



Paducah Gaseous Diffusion Plant
Citizens Advisory Board

January 15, 2009

Proposed Agenda for the January Board Meeting

Chair

Bobby Ann Lee

Chair-Elect

Judy Clayton

Board Members

John Anderson

Anna Brewer

Allen Burnett

Matt Duncan

Shirley Lanier

Elton Priddy

Alex Roman

John Russell, Ph.D.

Jim Smart, Ph.D.

Don Swearingen

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

Rob Gresham

Radiation Health Branch

Support Services

EHI Consultants, Inc.

111 Memorial Drive

Paducah, KY 42001

Phone 270.554.3004

Fax 270.554.3248

www.pgdpkab.org

paducahcab@bellsouth.net

6:00

Call to order, introductions

Review of agenda

DDFO's Comments

-- 20 minutes

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 10 minutes

Presentations

-- 30 minutes

Public Comments

-- 10 minutes

Administrative Issues

-- 10 minutes

Motions

- Recommendations

Final Comments

Adjourn



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

111 Memorial Drive • Paducah, Kentucky 42001 • (270) 554-3004 • PaducahCAB@bellsouth.net • www.pgdpcab.org

Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes January 15, 2009

The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky, January 15, 2009, at 6 p.m.

Board members present: John Anderson, Anna Brewer, Allen Burnett, Judy Clayton, Matt Duncan, Shirley Lanier, Bobby Ann Lee, Elton Priddy, Alex Roman, Jim Smart and Don Swearingen

Board members absent: John Russell

Board Liaisons and related regulatory agency employees: Gaye Brewer, Todd Mullins, Leo Williamson, and Ed Winner, Kentucky Division of Waste Management (KDWM); Turpin Ballard, U.S. Environmental Protection Agency (EPA); Stephanie Brock and Rob Gresham, Kentucky Radiation Health Branch (RHB)

Deputy Designated Federal Official: Reinhard Knerr

DOE Federal Coordinator: Buz Smith

U.S. Department of Energy (DOE) related employees: Rich Bonczek, DOE; Russ Boyd, PRS; Yvette Cantrell, RSI; Pete Coutts, PRS; Kim Crenshaw, EHI; Pam Dawson, PRC; Mark Duff, SEC; Tracey Duncan, PRS; Bruce Gardner, PRS; Marc Hill, CDM; Jim McVey, SST; Scott Hood, Navarro; David Hutcheson, 5H Technologies; Kevin Kytola, Sapere; Jim McVey, SST; Bill Murphie, DOE; Harmony Paulsen, Harmony Paulsen, Sapere; Eric Roberts, EHI; Roger Slavin, Shaw Group; Anne Smith, SEC; Jim Staehr, PCRC; Ted Theopolos, DOE; and Dan Wilkes, Wastren

Public: Robert Coleman, Jonathan Hines, Maggie Morgan, Diane O'Brien, Mark Sullivan, and Ralph Young

Introductions

Lee introduced Harmony Paulsen, Sapere Consulting, new facilitator for the Board.

Agenda

Paulsen asked for modifications to the proposed January agenda. Lee asked to include an update on Scenario Planning. **The Board approved the agenda as modified.**

Deputy Designated Federal Official Comments

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

Questions/Comments	Answers
Burnett: Shouldn't the U.S. Army Corps of Engineers be responsible for the water towers that were used by Kentucky Ordnance Works instead of DOE?	Knerr: Those towers were transferred to DOE when the towers were connected to the water system at the plant when it was being constructed.

Bonczek updated the CAB on a letter sent to DOE from KDWM inquiring about the United States Enrichment Corporation (USEC) lab return results lower in uranium than those of the RHB Laboratory. Both of the labs have utilized alpha spectrometry since 2001. The RHB lab utilizes hydrofluoric acid in its isotopic uranium analytical extraction procedures and the USEC lab utilizes nitric acid in its extraction procedures. DOE is working with the USEC lab to see if they can switch over to the hydrofluoric acid. DOE is currently investigating any impact that this has had on the data. It is Bonczek's belief that this difference in data is primarily around low concentrations at background levels. DOE will continue to work with RHB to establish a radioisotope analysis that is consistent with the state's radiation laboratory.

Federal Coordinator Comments

Smith expressed his appreciation to the potential Board members that had attended the meeting.

Liaison Comments

Kentucky Division of Waste Management

Winners said KDWM and DOE have been discussing the excavation of some of the Burial Grounds. The state is excited to see the electrodes insertion for the C-400 trichloroethylene (TCE) source reduction project. Winner updated the CAB on the changes in KDWM's personnel and welcomed Gaye Brewer back to the Waste Division in Paducah.

Environmental Protection Agency

Ballard said the C-400 project is a very big deal due to it being one of the largest releases of TCE in the country. EPA is very pleased to start construction on the remedy. DOE will be installing several monitoring wells to support many of the groundwater initiatives. In addition, DOE and EPA are meeting to finalize 2009 Site Management Plan (SMP) and started the preparation of the 2010 SMP to help with the uncertainties such as fund availabilities in the Federal Facilities Agreement and the new administration.

Upon Lee's request to help inform new and potential CAB members, Winner described the relationship between DOE and the regulators in regard to the CAB. Winner briefly described the reasoning behind the Federal Facilities Agreement for the Superfund site which designates both EPA and the state to participate in environmental clean-up decisions at the site. Winner is the CAB point of contact (POC) for the Kentucky Environmental Cabinet and Ballard is the EPA POC. Burnett added that the CAB can only provide advice and submit recommendations to DOE.

Presentations

DOE and the CAB presented Smart with a plaque, a clock and a letter of appreciation for ten years of dedicated service as a CAB member. Knerr thanked Smart for his advice and guidance to the Board and to DOE. Only three CAB members have fulfilled their full allotted time for membership. Murphie thanked Smart for his contributions to DOE. Smart tenured his resignation and expressed his appreciation to DOE and fellow Board members for the opportunity to be affiliated with the CAB. He expressed gratitude over the recent work of the Board since the "en masse" resignation of eight members in 2003. He recognized the work of Bill Tanner and Allen Burnett as chairs and was optimistic over the scenario planning of the current chair, Bobby Ann Lee. He challenged every future board chairperson to have a vision of where they want to take the board. Smart hoped that he had demonstrated a positive dedication to helping DOE and the stakeholders reach the most promising decision regarding the cleanup of the plant.

Lee updated the CAB on the Scenario Planning. Two of the previous presentations can be located on the CAB website. The outcome is for stakeholders to describe four possible scenarios for 20-25 years into the future for the Paducah Gaseous Diffusion Plant. Burnett asked if all groups had been identified for the End Use Group. Lee encouraged all members to send suggested stakeholders groups to CAB staff. Murphie said he endorsed what Lee is doing with the End Use Group and DOE and stakeholders will benefit from the input and consensus of the long range vision.

Public Comments

Don Wilkes, Wastren, asked if the uranium extraction issues would result in any rework of either sampling documentation or field activities. Bonczek said fortunately uranium analysis data is available through mass spectrometry and for radioisotopes. For those situations where samples didn't match state analysis for radioisotopes the results are accurate for the mass spectrometry. Murphie said DOE will continue to study the uranium extraction issues and report to the CAB on the full explanation. No conclusion has been established.

Administrative Issues

The Spring Chairs meeting is scheduled for March 16-19 in Savannah River, Georgia. Lee asked all members to contact staff if interested in attending the meeting and to send all suggestions for the Paducah top three issues by January 22 to compile and distribute for review. The final issues will be reviewed at the February 19 Working Session. The top three issues that were presented at the last meeting were: 1) Increase communication and public education of waste disposal options, 2) Development of a comprehensive on-site metals recycling program, including existing nickel ingots, and 3) C-400 resistance heating project and proposed TCE reduction in the groundwater plume.

Potential issues for the Chairs meeting discussed at the meeting include:

- Economy and funding to support milestones
- C-400 resistance heating project

- DOE communication with public whether on waste disposal options or other issues
- Potential new Remediation contractor since the Request for Proposal (RFP) has been awarded
- Recyclable Metals
- Community involvement with End Use Groups or Scenario Planning

Murphie said the RFP competition and selections and implications on the workforce transition impact the community. The Deleted Uranium Hexafluoride Conversion Facility RFP contract was issued in December, the remediation RFP contract is imminent, and the infrastructure RFP contract will be issued in the near future. He said DOE can educate the CAB on the process of the RFP at one of the future meetings.

Burnett asked for the status on the RFP. Murphie said the Environmental Assessment has not been issued yet. Smart asked if the new administration would support this issue. Murphie said he was unsure.

Due to the Chairs meeting, the March Board meeting will need to be rescheduled. Staff will email the Board on potential dates for rescheduling.

The February Working Session is scheduled for updates on the Waste Disposition Work Plan, Framework for the Four Potential Scenarios, CAB participation in Earth Day and Leadership Paducah. Burnett asked that the agenda include an update on the RFPs if the remediation RFP had been issued. Lee said the discussion of the four potential scenarios can be postponed to include this discussion.

The meeting adjourned at 7:30 p.m.

Solving Cleanup Challenges Through Risk Reduction

Cleanup Progress at the Paducah Gaseous Diffusion Plant

Briefing for the
Paducah Citizens
Advisory Board
January 15, 2009



EM Environmental Management

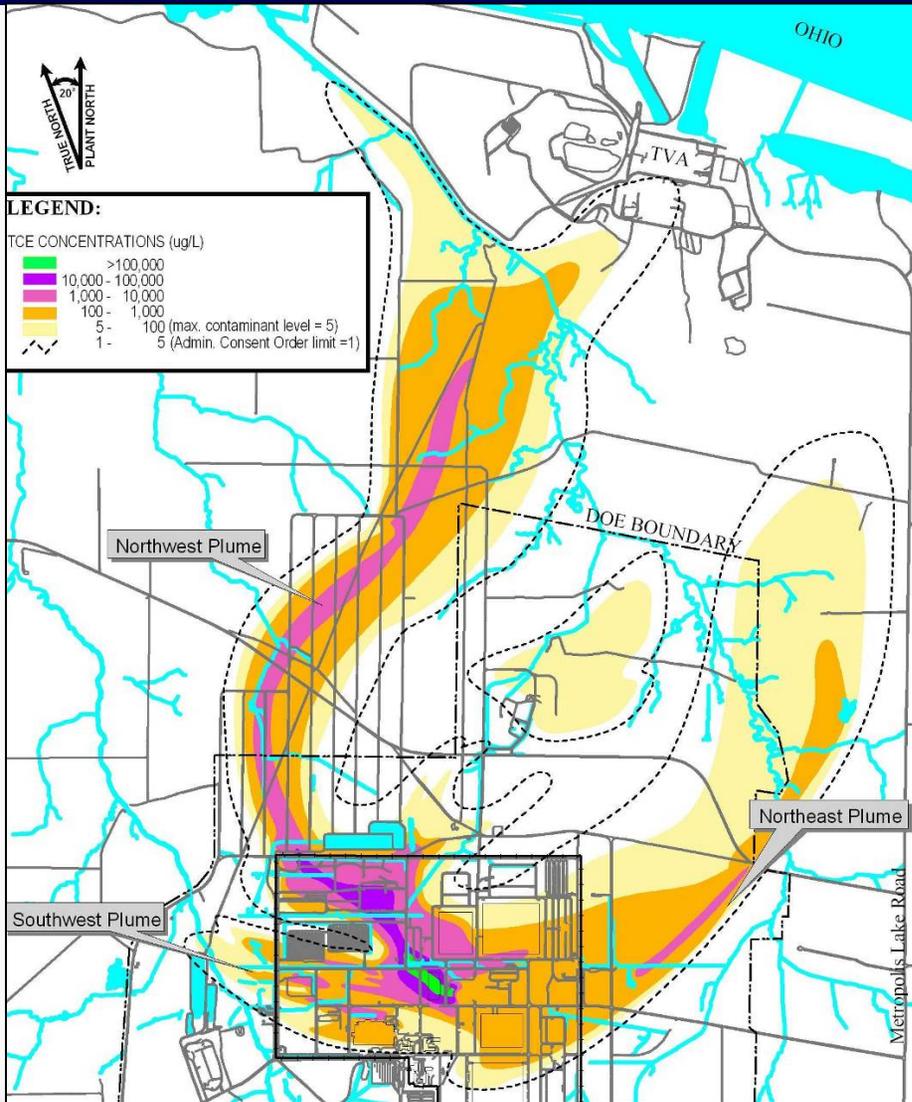
safety ❖ performance ❖ cleanup ❖ closure

Highlights

- C-400 TCE Source Reduction
- Soil Pile Sampling
- Site Walkover Survey
- Rubble Pile Sampling
- Water Tower Demolition
- Other Environmental Projects



C-400 TCE Source Reduction - Background



- In 1988, groundwater contamination discovered beyond DOE property boundary
- Main contaminant is the degreaser TCE

TCE contamination plumes at PGDP

C-400 TCE Source Reduction - Background

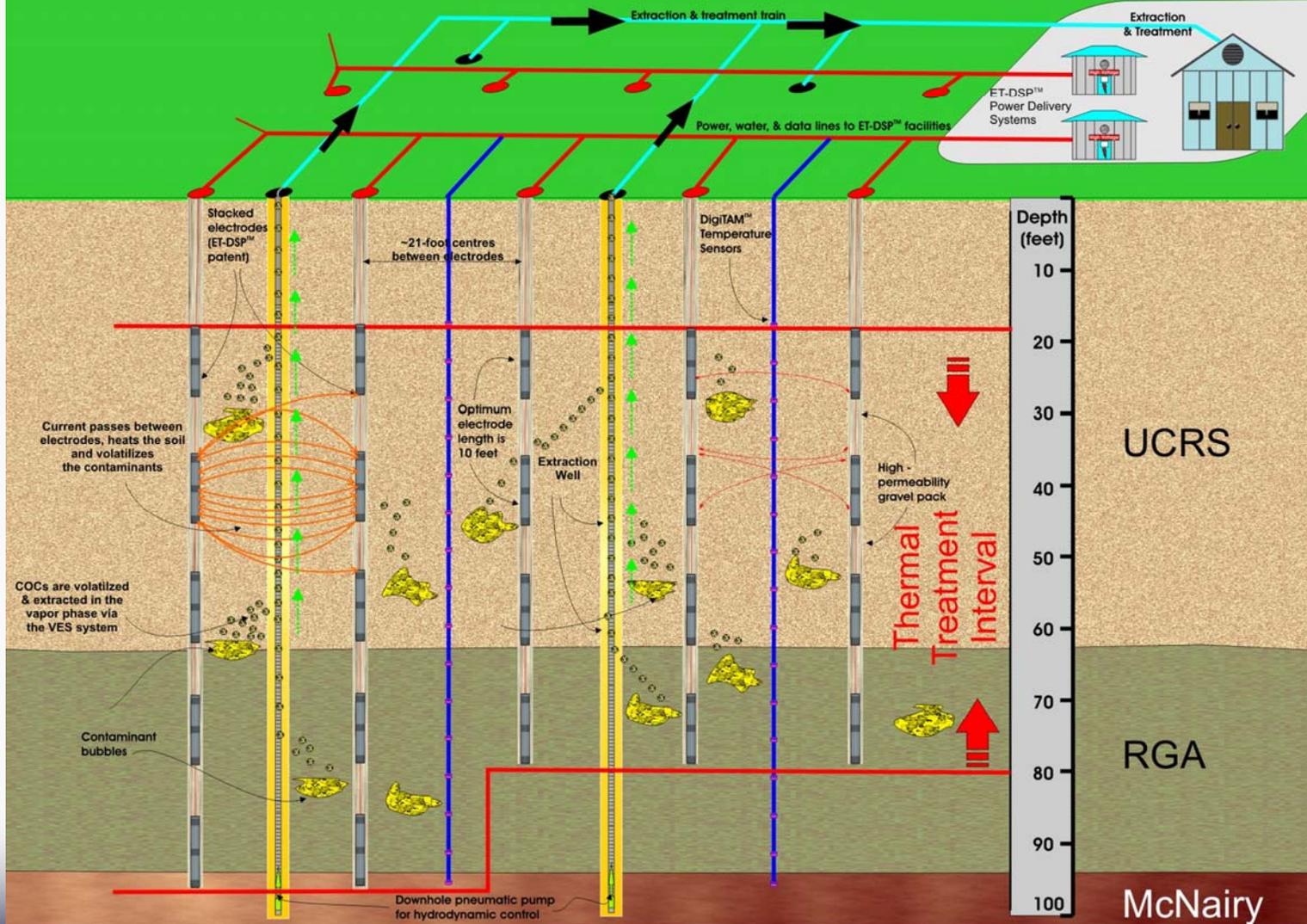


The C-400 Cleaning Building

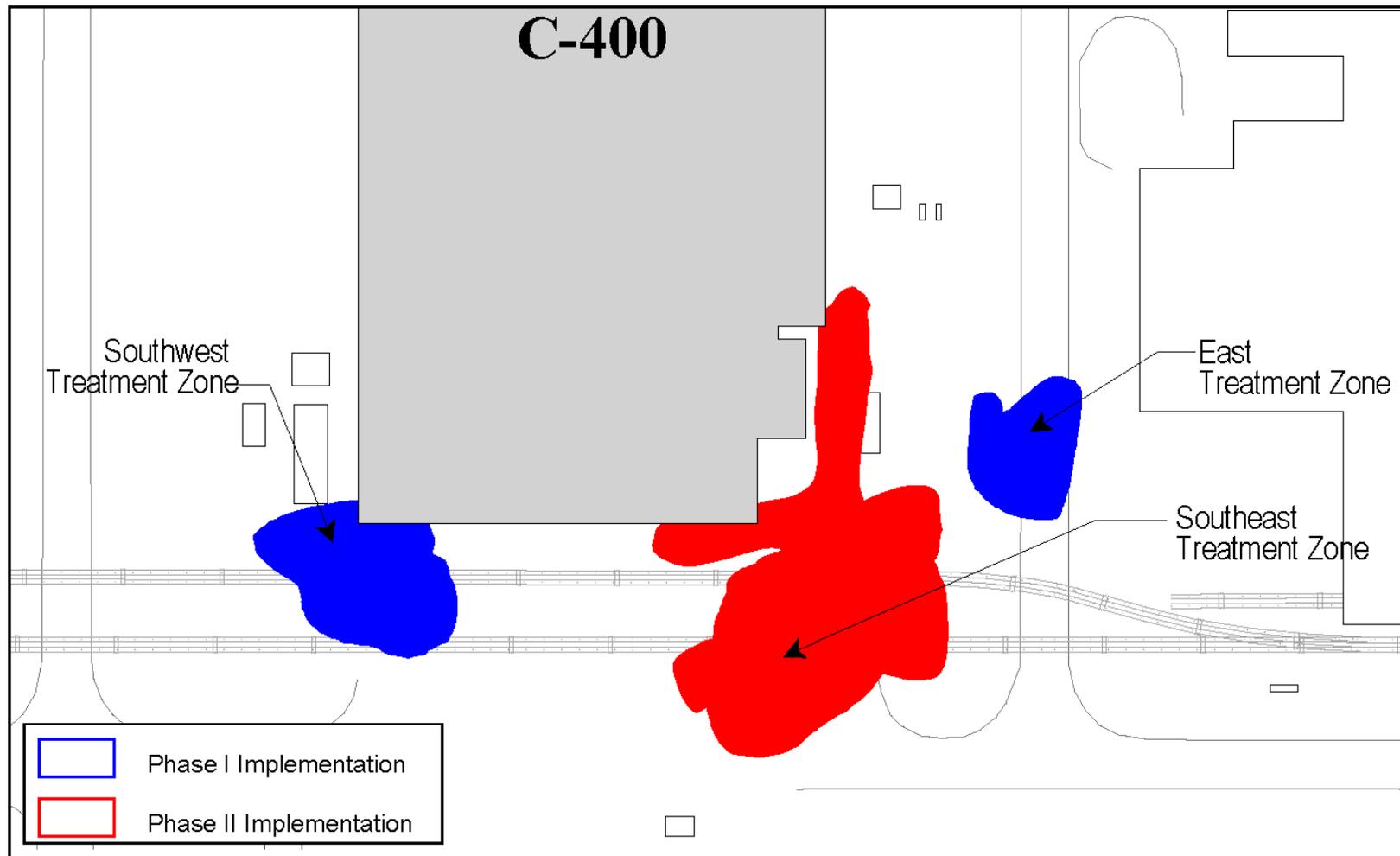
- Largest contamination source is the C-400 Cleaning Building, located near the center of the plant
- In 2005, DOE signed a Record of Decision to use electrical resistance heating to vaporize TCE, which then will be collected by vacuum pumps

C-400 TCE Source Reduction

Cross Section of Conceptual Design for the Paducah Site



C-400 TCE Source Reduction



Here you see the highest concentrations of TCE on the site. We will be treating the area in two phases. The blue zones are Phase, I which is now under construction.



C-400 TCE Source Reduction



- Drilling and electrode insertion began December 10, 2008

Workers prepare to hoist an electrode to place in a boring at C-400.



C-400 TCE Source Reduction



- Phase I borings and electrode installation scheduled for completion in mid-April 2009
- Remainder of treatment system scheduled for completion in early May 2009
- Phase I operations scheduled to begin early June 2009

Construction

Testing Operations

An electrode is inserted into a boring during mid-December 2008.



Soil and Rubble Areas – Background



- In November 2006, technicians performing a routine survey of DOE property discovered elevated levels of contamination in soil piles outside the security fence

One of the soil areas on the east side of the plant.

Soil and Rubble Areas – Background



A technician takes a soil sample.

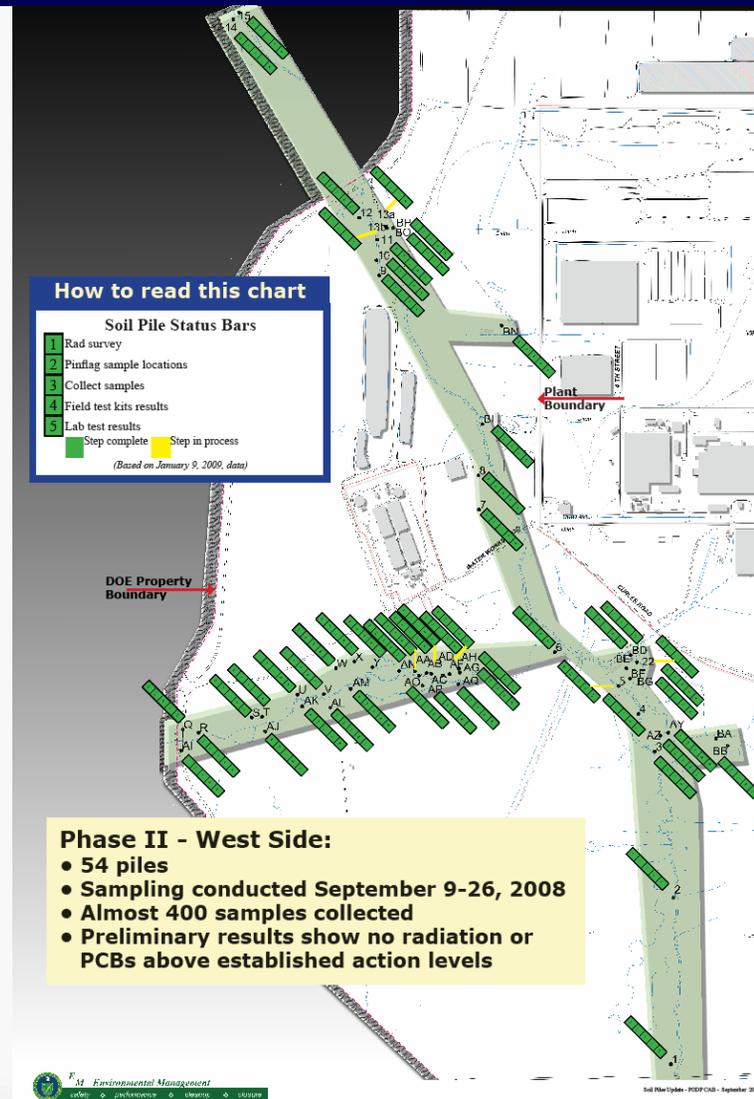
- Piles resulted from maintenance actions, such as creek dredging, in the 1970s and 1980s
- 104 soil areas and 51 concrete rubble areas
- Immediately upon discovery, DOE began a surveying effort to evaluate risk
 - 1st area sampling completed July 2007
 - Remaining areas divided into 3 phases for additional sampling



West Side Soil Pile Sampling

West Side Sampling

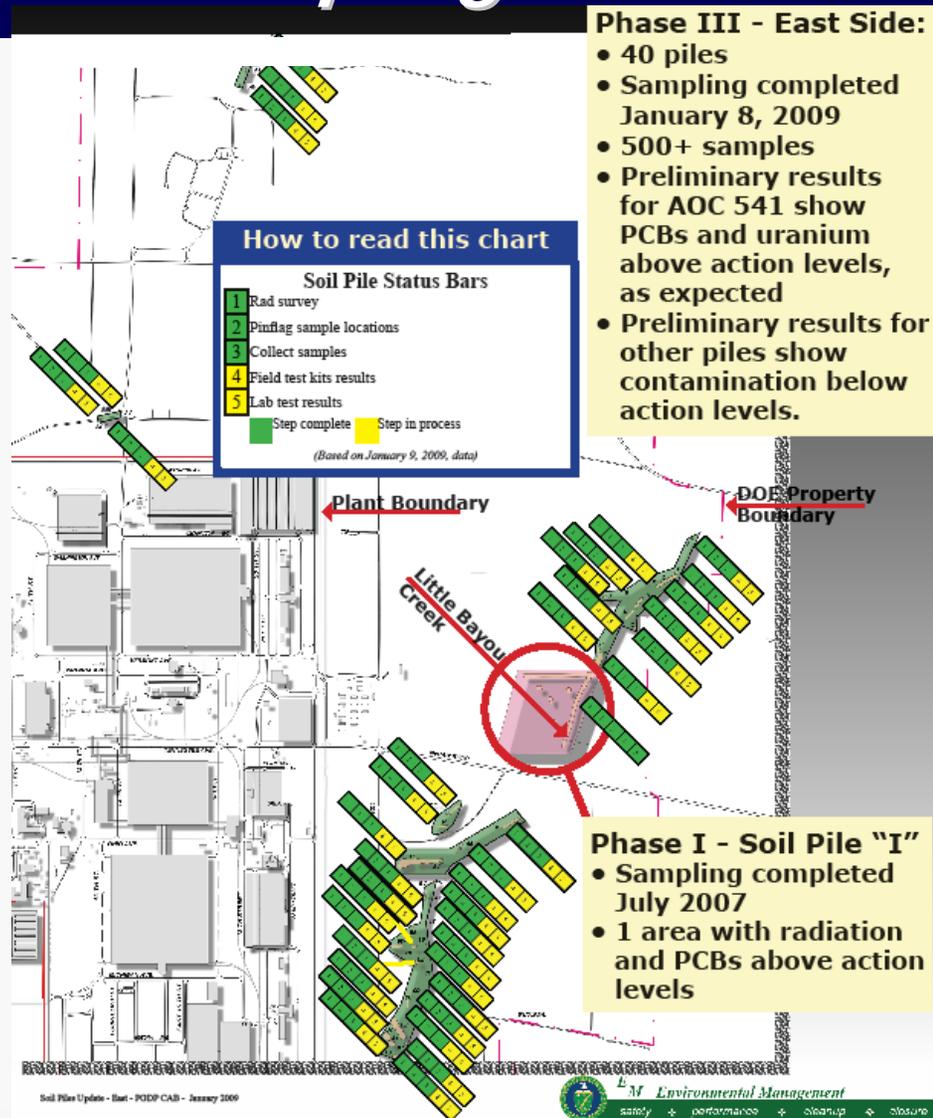
- West side soil pile sampling completed September 2008
 - Site Evaluation Report scheduled for February 2009
 - Results show no PCBs
 - Results show uranium at or below background level



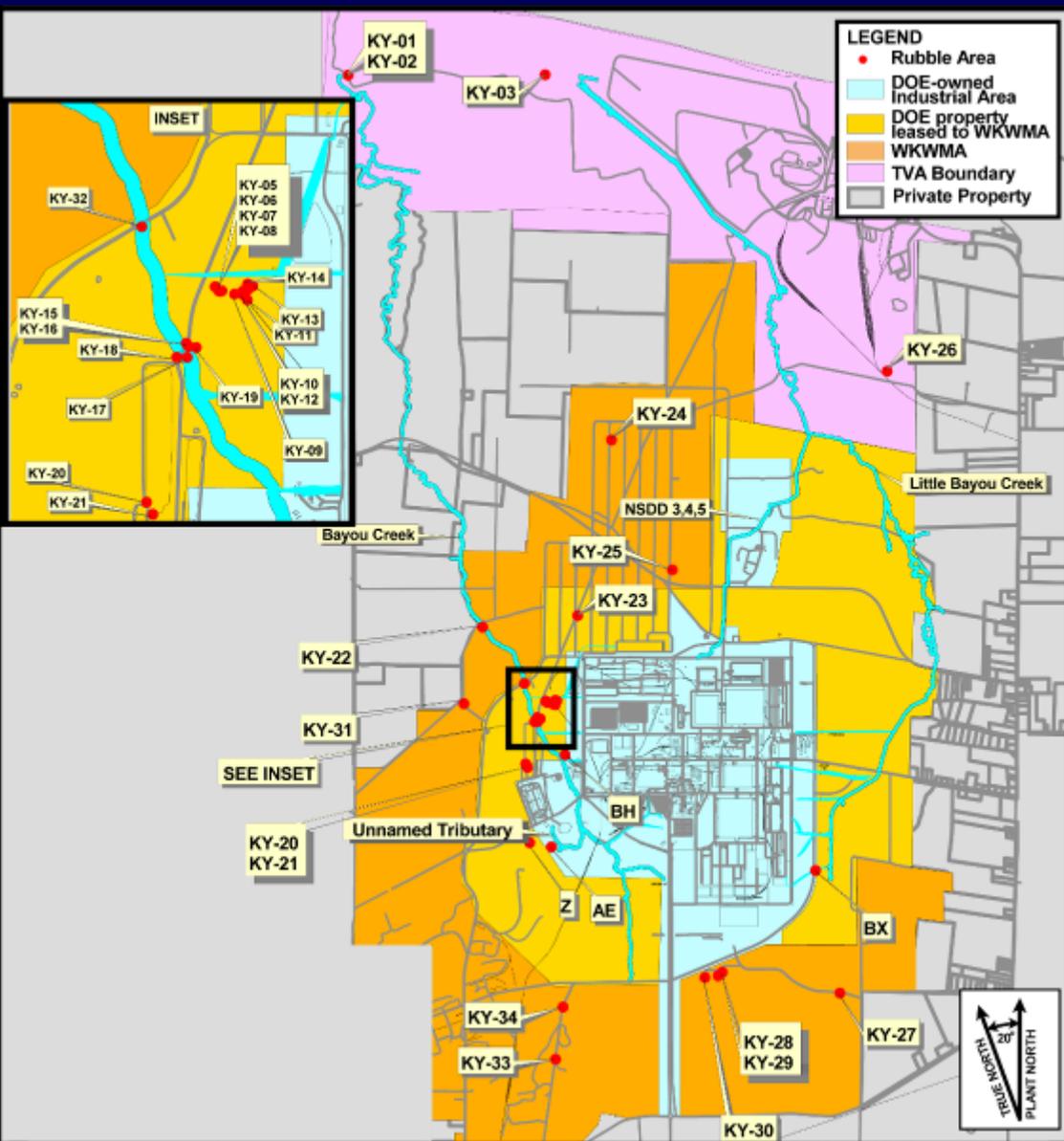
East Side Soil Pile Sampling

East Side Sampling

- All sampling completed
- Preliminary data currently under review



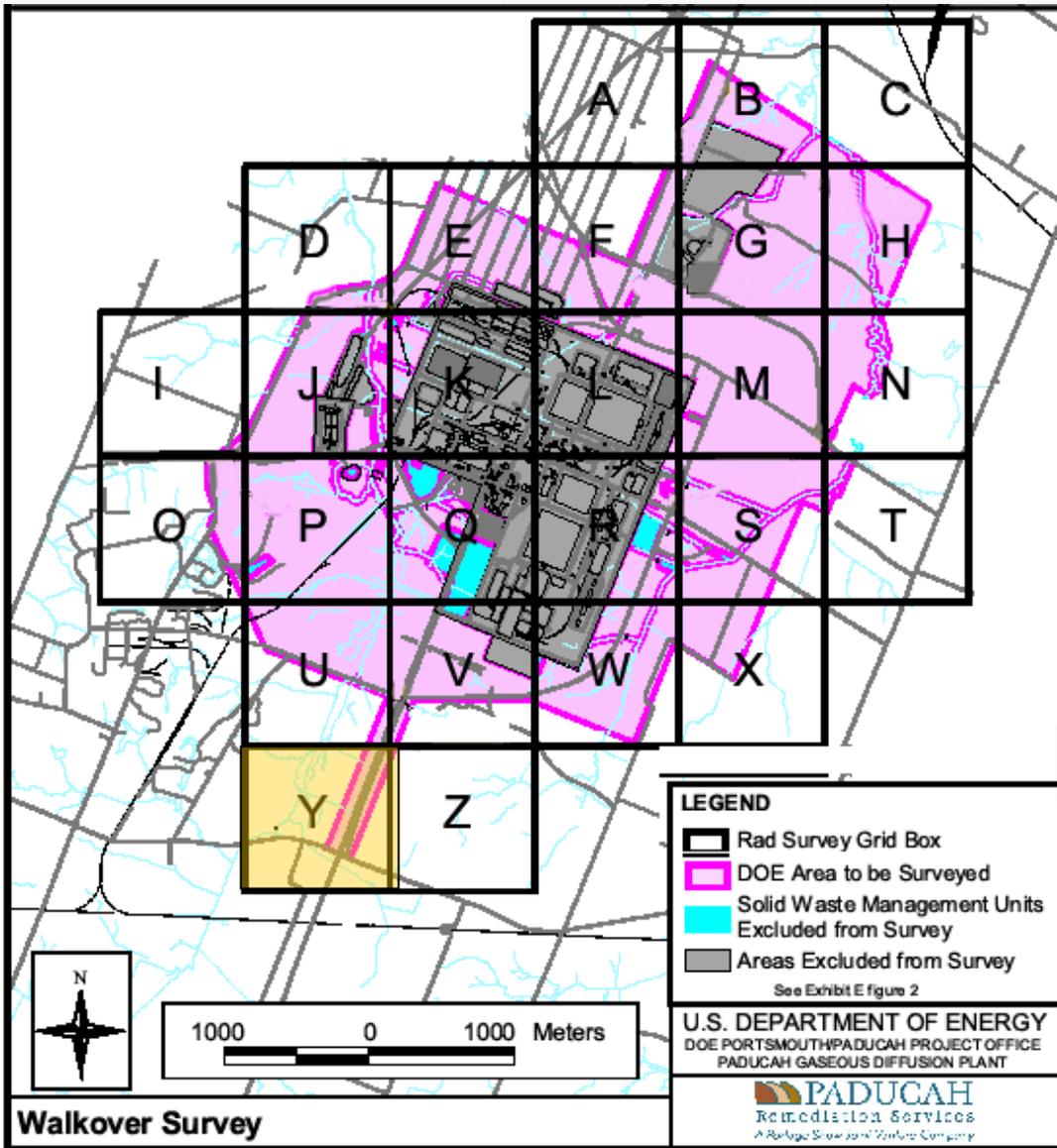
Rubble Area Sampling



- Final Sampling and Analysis Plan approval from KY and EPA received December 2008
- Sampling to begin late January or early February 2009

Site Walkover Radiological Survey

- Survey began January 7, 2009
- Completion scheduled April 2009



Grid completed



Site Walkover Radiological Survey



- Radiological survey will be performed on any area where materials appear to have been placed or removed
- 100% visual inspection of ~2,500 acres

A radiation control technician performs a radiological survey in Grid Y earlier this week.

C-611 M&N Water Tower Demolition



North Tower



South Tower

- 66-year-old towers once used for water storage at Kentucky Ordnance Works
- Later used to support plant fire suppression system
- Demolition scheduled in February 2009
- Metal and concrete being salvaged and reused

Other Environmental Projects

Soils Inactive Facilities

- Developing D2 Action Memorandum in consultation with KY and EPA
- Field start depends on approval of AM & Removal Action Work Plan

Surface Water “Hot Spot” Removal

- Developing D2 Action Memorandum and D1 Removal Action Work Plan
- Field start depends on approval of AM & Removal Action Work Plan

Groundwater Operable Unit

- Southwest Plume D1 Focused Feasibility Study tentatively scheduled for January 30, 2009

Burial Grounds Operable Unit

- Additional sampling to support Remedial Investigation scheduled to begin Spring 2009





DOE Portsmouth/Paducah Project Office