



Paducah Gaseous Diffusion Plant
Citizens Advisory Board

May 20, 2010

Chair
Judy Clayton

Chair-Elect
Ralph Young

Board Members
John Anderson
Allen Burnett
Robert Coleman
David M. Franklin
Jonathan Hines
Shirley Lanier
Margaret Morgan
Dianne O'Brien
Elton Priddy
Alex Roman
Mark Sullivan
Don Swearingen
May Louise Zumwalt

Board Liaisons
Reinhard Knerr
DOE DDFO

Buz Smith
DOE Federal Coordinator

Ed Winner
*Division of Waste
Management*

Turpin Ballard
*Environmental Protection
Agency*

Mike Hardin
Fish and Wildlife Resources

Stephanie Brock
Radiation Health Branch

Support Services
EHI Consultants, Inc.
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Agenda for the May Board Meeting

6:00

Call to order, introductions

Review of agenda

DDFO's Comments

-- 20 minutes

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 5 minutes

Subcommittee Chair Comments

-- 10 minutes

Presentations

-- 15 minutes

Administrative Issues

-- 15 minutes

Public Comments

-- 15 minutes

Final Comments

Adjourn



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes May 20, 2010

The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky on May 20, 2010, at 6 p.m.

Board members present: Judy Clayton, Chair; Ralph Young, Vice-Chair; John Anderson; Robert Coleman; Shirley Lanier; Maggie Morgan; Dianne O'Brien; Elton Priddy; Alex Roman; May Louise Zumwalt

Board members absent: David Franklin; Ronnie Rathman; Mark Sullivan; Don Swearingen; Jonathan Hines

Board Liaisons and related regulatory agency employees: Stephanie Brock, Kentucky Radiation Health Branch (KRHB); Nathan Garner, KRHB; Ed Winner, Kentucky Department of Waste Management (KDWM); Gaye Brewer, KDWM; Turpin Ballard, U.S. Environmental Protection Agency (EPA)

Deputy Designated Federal Official: Reinhard Knerr

DOE Federal Coordinator: Buz Smith

Facilitator: Kevin Kytola, Sapere Consulting

U.S. Department of Energy (DOE) related employees: Rich Bonczek; DOE, Joe Tarantino, Paducah Remediation Services (PRS); Allen Burnett, Diversified Management Consultants (DMC); Barbara Mazurowski, Los Alamos Technical Consultants of Kentucky (LATA KY); Bill Branz, LATA KY; Curt Hull, Stoller; Steve Brinkman, Stoller; Scott Smith, Swift & Staley; Janet Miller, Performance Results Corporation (PRC); Jeff Carman, PRS; Dennis Ferrigno, PRS; Sarah Roman, LATA KY; Suzanne Clinton, EHI Consultants (EHI); Eric Roberts, EHI; Bruce Gardner, PRS

Public: Gary Vander Boegh; George Johnson

Introductions

Kytola welcomed everyone and allowed for round-table introductions. **Kytola** reviewed agenda, the scope of the CAB and stated fifteen minutes are allotted for public comment and that members of the public must sign in to speak.

Deputy Designated Federal Official Comments

Knerr presented project updates to the Board. All presentations are available on the CAB Website at www.pgpcab.org. Questions and answers (paraphrased) appear below.

Question/Comment	Answer
<p>Clayton: With regard to bidding process, I'm wondering how there can be such a disparity between what a bidder bids and what DOE anticipates the cost will actually be?</p>	<p>Knerr: There are certain things that any bidder will not understand up front. There is a great deal of information that is difficult to incorporate in a Request for Proposals and there will always be some type of discrepancy in a bid this large. The simpler the scope of a given project, the more accurate the cost estimates will be and the reverse is also true.</p>
<p>Clayton: Do you then anticipate that the bidder will come back and ask for more money?</p>	<p>Knerr: Yes, we will go through a process where we align the contract with the work scope and correct discrepancies that, for whatever reason, occurred. In some cases, we're dealing with sensitive information that cannot be included up front.</p>
<p>Clayton: I guess what I'm asking, then, is what criteria was used when awarding the contract?</p>	<p>Knerr: The criteria that was used was specified in the RFP to all the bidders who know exactly what the criteria are. We will identify which pieces of the work scope are focused on discriminating factors. I believe Burial Grounds was one as well as D & D activities. In the scheme of things, there is not a large discrepancy considering the size and scope of the project.</p>

DOE Federal Coordinator Comments

Smith stated he would like to recognize former CAB Member, **Allen Burnett**. **Smith** stated Burnett is a huge loss to the CAB and that his experience and expertise will be greatly missed. During Burnett's tenure as Chair, 13 quality recommendations were passed. **Smith** presented Burnett with a plaque featuring a gavel specifying his years of service as a CAB Member (March, 2005 to May, 2010) and as Board Chair (November, 2006 to September, 2008). Chair **Clayton** stated she feels Burnett's loss as a personal friend and as Chair of the CAB and presented him with a letter of appreciation on behalf of the CAB.

Liaison Comments

Winner, KDWM, thanked the CAB Members who appeared in the video produced for STGWG (State and Tribal Government Working Group) members who visited Paducah in April.

Ballard, EPA, commented that the Burial Grounds Feasibility Study is an important document and encouraged the CAB to delve in and provide feedback as to the preferred alternative. Also, the CAB could perhaps help to make the document more accessible when it goes out for public comment. **Ballard** said he feels the organization of the document is an improvement over the remedial investigation report. **Kytola** asked what form should CAB input take and **Knerr** responded that the CAB could provide feedback in the form of a Recommendation.

Subcommittee Recommendations/Comments

Executive Committee

Clayton reported that she, Morgan and Young attended the Chairs Meeting in Oak Ridge April 27-29, 2010. Assistant Secretary Inés Triay was in attendance and, as a follow-up to that, the CAB will consider a Recommendation on Baseline Funding Support.

Groundwater Subcommittee

Morgan reported the Subcommittee met and considered the Surface Water Operable Unit RI/FS Scoping document. **Morgan** said it was great to again see an open line of communication throughout the process.

Future End Use Subcommittee

Young reported a group of focus meetings were held a week ago some CAB Members (Morgan, Lanier) participated in the process. **Morgan** commented the process was really good and she believes KRCEE intends to give people time to make their preferences known. **Young** continued saying the next step in the process is public meetings which will become broader and broader ultimately leading up to their report that should be issued in the fall. One of KRCEE's findings has been that the public is perhaps not as well informed as it should be on the history and function of the PGDP site. They have identified a need to educate members of the public in this regard and plan to allocate funds toward developing some educational materials.

Community Outreach

Coleman stated he had participated in the process of planning the Eco-Fair which was held at the PGDP site May 11th and 12th. **Young** reported he attended the fair and there were lots of kids participating in the event. **Smith** stated a wrap-up meeting on the event is planned for Friday. **Smith** continued saying the event went well, the weather cooperated, and the Fair was fortunate to have many

partners participating and providing activities and demonstrations for the sixth-graders. Also, it was important to have CAB members in attendance in order to raise awareness about the CAB and the important work they do. **Smith** stated he'd received a lot of positive feedback from the participating teachers and schools.

Risk Presentation

Bonczek, DOE, was introduced and gave a presentation entitled “Risk Assessment and Risk-Based Clean-Up”. All presentations are available on the CAB Website at www.pgpdcab.org. Questions and answers (paraphrased) appear below.

Question/Comment	Answer
<p>O’Brien: Those cancer studies are not done with humans, right?</p> <p>O’Brien: How many of these risk management figures go back to studies based on self-reported data?</p>	<p>Bonczek: For things like vinyl chloride they use industrial exposures for humans. With TCE, there are animal studies.</p> <p>Bonczek: There are actually two different things that are done. There is the risk assessment world that asks “what kind of risk might occur if one is exposed today?”; then there are health assessments that look at the population and asks if there are effects from exposure at the site. At the Paducah site they really have documented health risks.</p> <p>Ballard: There is a hierarchy of information at the Paducah site that is toxicological information. At the highest level is what’s called Integrated Risk Information System (IRIS). In order to be included in IRIS, data must go through a rigorous peer review by toxicologists to look at the source of information and validate it.</p> <p>Bonczek: There are all kinds of parameters. What’s important to the risk assessor is following the methods that EPA has laid out modified by KY and DOE input and that those risks are being managed in such a way that the guidelines are always adhered to.</p>

Administrative Issues

Recommendation 10-05, Recommendation on Baseline Funding Support

Clayton reported the recommendation brought forward at the Chairs meeting and because of that, the CAB must give a simple up or down vote. The recommendation is the result of concerns that funding for baseline projects might be diverted to other projects outside Environmental Management. The recommendation requests funding continue.

The recommendation reads (in part):

We do not want to see any of the 2012 and beyond base program funds for remediation reduced or diverted away from DOE/EM. We, the EM SSAB Chairs, encourage DOE/EM to request, at a minimum, continued base program funding for all planned projects. In maintaining base program funding, DOE/EM will continue to reduce risks to human health and the environment – a benefit to all citizens.

We applaud all of the DOE/EM cleanup successes of the past couple of years and look forward to a continued, determined effort focused on maximizing cleanup efforts across the EM complex. The EM SSAB Chairs invite DOE/EM to discuss this issue at the fall 2010 Chairs' meeting.

Kytola polled each board member on the Recommendation.

UNANIMOUSLY APPROVED

Revision of Operating Procedure relating to Board Chair--Vote

Roberts reported the changes came about in order to give the board more flexibility by making the option available to either continue chair/vice-chair for more than one year (or not) depending on what works best for the CAB. The procedure amends the term “Chair-Elect” to “Vice-Chair”.

The amended section reads (in part):

V. BOARD STRUCTURE

A. Chair and Vice Chair: *The Board will elect by majority vote of the full Board, a Chair and Vice Chair, who will ensure that a diversity of viewpoints are considered in all Board discussions. The Chair will support the Board in a balanced and unbiased manner, irrespective of any personal views on a particular issue and see that all Board members have the opportunity to express their views.*

- 1. The election for Chair and Vice Chair will be held before September 30th of each year. The terms of the Chair and Vice Chair will be one year beginning October 1st.*
- 2. The Chair will develop draft agendas to be approved by the DDFO. The DDFO will ensure that detailed minutes of meetings are prepared and duly certified by the Chair within 90 calendar days.*
- 3. The Chair certifies to the accuracy of all minutes within 90 calendar days.*
- 4. The Chair signs the certification of a recommendation that the Board passes.*
- 5. The Chair assures necessary administrative support for the committees and requests support through the DDFO.*

6. *The Chair shall recommend to the DDFO candidates for positions on committees and ensure that the membership of the committees reflect the diversity of the Board to the extent practicable.*
7. *The Chair serves between regular meetings of the Board as contact for DOE.*
8. *The **Vice Chair** serves as Chair in the absence or incapacity of the Chair.*
9. *The Chair and **Vice Chair** will have other duties as assigned by the Board.*
10. *In the absence of the Chair and **Vice Chair**, the immediate past Chair, if that person still serves on the Board, shall serve as Chair of the board meeting. In the absence of the immediate past Chair, the immediate past **Vice Chair**, if that person still serves on the Board, shall serve as Chair of the Board meeting. If none of these persons is present, those Board members present shall select a chair for the meeting.*

Kytola polled each board member on the Recommendation.

UNANIMOUSLY APPROVED

**Review of Revisions to Operational Protocols--Vote
Process for Developing Recommendation from Subcommittees**

Clayton reported the Operational Protocol came about in response to a request that the CAB draft some guidelines to more formally make clear the process. A first reading of the Protocol was held at the March, 2010 CAB Meeting.

The Operational Protocol reads:

***Operational Protocol for Developing Recommendations
From Subcommittees***

Each subcommittee will research a given issue and gather additional information and data as needed. DOE or its representative will brief members on subjects pertinent to the issue.

Each subcommittee will determine if there is a need to generate a recommendation on the subject based on the briefing(s) and information.

If it is decided that a recommendation is in order, the subcommittee will:

- *Draft a recommendation and refine it.*
- *Draft a presentation detailing the technical information substantiating the recommendation. This presentation will be given at the next full Board meeting, and should last no longer than 10 minutes.*
- *Provide CAB Staff with the draft recommendation and presentation as soon as possible prior to the full Board meeting at which the recommendation will be considered. Subcommittees are strongly encouraged to issue draft recommendations to the full Board at least one week prior to the meeting so that all members have the privilege of reviewing the document and providing comments or questions.*
- *Provide draft recommendation and give prepared presentation at the next full Board meeting.*
- *Discuss draft recommendation at full Board meeting.*
- *Edit as necessary based on discussion.*

- *Vote.*
- *If consensus cannot be reached after full Board discussion, the draft recommendation will go back to the subcommittee for further refinement. In the event consensus cannot be achieved, the subcommittee can draft the ultimate recommendation to include a majority opinion.*

Kytola polled each board member on the Recommendation.

UNANIMOUSLY APPROVED

Process for Utilizing a Member of the Public in Subcommittees--Vote

Clayton reported the CAB was asked to formalize the procedure for utilizing non-CAB members in subcommittees. Clayton continued saying the CAB also had a situation where we lost a very technically valuable CAB member who then was still interested in serving on a subcommittee. A first reading of the Protocol was held at the March, 2010 CAB Meeting.

The Operational Protocol reads:

***Operational Protocol for Utilizing Members of the Public
In Subcommittee Meetings***

A potential subcommittee member may volunteer in writing. He/she may also be recruited by CAB members or DOE.

The interested party will submit a written request expressing a desire to become a member of a particular subcommittee, the reason for interest, qualifications, experience, and contact information to the chair of the subcommittee. Any other pertinent information may also be included.

The subcommittee chair will contact subcommittee members. They will consider whether the interested party would be of benefit to their subcommittee.

If the subcommittee members desire the interested party to join their ranks, the chair of the subcommittee will submit the request to the Executive Board for consideration.

If the Executive Committee approves, the chair of the Board submits a written request for consideration to the Deputy Designated Federal Official (DDFO).

The DDFO, who is authorized to act on behalf of the DFO and EM-1, approves or rejects the chair's request.

If approved, the local DOE authority will extend an invitation to the interested party. The invitation will include the specific reason for appointment and the duration of the term which will be served. In the absence of a specific date, the term of participation in the subcommittee will automatically extend through the end of the current fiscal year.

This date may be extended by written agreement between the subcommittee chair, incoming Board chair, and the DDFO. Email is acceptable for written agreement.

Once the interested party becomes a member of the subcommittee, he/she will enjoy the full privileges afforded other members in subcommittee matters. Only members of the CAB can serve as subcommittee chairs.

Any member of the public who is serving on a subcommittee who fails to benefit the subcommittee or causes disruptions may be dismissed by the DOE authority upon recommendation of the subcommittee chair.

Any member of the public who is serving on a subcommittee will not be reimbursed for any expenses associated with membership on the subcommittee.

Kytola polled each board member on the Recommendation.

UNANIMOUSLY APPROVED

**Review revision to Operational Protocol—First Reading
CAB-Sponsored Participation in Leadership Paducah**

Clayton reported the protocol allows the CAB to sponsor a CAB member to go through the Leadership Paducah Program. This protocol ensures that the CAB receives something in return. A vote on this protocol will be held July 15, 2010.

**Review revision to Operational Protocol—First Reading
Recruiting Members**

Clayton reported this operational protocol again spells out the procedure for recruiting new members. A vote on this protocol will be held July 15, 2010.

Public Comments

Kytola reminded those in attendance that all comments must be limited to topics relating to the scope of the CAB and stated that the 15 minute comment period will be divided equally among the three attendees signed up to speak.

Barbara Mazurowski, Program Manager for LATA KY, stated she and her company are very pleased to be in Paducah and LATA KY considers itself fortunate to work with a workforce so dedicated to safety and the cleanup mission. **Mazurowski** continued saying that, although LATA KY is expert in the cleanup field, they understand that they are new to Paducah and have a great deal to learn. The LATA KY philosophy is one of open communication, worker involvement, and community support. **Mazurowski** stated LATA KY is here to work safely, protect the environment, and support the community and the Department of Energy.

Mazurowski introduced Sarah Roman, Public Affairs, and Curt Hall of Stoller. Curt was born in Paducah and his father worked at the PGDP. LATA KY is committed to, above all, working safely. A website is under construction that will be up and running next week. The site will introduce the company, key staff, and spell out LATA's transition and hiring plan. Questions can be submitted on the website. Also, a hotline will be established. **Mazurowski** thanked the CAB for their time.

Gary Vander Boegh of Commonwealth Environmental Services stated he is an advocate for sick nuclear workers. **Vander Boegh** welcomed LATA KY to the cleanup project. He stated

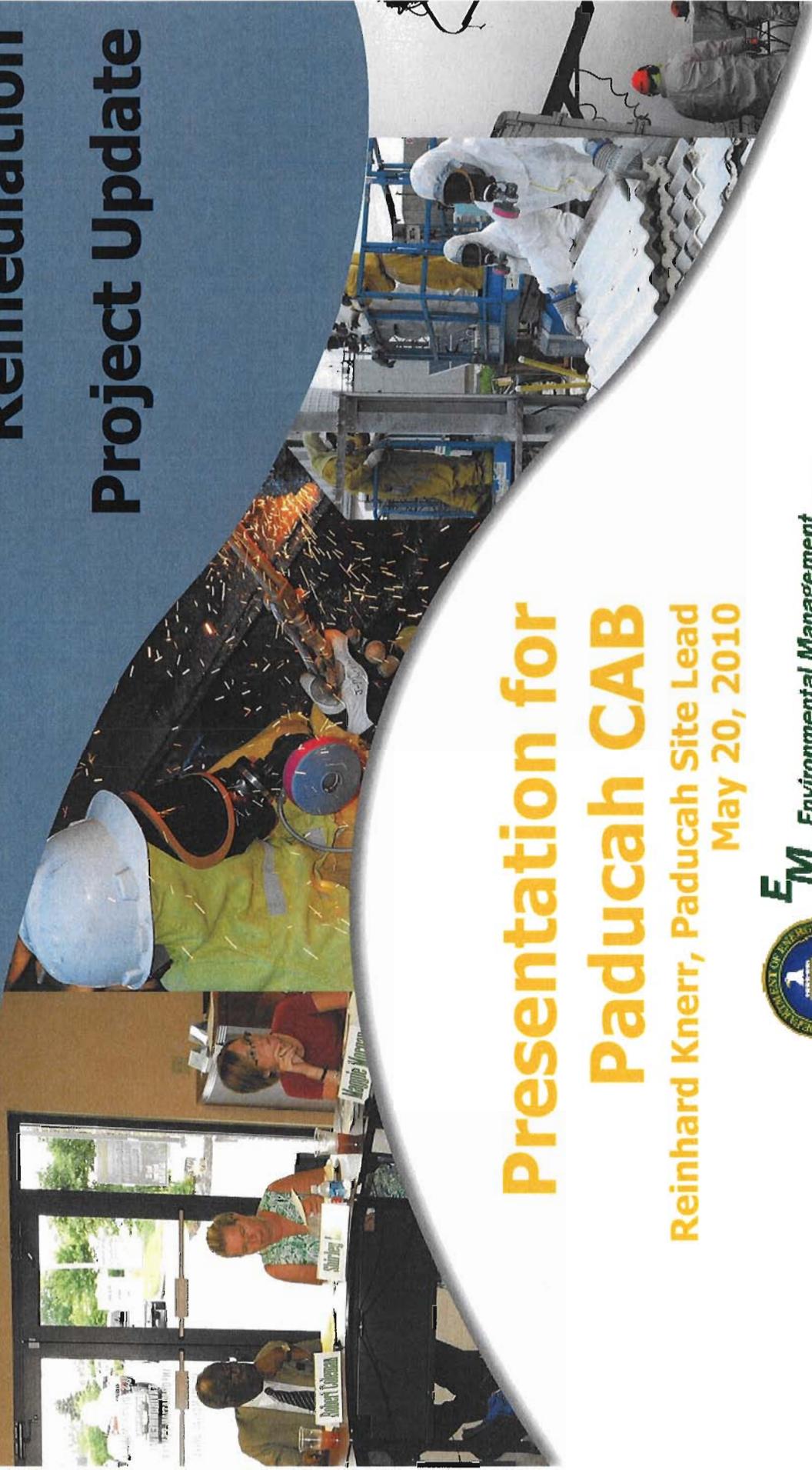
he handed out documents to the LATA President. He noted that the CAB is not the same board he made a presentation to four years ago. He stated he is glad LATA KY is going to be sharing their site with openness and providing people an opportunity to communicate on various issues. **Vander Boegh** said he would like to point out that there are many levels of contamination around the site and that he frequently uses the risk assessment presentation by Bonczek for the sick nuclear workers. He continued thanking LATA KY for taking over the contract and stated that there are many issues that LATA KY needs to be aware of, and that he appreciates the opportunity to speak to the board.

Sarah Bynum Roman stated she is Public Affairs Coordinator of LATA KY and thanked the CAB for their dedication and service. **Roman** stated she looks forward to keeping the CAB informed about LATA KY as the transition takes place. **Roman** said she has been impressed by LATA KY's respectful attitude toward the community and their sincere desire to become involved locally and make a lasting positive impression. **Roman** stated the website and hotline will be established next week; anyone can contact LATA KY through those channels and get information on the company, hiring processes, etc. **Roman** thanked the CAB for their time and attention.

The meeting adjourned at 8:20 p.m.

Solving Cleanup Challenges Through Risk Reduction

Remediation Project Update



Presentation for Paducah CAB

Reinhard Knerr, Paducah Site Lead
May 20, 2010



EM Environmental Management

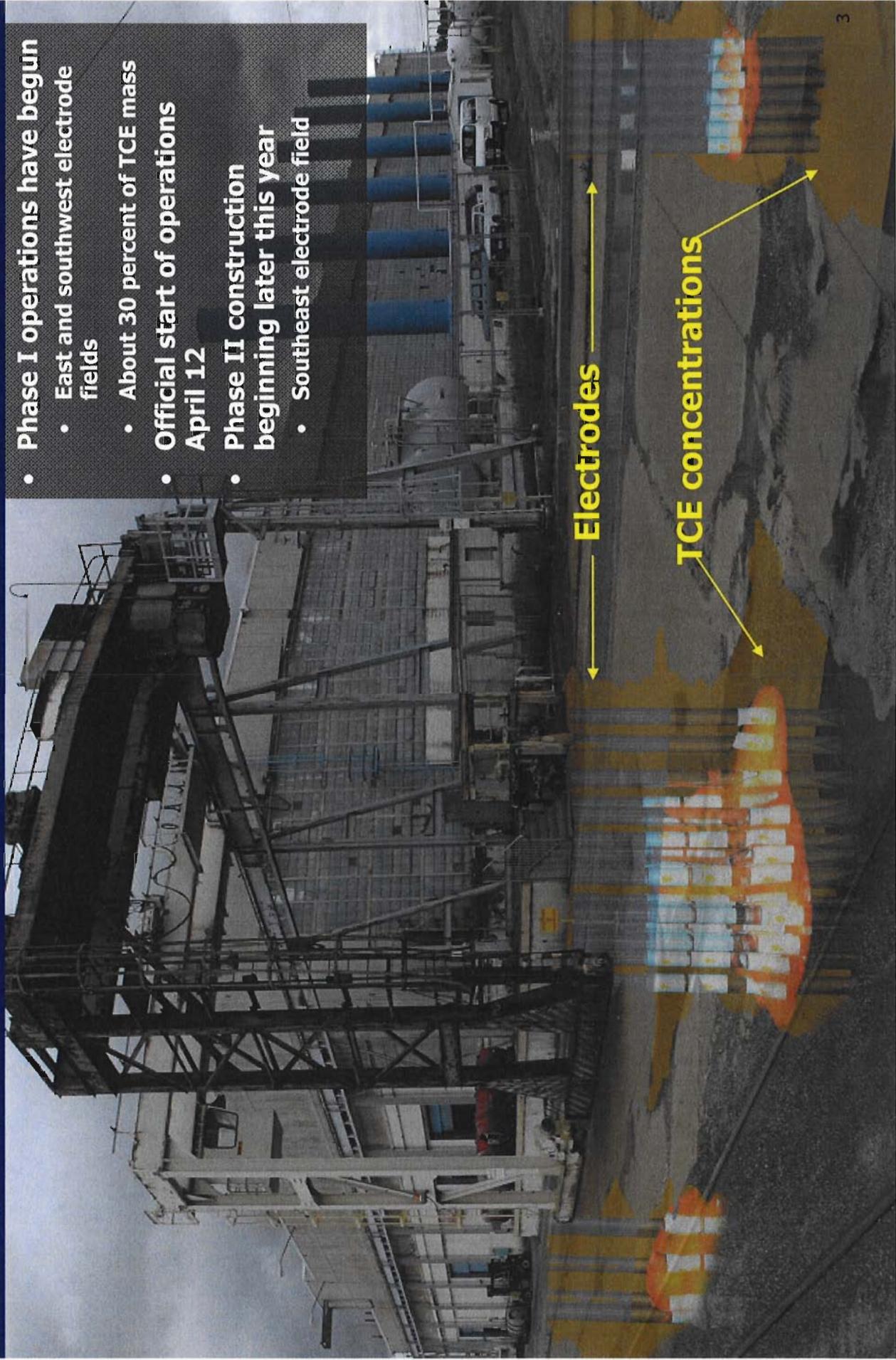
safety ♦ performance ♦ cleanup ♦ closure

Presentation Highlights

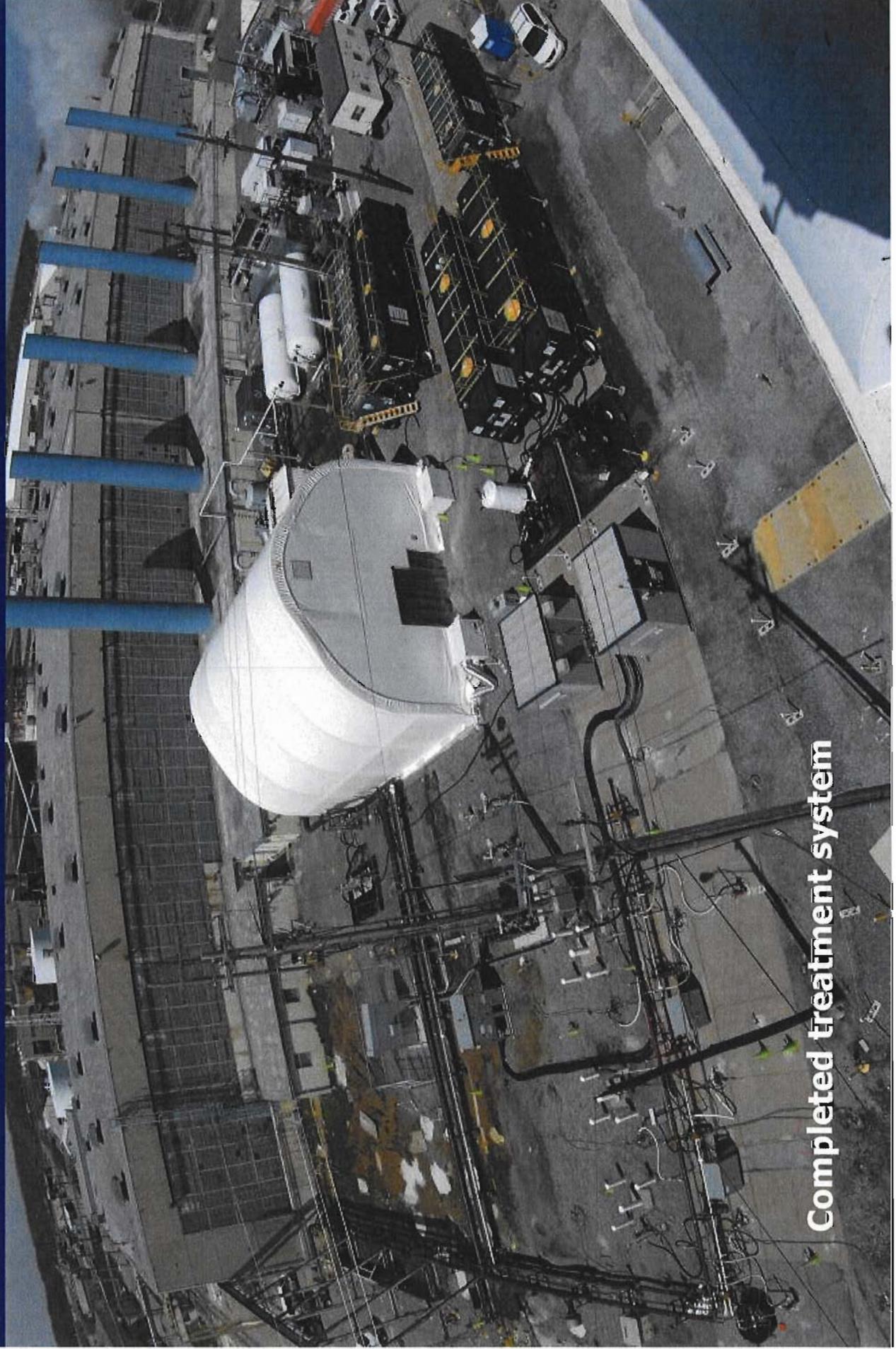
- **Environmental Restoration Projects**
 - C-400 TCE Source Removal
 - Dissolved-Phase Plume
 - Southwest Plume
 - Surface Water “Hot Spot” Removal
 - Soils Remedial Investigation
 - Burial Grounds Feasibility Study
 - CERCLA Waste Disposal Options
- **D&D Projects**
 - C-410 Feed Plant D&D
 - C-340 Metals Plant D&D
 - C-746-A East End Smelter D&D
- **Public Involvement**
 - State and Tribal Working Group
 - EcoFair 2010

C-400 TCE Source Removal

- Phase I operations have begun
 - East and southwest electrode fields
 - About 30 percent of TCE mass
- Official start of operations April 12
- Phase II construction beginning later this year
 - Southeast electrode field



C-400 TCE Source Removal



Completed treatment system

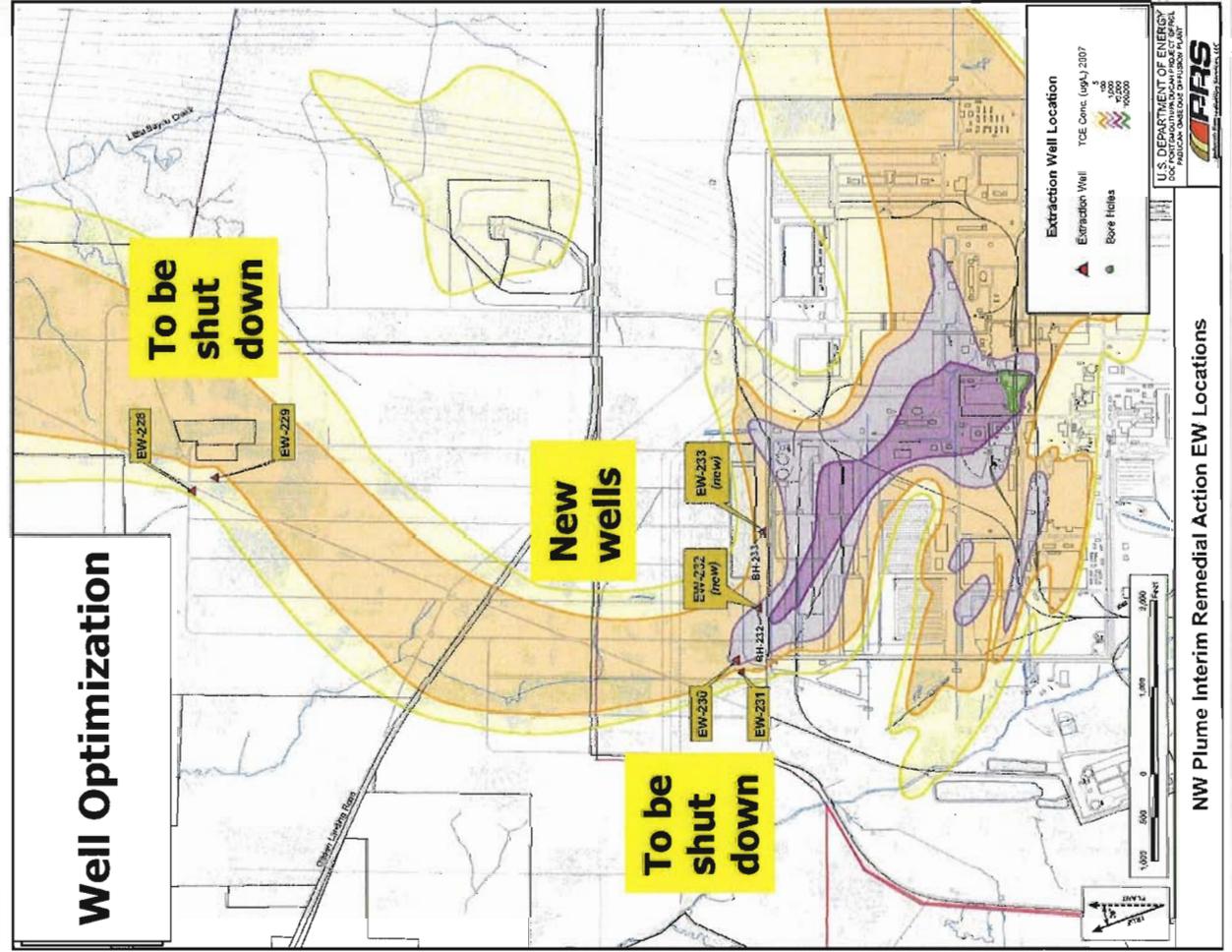
Groundwater Projects

• Environmental Monitoring System Upgrade

- Completed installation/initial sampling of 73 of 79 new wells
- Working on license agreements for remaining wells

• Dissolved-Phase Plume

- Northwest Plume Optimization
 - 2 new groundwater extraction wells now installed near the fence line to replace existing 4 wells
 - Will enhance system efficiency; goal: remove more TCE mass leaving the fenced area
 - Scheduled for July 2010 startup
- Dissolved-Phase Scoping
 - DOE, EPA, and Kentucky met last week to continue scoping process



Groundwater Projects



Installing new extraction wells for Northwest Plume Pump-and-Treat

• Southwest Plume

- Issued D2 Focused Feasibility Study in January 2010
- Issued D1 Proposed Plan in February 2010
- Informal dispute process invoked by DOE on D2 FFS on April 12, 2010
- FFA parties working to resolve
 - Affected work includes D2 Proposed Plan; D1 ROD; D0 RDWP; D0 RDR 30% Design

Surface Water

"Hot Spot" Removal

- Removed ~16,000 yd³ of sediments from internal and outfall ditches
- Approximately 80 percent complete
- Project scheduled for completion in June 2010
- Excavated areas are backfilled and restored

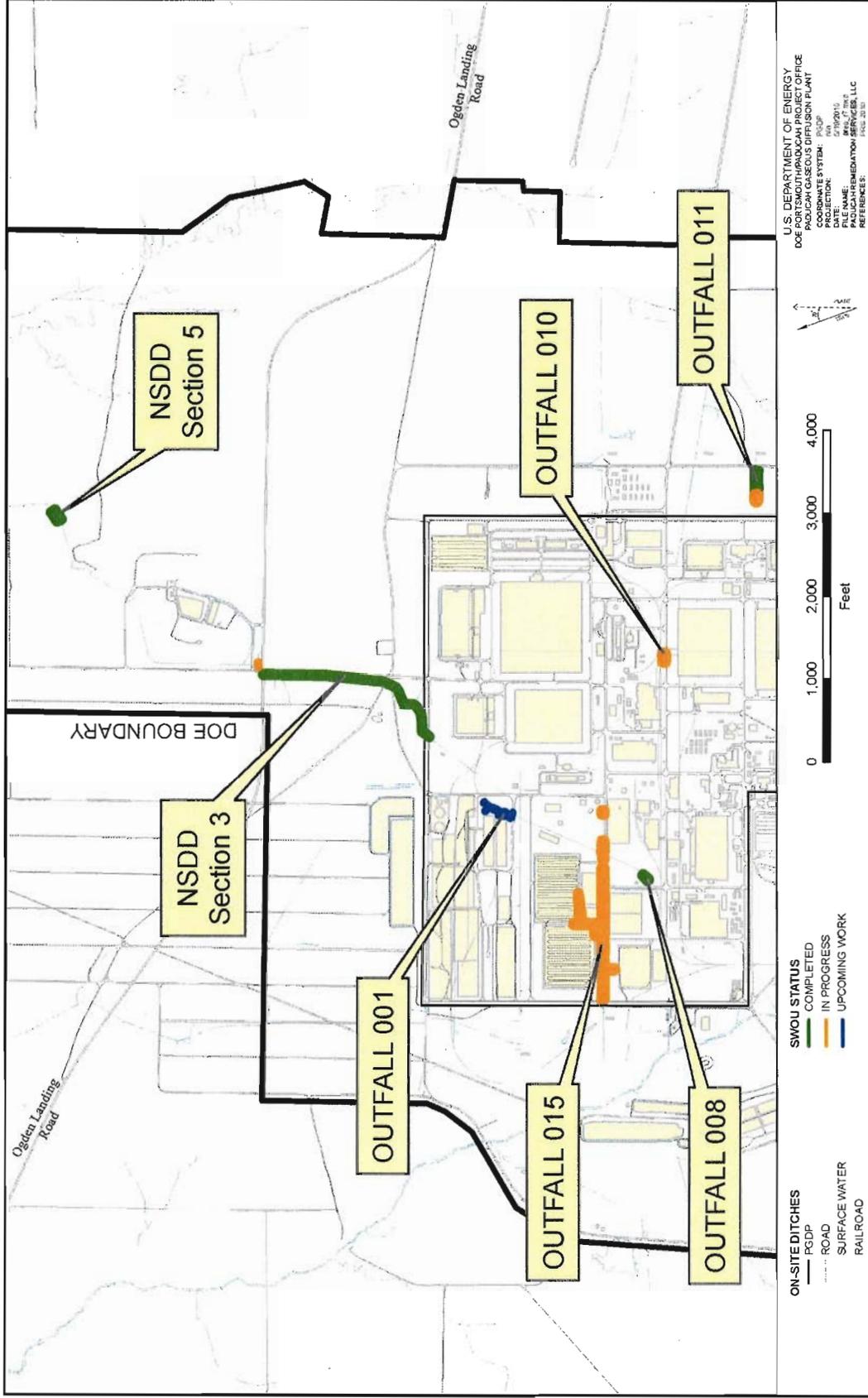
Off-Site Action

- RI/FS scoping has begun
- Also scoping ecological risk assessment with EPA and KY



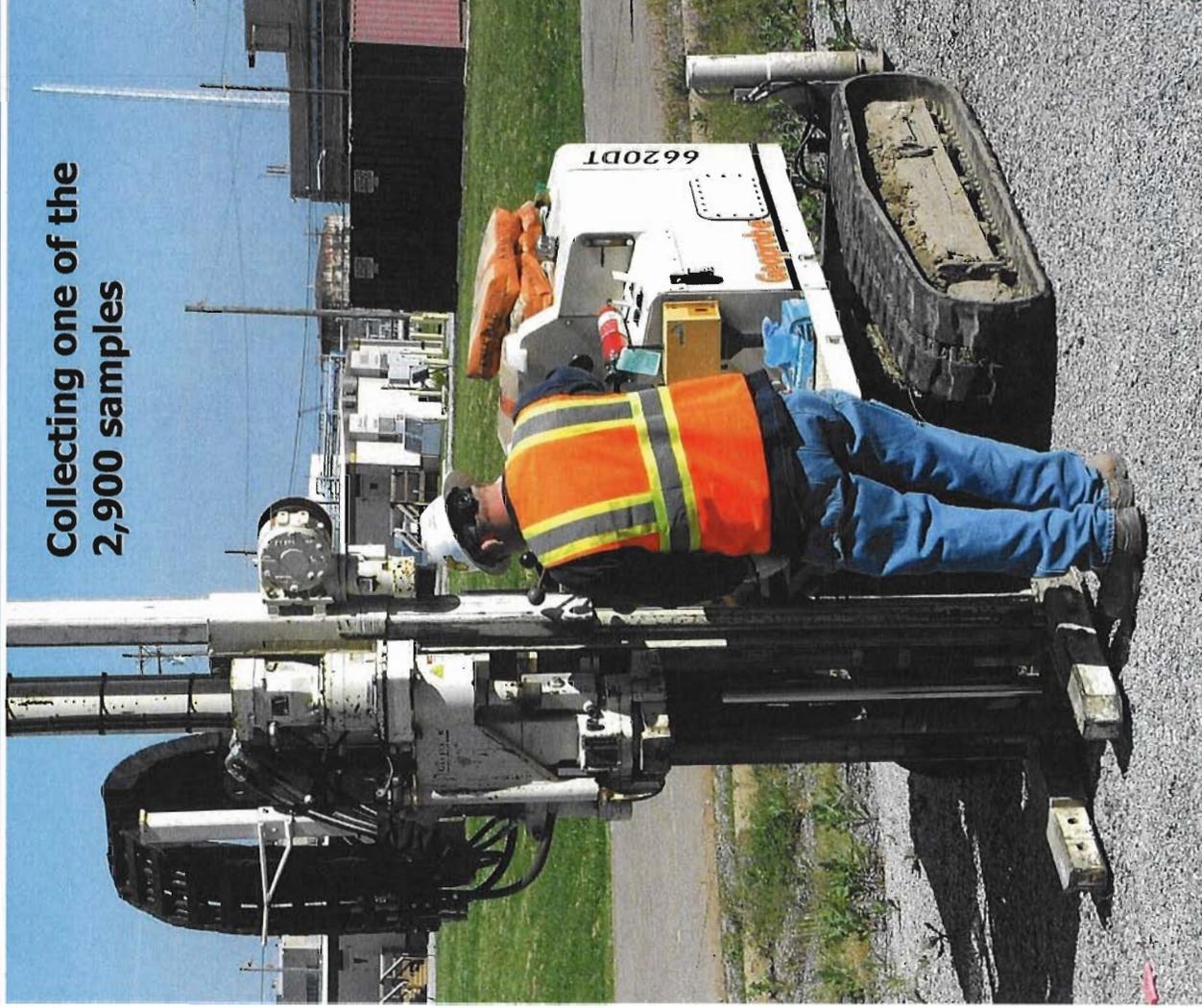
Contaminated soils are removed from the ditch leading to Outfall 015

Surface Water



Surface Water Operable Unit Removal Action

Soils Remedial Investigation



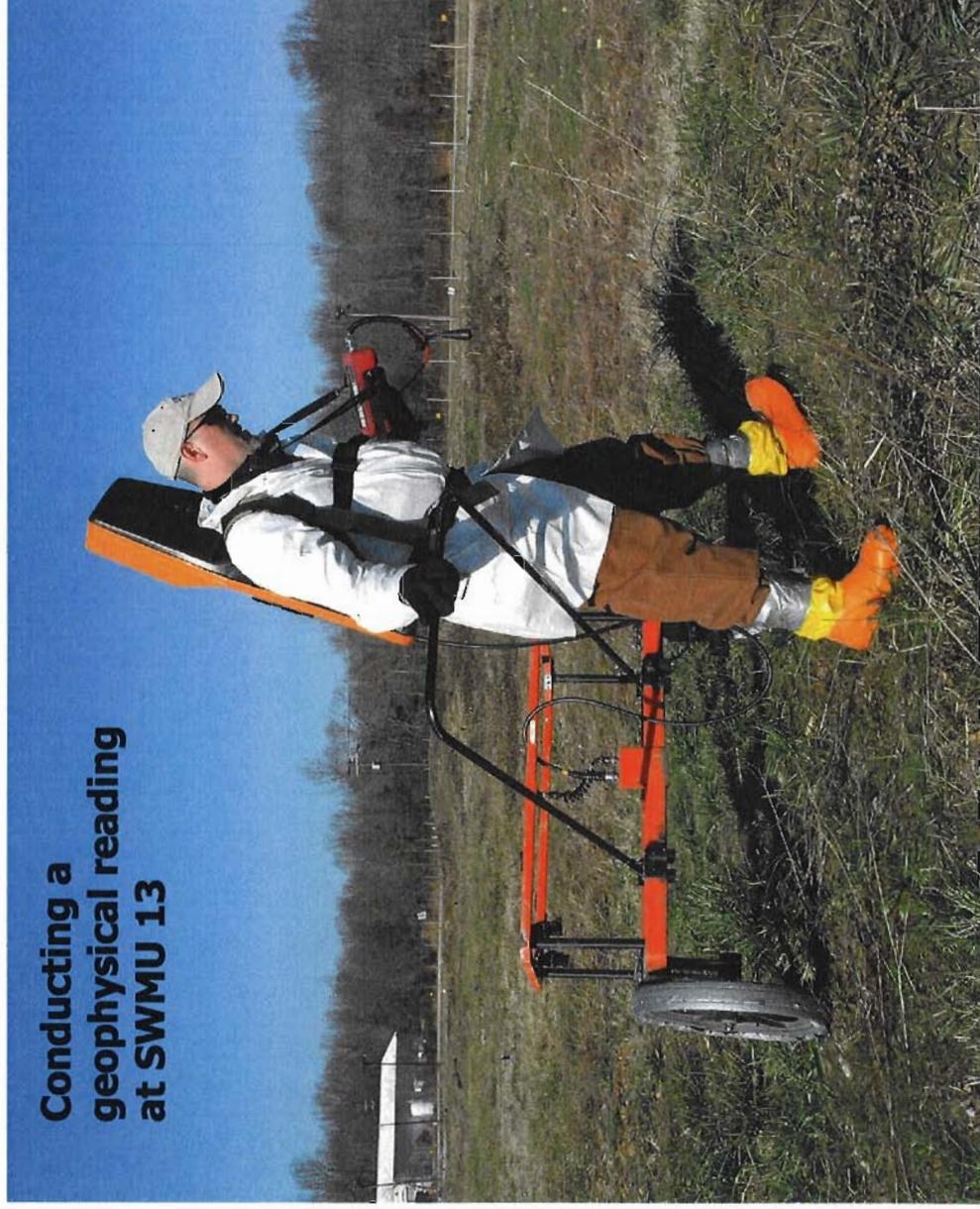
- Responding to KY/EPA comments on D2/R1 Soils RI Work Plan
 - Plan due May 28
- Sampling began in March 2010
- ~2,900 samples to be collected
- More than 1,200 collected to date
- Completion expected by June 30, 2010

Other Environmental Projects

Burial Grounds Feasibility Study

- Submitted D1 to EPA/KY on April 28, 2010
- Proposed Plan in development

**Conducting a
geophysical reading
at SWMU 13**



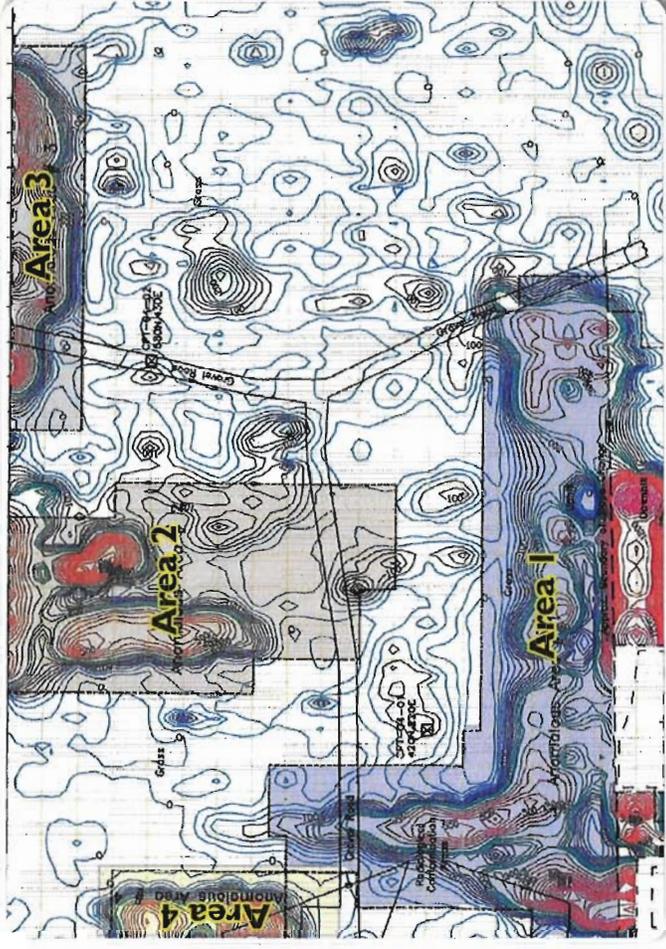
SWMU 13 (burial ground)

- Additional sampling required because of subsurface anomalies detected during BGOU Remedial Investigation
- Investigation scope
 - 17 borings to 18 ft depth
 - 2 composite samples per boring
 - 1 groundwater sample per boring (if groundwater present)
- Work Plan approved by KY/EPA
- Fieldwork scheduled to start in June 2010

Other Environmental Projects

SWMU 4 (burial ground)

- Removal Notification approved by KY/EPA
- Finalizing EE/CA and developing Action Memo



SWMU 4 burial area

CERCLA Waste Disposal Options

- Meeting with Kentucky regulators in June to discuss waste disposal options
- Finalizing RI/FS
- Public meeting to be scheduled

Contract Transition

- **LATA Environmental Services of Kentucky, LLC, awarded remediation contract**
- **Transition from PRS has begun**
- **Transition scheduled for completion late July**

Nickel Request for Proposals

- **9,700 tons of nickel at Paducah**
- **Successful bidder must**
 - Have DOE authorization to possess and process classified material
 - Declassify and decontaminate the nickel in an NRC-licensed facility
 - Start processing the nickel within 12 months of award
 - Nickel must be decontaminated to meet IAEA clearance levels
- **RFP responses are due July 28, 2010**



Nickel Request for Proposals

- **Award decision factors**
 - Technical approach and domestic and international controls 40%
 - Extent to which end use achieves DOE missions 25%
 - Environmental, safety, and health /quality assurance 20%
 - Experience and past performance 15%

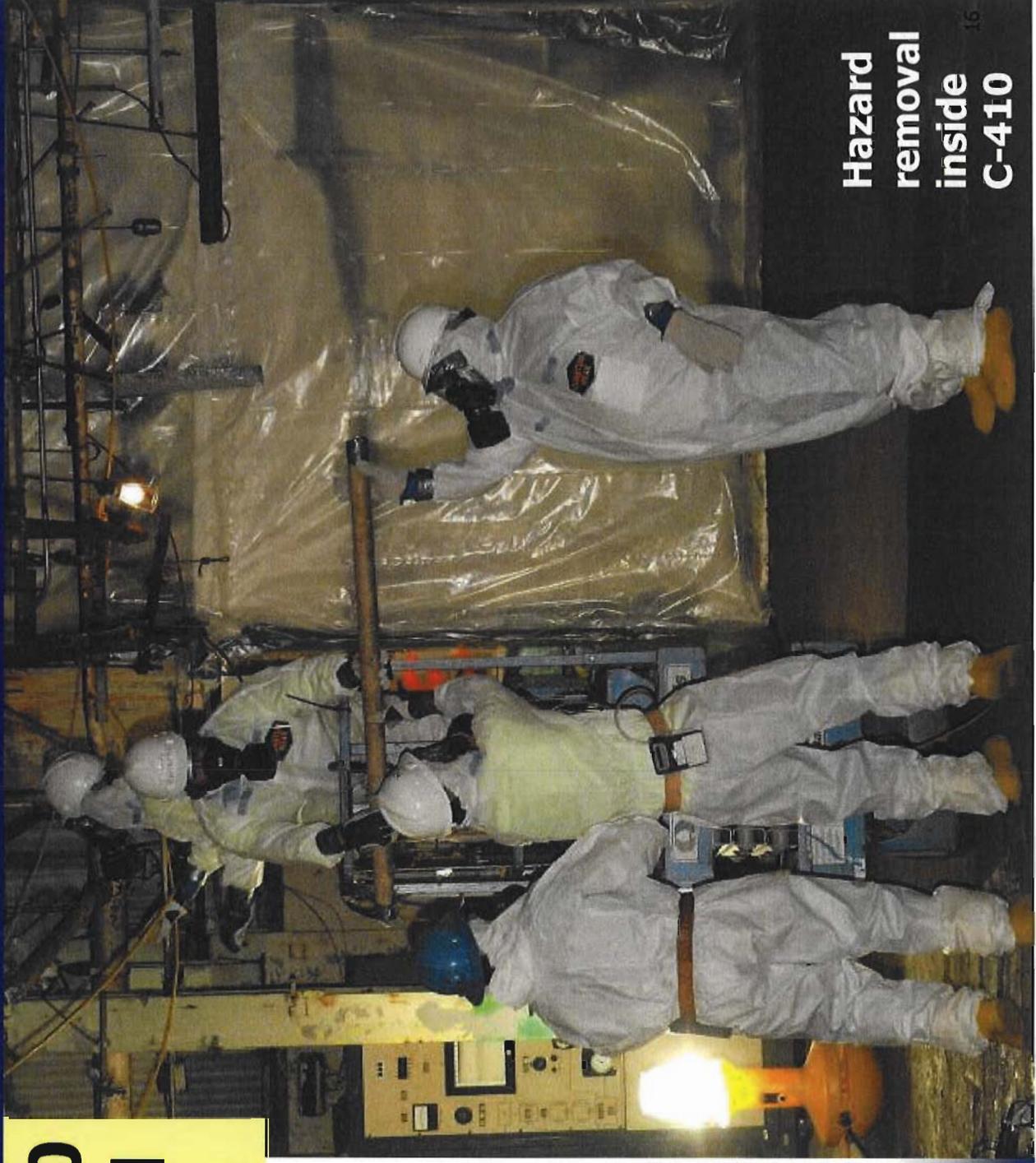


Accelerated D&D

C-410 Feed Plant



- Removed 4 of 19 cold traps once used to freeze UF_6 for collection into cylinders
- Hazard removal and elevator refurbishment are continuing



Hazard
removal
inside
C-410

Accelerated D&D

C-340 Metals Plant



Removing equipment inside C-340



- Asbestos abatement approximately 70 percent complete
- Utility systems (air, water, nitrogen lines, steam lines, sprinkler systems) are being drained
- Loose material removal completed

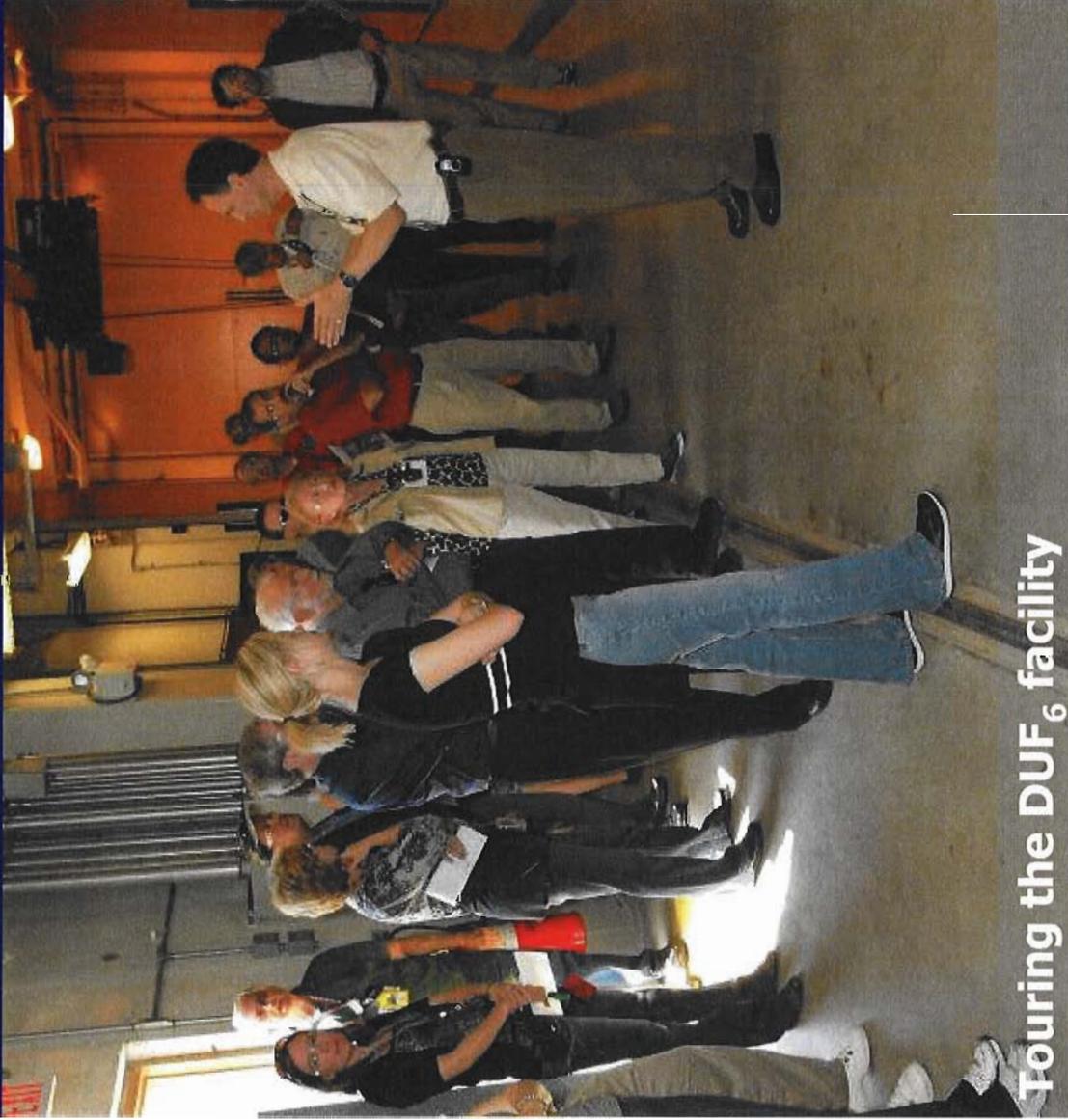
Accelerated D&D

C-746-A East End Smelter



- Process piping removal more than 90 percent complete
- Disconnected external power to building to allow removal of furnace and major equipment starting the week of May 17
- Demolition scheduled for mid-July

Public Involvement – STGWG



Touring the DUF₆ facility

- State and Tribal Government Working Group (STGWG) visited Paducah in early May
- STGWG works with DOE on remediation issues
- Representatives from the National Governors Association and the National Council of State Legislatures also attended
- Nearly 40 members toured Paducah Site, including stops at
 - C-400
 - DUF₆ Conversion Facility
 - USEC
 - C-410

Public Involvement – EcoFair 2010



Duck banding demonstration by
Kentucky Fish and Wildlife

- Held May 11-12 in West Kentucky Wildlife Management Area
- Sponsored by CAB and DOE

Public Involvement – EcoFair 2010



- Approximately 500 6th graders attended from 4 McCracken County middle schools

CPR training by PRS.

Public Involvement – EcoFair 2010



Paducah Power solar oven demonstration

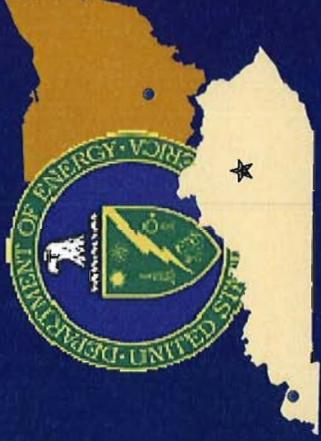
Public Involvement – EcoFair 2010



- Presenters included
 - Kentucky Fish & Wildlife
 - Paducah Remediation Services
 - Murray State University
 - Paducah Power System
 - Greater Paducah Sustainability
 - U.S. Coast Guard

PRR groundwater presentation





DOE Portsmouth/Paducah Project Office