

Solving Cleanup Challenges Through Risk Reduction

Progress at the Paducah Gaseous Diffusion Plant



Presentation for Paducah CAB

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November 17, 2009



EM Environmental Management

safety ♦ performance ♦ cleanup ♦ closure

Presentation Highlights

C-400 Interim Remedial Action



Inactive Facilities



Waste Disposal Options



Waste Removal Status



Status of Other Projects

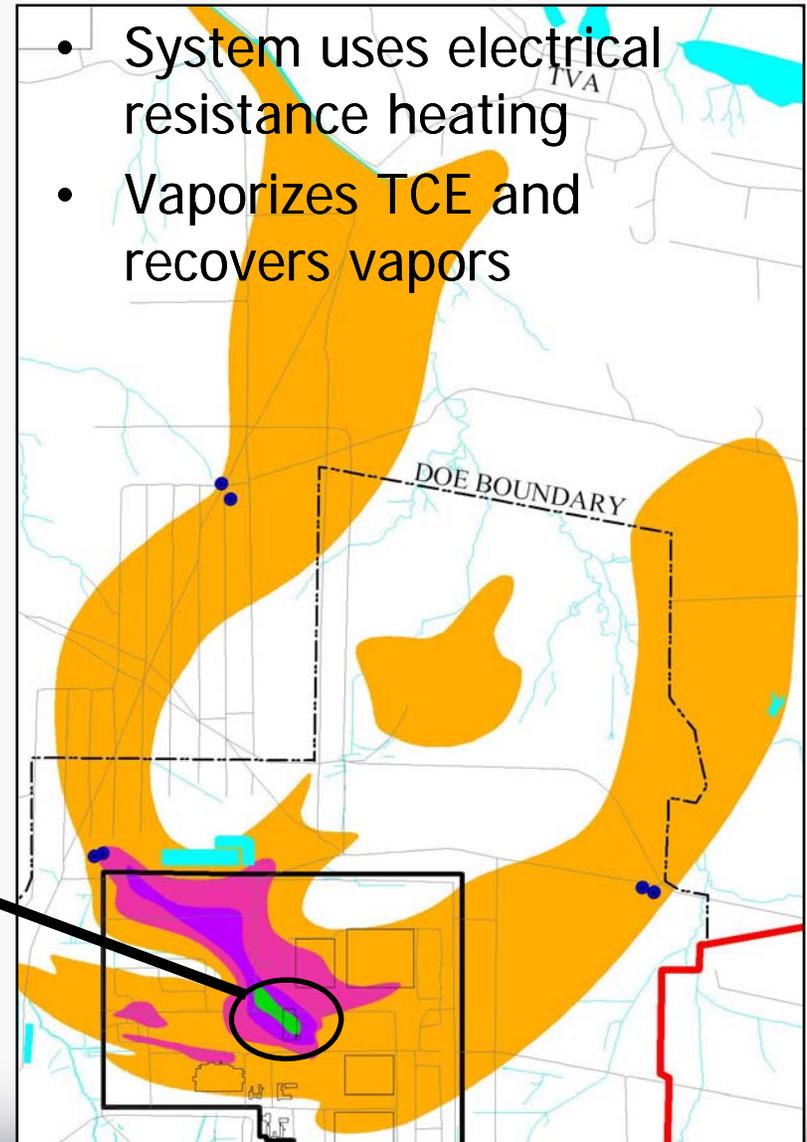


C-400 TCE Source Reduction - Background

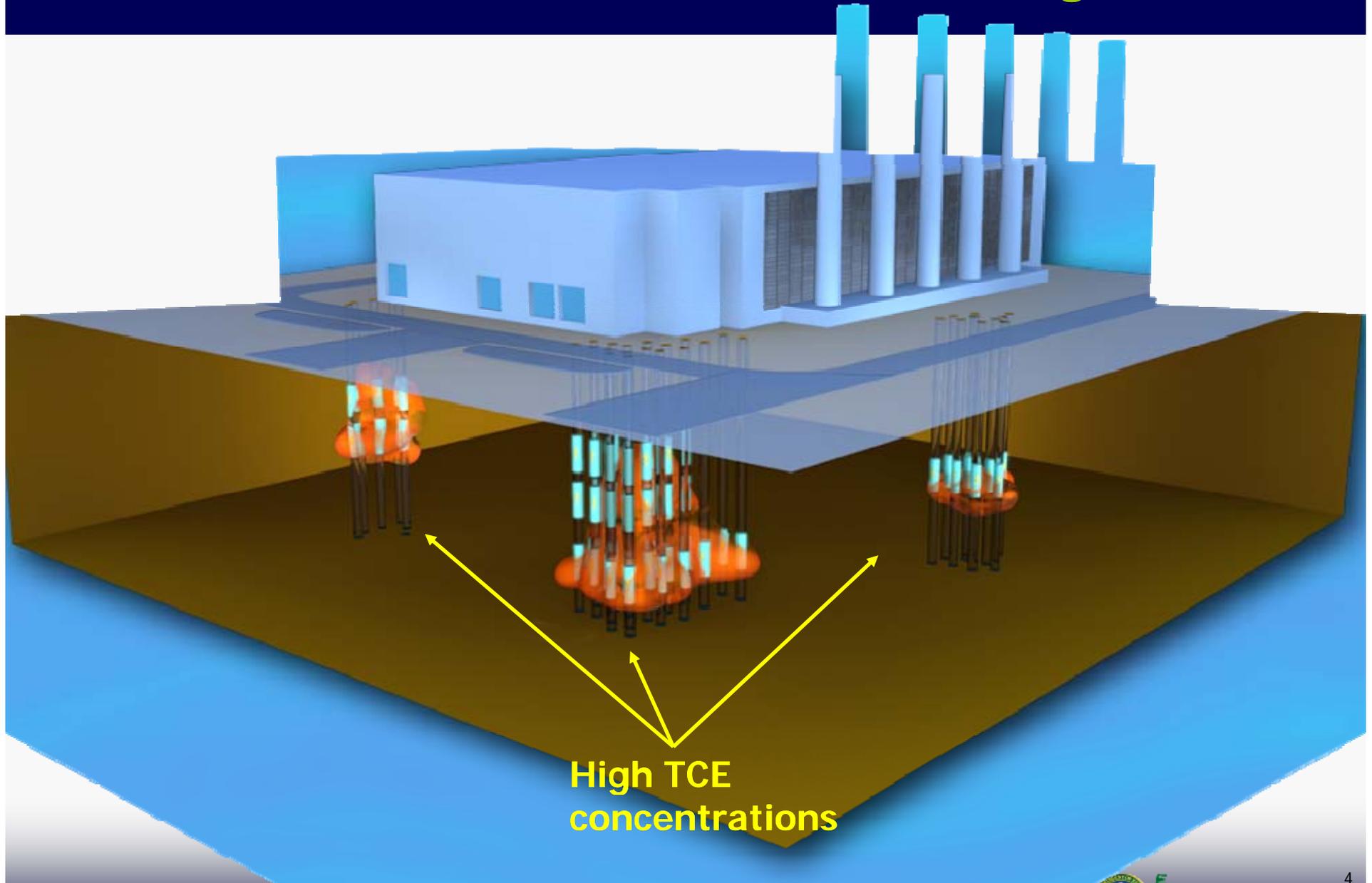
Action targets the largest off-site groundwater contamination plume in DOE complex



- System uses electrical resistance heating
- Vaporizes TCE and recovers vapors



C-400 TCE Source Reduction - Background



**High TCE
concentrations**

C-400 TCE Source Reduction - Status



System testing began last week

Accelerated D&D - Background



Paducah has received \$78 million in additional funding to accelerate the removal of 3 facilities:

C-410 Feed Plant

C-340 Metals Plant

C-746-A East End Smelter

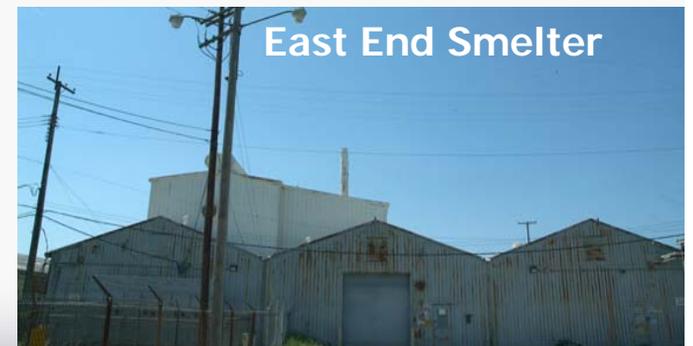
Work has begun in two facilities



Metals Plant



Feed Plant



East End Smelter

Accelerated D&D – Background



- **Rapidly increasing remediation workforce**
 - 475 employees on April 30, 2009
 - 207 hired in past six months
 - Need for additional hires is being evaluated
- **Training and deploying new workers**
- **Accelerating scope of work to reduce D&D time from 2 years to 9 months**

Accelerated D&D – Feed Plant



Scope - Accelerate the ongoing dismantlement and disposal of major systems and complete structural demolition of the complex to slab

- Additional personnel now working in the facility
- Removal of instrument and process lines is ahead of schedule



- Loose material removal completed

Accelerated D&D – Metals Plant



**Scope -
Accelerate
dismantlement
and disposal of
major systems
contained within the
complex and
complete structural
demolition of the
C-340-D and C-340-E
Buildings to slab**



Removing debris to clear the way for D&D work

- Elevator refurbishment to support D&D underway
- Waste characterization has begun
- Asbestos abatement scheduled to start week of November 16



Accelerated D&D – East End Smelter



**Scope -
Accelerate
dismantlement
and disposal of
systems and smelter
equipment and
complete structural
demolition to slab**

- Field mobilization has begun
- D&D work scheduled to begin in December



Waste Disposal Options Feasibility Study

Threshold Criteria

WASTE DISPOSAL ALTERNATIVES

NO CHANGE	ON-SITE	OFF-SITE
		
Continue existing process to dispose of waste on a project-by-project basis	Dispose of waste on-site in a new facility on DOE land	Ship waste to other states
Protective of human health and the environment? ✓ YES	Protective of human health and the environment? ✓ YES	Protective of human health and the environment? ✓ YES
Meets applicable federal and state laws / regulations? ✓ YES	Meets applicable federal and state laws / regulations? ✓ YES	Meets applicable federal and state laws / regulations? ✓ YES
1	2	3

ALL MEET THRESHOLD CRITERIA

- Project will evaluate how to dispose of future wastes generated
 - By CERCLA cleanup
 - By GDP D&D
- Two previous Public Information Exchanges
 - November 2008 at Cherry Civic Center
 - March 2009 at Maiden Alley Cinema

Waste Disposal Options Feasibility Study

Welcome!

Thanks for taking time
to come to tonight's public information exchange about the future of the Paducah site.

Please visit the exhibits and let us know your suggestions and comments before you leave.

If you want more information on any DOE project, please ask a staff member for assistance.

Please let us know what you think before you leave!



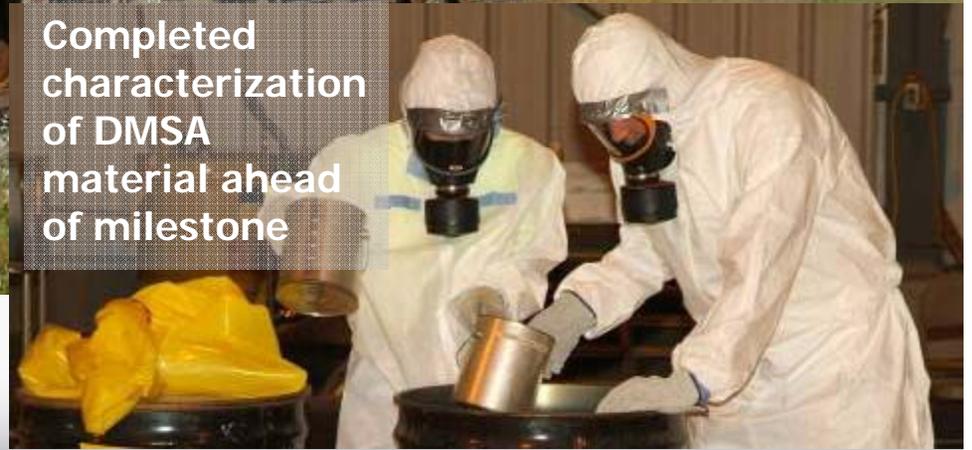
- Work on Feasibility Study continues
- Plans for next public meeting are being finalized
- CAB subcommittee has provided input for planned exhibits; comments being incorporated

Waste Removal

Disposition of 615,000 ft³ of waste from storage areas



Completed characterization of DMSA material ahead of milestone



Key regulatory milestone met

Waste Removal



Final shipment of
legacy waste
scheduled for
December 2009

Other Projects

Burial Grounds Operable Unit Feasibility Study

- D1 submittal to EPA/KY scheduled for December 29

Surface Water Removal Action (Hot Spots)

- Mobilization underway; removal work starts next month

Soils Removal Action

- Mobilization underway; removal work starts next month

Southwest Plume Focused Feasibility Study

- Document revisions are in process
- Proposed Plan will follow approval

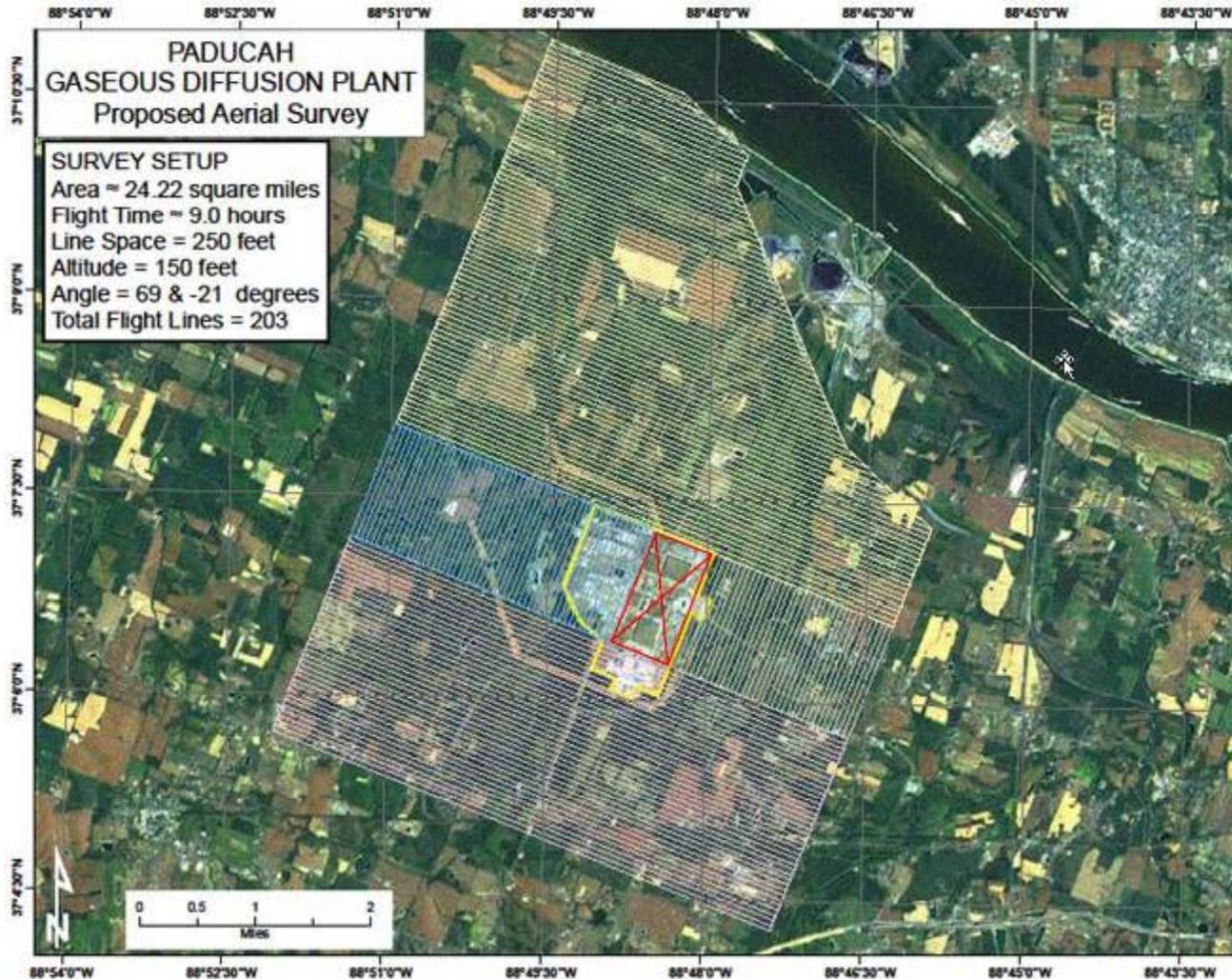
New Groundwater Monitoring Wells



- 36 new groundwater monitoring wells in 25 days
- 33 more wells to be installed



Site Radiological Flyover



- Flyover completed November 9
- Preliminary data shows no unexpected radiation readings
- Final data expected in December



DOE Portsmouth/Paducah Project Office