald and Mound) to observe and gather information on their rail shipping campaigns.



## Schedule

- Metal turnings to be shipped to Envirocare upon DOE approval of security plan.
- Plans underway to ship 191 containers of scrap metal to Envirocare via rail this summer.
- Field work expected to begin in May 2005 for landfill disposal of approximately 30 containers of scrap metal dumped and inspected.
- NTS audit -- suspended to resolve procedural issues regarding the audit scope -- to resume not later than June 13

# Waste Disposition Task Force

## DMSA Project Update

Rhonda A. McCorry  
May 19, 2005

Characterization/Remediation of the  
Department of Energy Material Storage Areas  
at the  
Paducah Gaseous Diffusion Plant

Citizens Advisory Board Waste Disposition Task Force  
April 13, 2005

Ricky Joe Keeling  
Bechtel Jacobs Company  
DMSA Project/Facility Manager

# General Description

DOE Material Storage Areas (DMSAs):

- Various material storage areas located throughout the PGDP

- **Types of materials include:**

- **Enrichment process equipment**
- **non-process equipment**
- **surplus material**
- **scrap material**
- **LLW and PCB/radioactive waste containers**
- **UF<sub>4</sub> containers**

- Includes inside and outside areas
- Boundaries marked with blue and white roping, signs and postings as required

# Overview

- **DMSA Project Scope Statement:**

**To characterize approximately 800,000 cubic feet and disposition approximately 630,000 cubic feet of material stored in 160 DMSAs.**

- **Major Agreed Order Milestones:**

<b>Milestones</b>	<b>Status</b>
Characterize Priority “A” DMSAs by September 30, 2004	Completed
Characterize DMSA C-400-05 by September 30, 2004	Completed
Characterize Priority “B” DMSAs by September 30, 2006	Ongoing
Characterize Priority “C” DMSAs by September 30, 2009	Ongoing

# Current Status

- 45 DMSA Characterization Reports have been submitted to DOE.
- 17 RCRA Closure Plans have been submitted to DOE and KDWM.
- **~630,000 ft<sup>3</sup> of the estimated 865,000 ft<sup>3</sup> of material have been characterized for NCS, re-use, or waste (radioactive/hazardous/PCB/asbestos/solid waste/combination).**
- ~268,000 ft<sup>3</sup> of waste have been packaged for disposition.
- ~228,000 ft<sup>3</sup> of waste have been dispositioned.
- **14 Outside DMSAs are now empty with originally stored material dispositioned.**
- 3 additional Outside DMSAs are awaiting material removal and disposition.
- **Of the 14 empty Outside DMSAs, 3 have had the boundaries removed and returned to other DOE Projects.**

# Path Forward

- Complete Agreed Order Milestones for Characterization by 2006 and 2009
- **Complete RCRA Closures with KDWM approval**
- **Complete Disposition of ~630,000 cubic feet of waste by end of 2010**
- Removal of ropes and boundaries
- Return areas to the DOE or USEC

# RCRA Closure Process for DMSAs

- **Applicability:** DMSAs in which “**Newly Discovered**” hazardous waste is determined to be present in a DMSA

- **Regulatory Drivers:**

1. Agreed Order between DOE and Kentucky Natural Resources and Environmental Protection Cabinet, Section D.
2. 401 KAR 34:070. Closure and postclosure.

- **Agreed Order Options for DMSA RCRA Closures:**

1. Final (Clean Closure)
2. Partial Closure
3. Deferral of Closure to FFA (inside units only)

# RCRA Closure Process for DMSAs (cont.)

## • Requirements

### 1. Closure Performance Standards:

- a. Minimize need for future maintenance
- b. Controls, minimizes, or eliminates....postclosure escape of hazardous waste....
- c. Complies with closure requirements of administrative regulations.

### 2. Closure Plan Submittal to and approval by KDWM:

- a. Description of closure
- b. Estimate of hazardous waste inventory over life of facility
- c. Description of methods of closure
- d. Other activities to accomplish closure
- e. Schedule for closure
- f. Notification of closure to and approval by KDWM

# RCRA Closure Process for DMSAs (cont.)

## 3. Closure Implementation

## 4. Closure Report and Certification

## 5. Schedule for DMSA RCRA Closures under the Agreed Order:

- a. **Closure Plan Submittal** - within 120 days of completion of characterization of a DMSA
- b. **Approval or NOD by Cabinet** - within 45 days of receipt of closure plan
- c. **Completion of Closure** - within 180 days of approval of closure plan
- d. **Submit Final Closure Report to Cabinet** - within 60 days of closure
- e. **Approval or NOD by Cabinet** - within 30 days of receipt
- f. **If NOD received, DOE to respond** - within 30 days of receipt
- g. **Approval or 2nd NOD** - within 30 days of receipt
- h. **Invoke consultation process or submit new plan** - within 30 days of receipt

Q & A