

Solving Cleanup Challenges Through Risk Reduction

2009 Highlights  
2010 Look Ahead



# Presentation for Paducah CAB

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**EM** Environmental Management

safety ♦ performance ♦ cleanup ♦ closure

# *2009 Accomplishments*

- Demolished two 60-year-old water towers
- Completed DMSA characterization
- Completed DMSA disposition
- Neared completion of legacy waste removal
- Completed C-400 Phase I construction and started testing
- Reused C-342 ammonia tanks at C-746-U Landfill
- Completed C-746-D yard excavation
- Began accelerated D&D of 3 inactive facilities (ARRA-funded)
- Started surface water hot spot removal
- Started removal of two soil facilities
- Started expansion of groundwater monitoring wells network
- Completed sitewide flyover

# ***Water Tower Demolition***



- Towers once part of Kentucky Ordnance Works
- Converted to use in PGDP fire suppression system; idled in 1980s
- Demolished February 2009
- Concrete and steel salvaged for reuse/recycling



# Waste Removal

✓ 33 Priority A  
100% Complete

✓ 11 Priority B  
100% Complete

✓ 116 Priority C  
100% Complete



Key regulatory milestone met

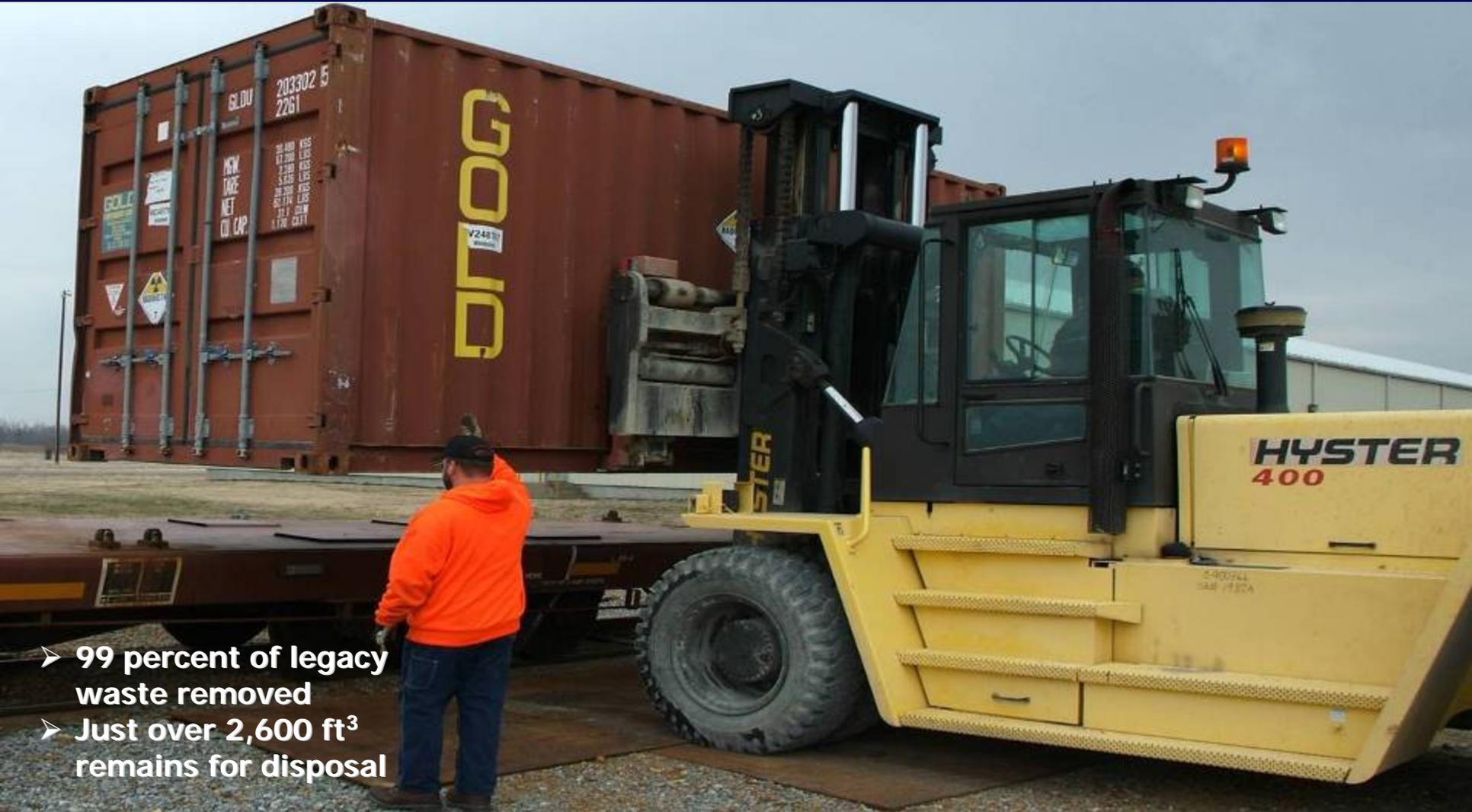
Completed characterization of DMSA material ahead of agreed deadline

# *Waste Removal*



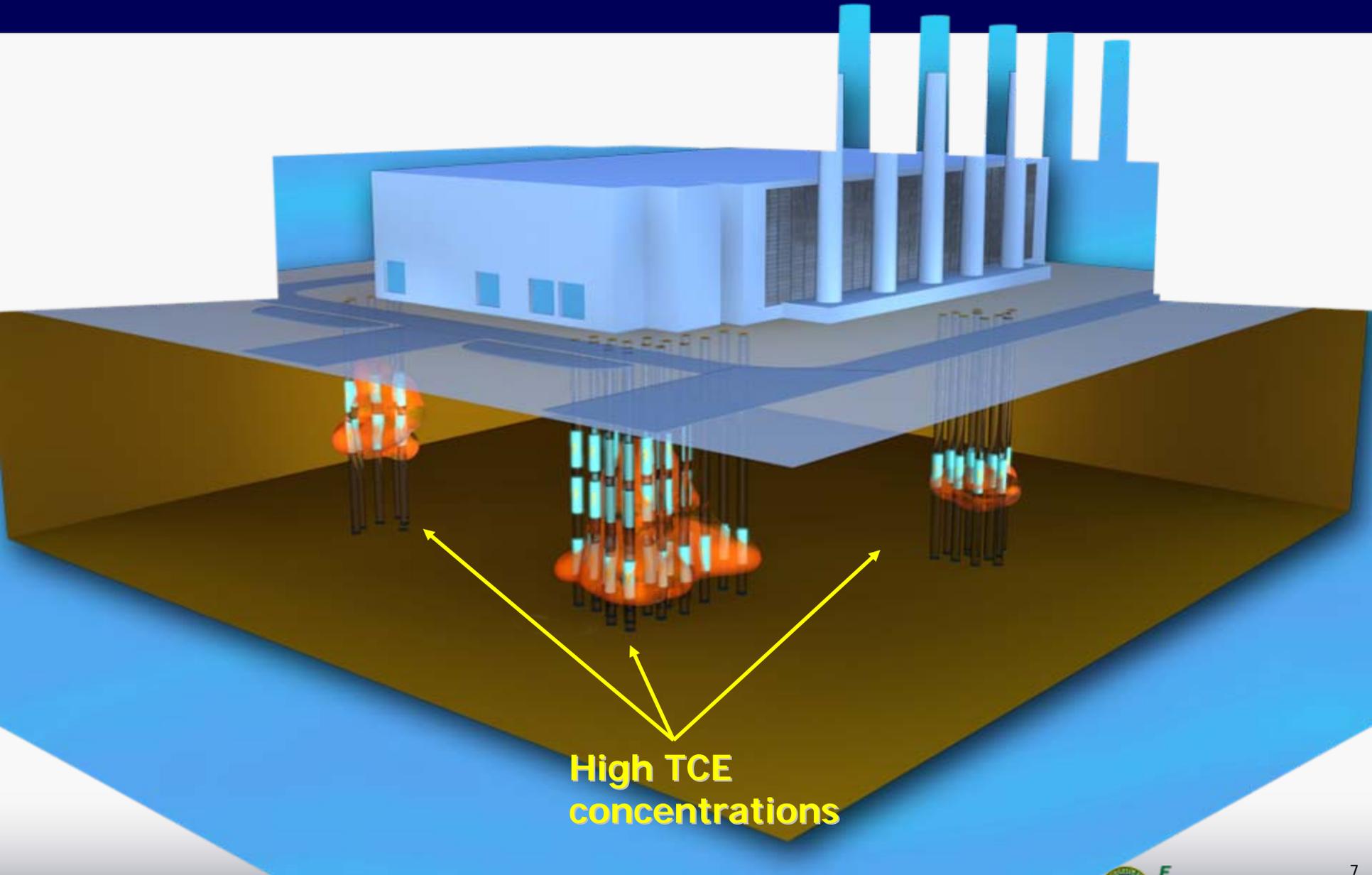
**Disposition of 615,000 ft<sup>3</sup> of waste from 160 DOE Material Storage Areas completed**

# Waste Removal



- 99 percent of legacy waste removed
- Just over 2,600 ft<sup>3</sup> remains for disposal

# *C-400 TCE Source Reduction*



**High TCE  
concentrations**

# C-400 Treatment System Construction



# C-400 Treatment System Construction



# C-400 Treatment System Construction



# *Ammonia Tank Reuse*



Two 20,000-gallon ammonia tanks removed from the former C-342 facility are now being used as leachate storage tanks at the C-746-U Landfill.

# *C-746-D Contaminated Soil Removal*



The D-Yard site today after removal work was completed

# Accelerated D&D

Feed Plant



Paducah has received \$78.8 million in additional funding to accelerate the removal of 3 facilities

## C-410 Feed Plant

- 1-year acceleration
- ARRA-funded work has begun



# Accelerated D&D



## C-340 Metals Plant

- 5-year acceleration
- ARRA-funded work has begun



Metals Plant

# Accelerated D&D

East End Smelter



- C-746-A East End Smelter**
- 22-year acceleration
  - ARRA-funded work has begun



# *Contaminated Soil Removal*

Contaminated soils are removed from a ditch on the east side of the plant near the C-331 process building



# Contaminated Soil Removal

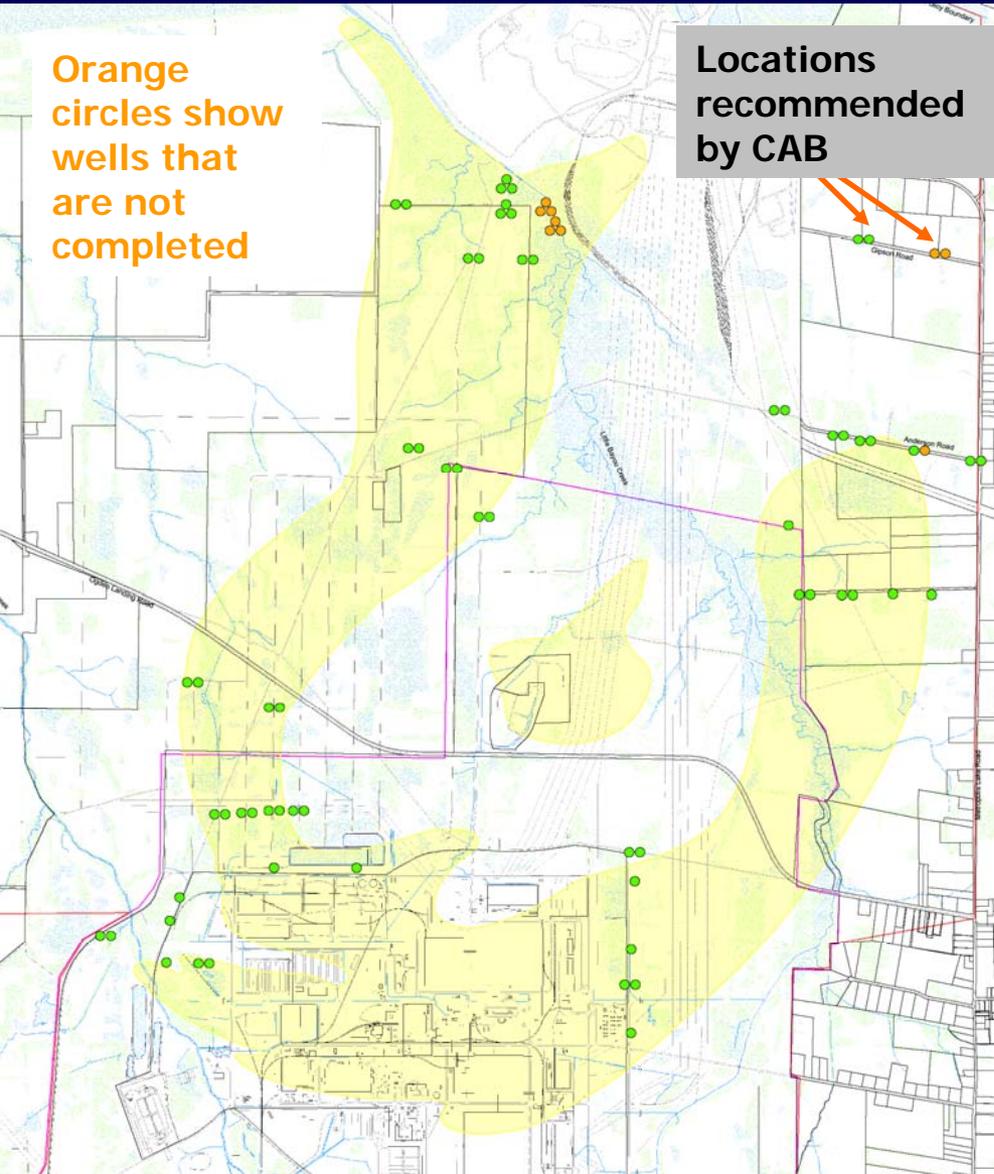
Contaminated soil is removed and bagged for disposal from the closed C-218 Firing Range



# New Groundwater Monitoring Wells

Orange circles show wells that are not completed

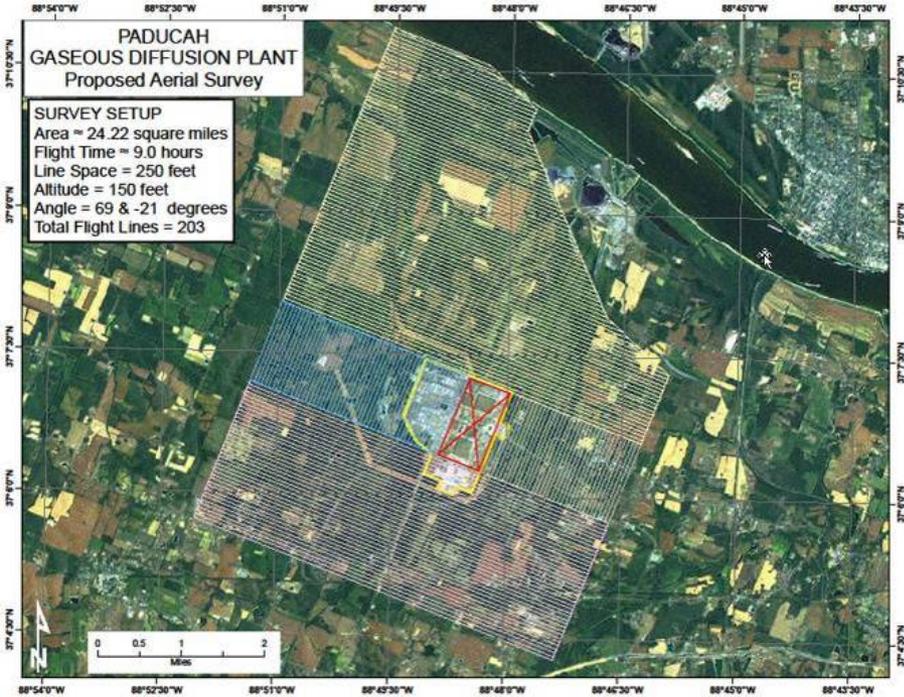
Locations recommended by CAB



- 64 new groundwater monitoring wells installed
- 9 more wells to be installed



# Site Walkover/Radiological Flyover



- Flyover completed in November 2009
- No unexpected radiation readings detected



# Waste Disposal Options Public Involvement

## 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.

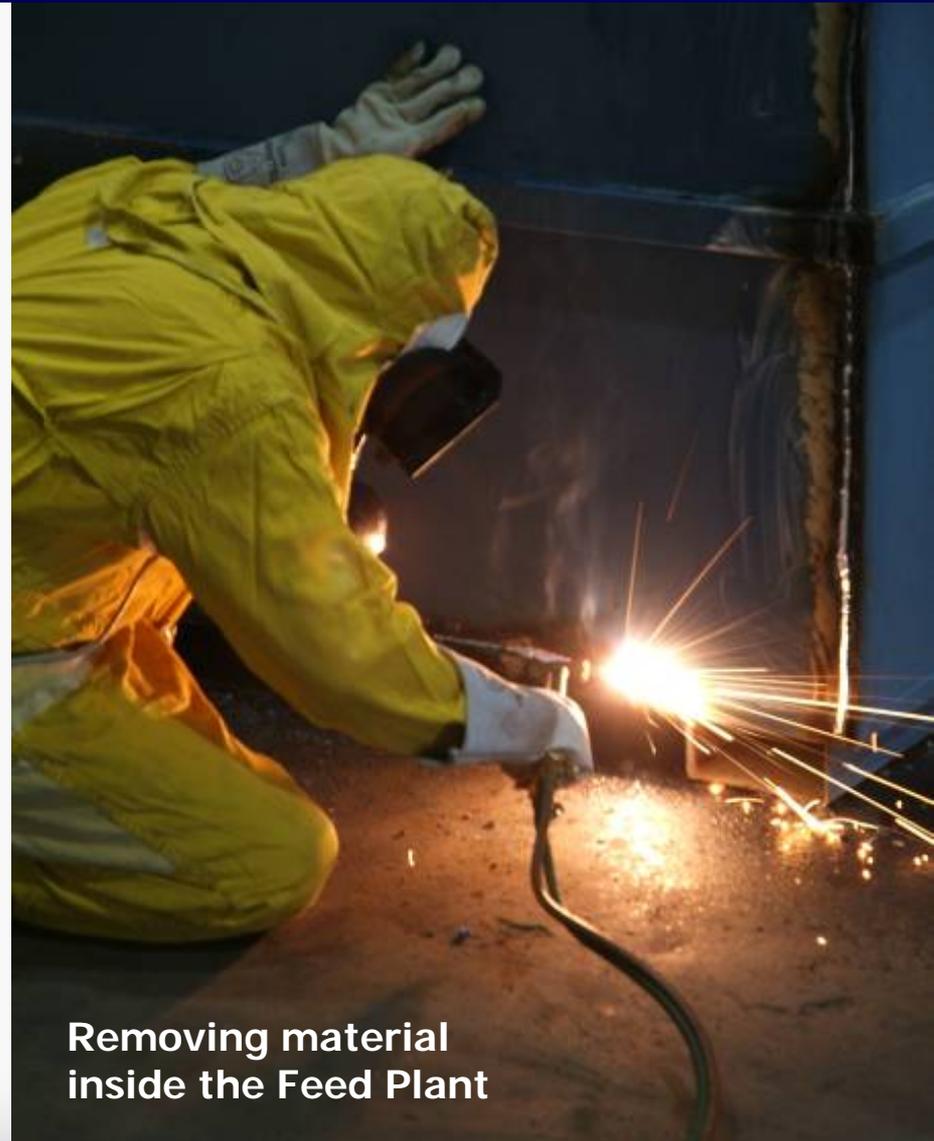
Please let us know what you think before you leave!

- Work on Feasibility Study continues
- Plans for next public meeting are being finalized
- CAB has provided helpful input at previous meeting and in planning for the next event



# 2010 – Major Planned Items

- Begin full-scale operations of C-400 source removal
- Complete accelerated ARRA-funded work
- Complete Soils and Surface Water actions
- Complete decision documents for SW Plume
- Issue BGOU Feasibility Study
- Issue Waste Disposal Options Feasibility Study
- Begin Soils Remedial Investigation
- Complete enhancement of monitoring well network



Removing material  
inside the Feed Plant

# *DUF<sub>6</sub> Conversion Facility*



- Construction completed on conversion facility
- Testing underway





**DOE Portsmouth/Paducah Project Office**