



LATA Environmental Services
of Kentucky, LLC

Waste Management Symposia

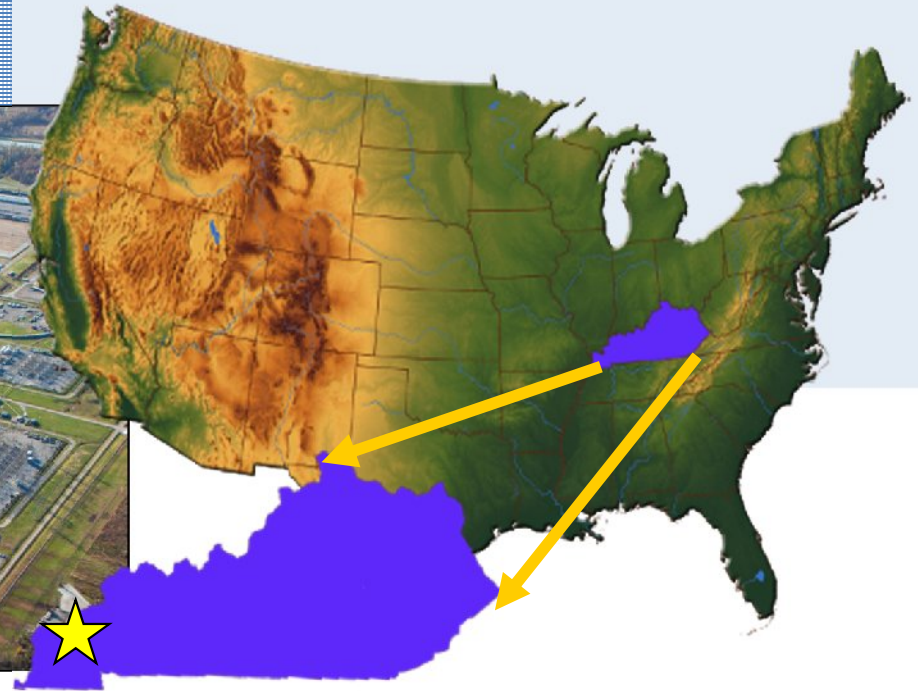
February 28, 2012

Mark Duff
LATA Kentucky





Paducah Facts



Paducah Quick Facts

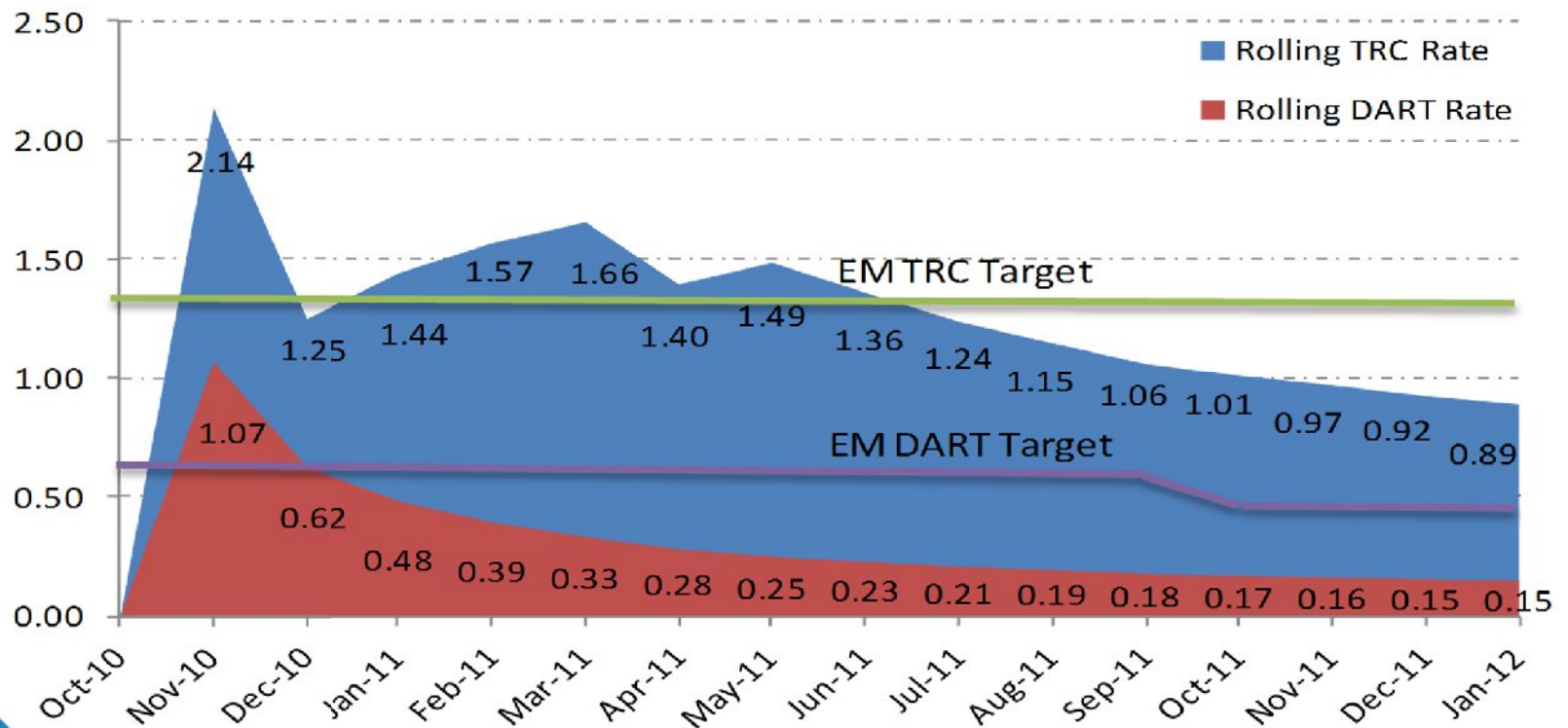
- 3,400+ acre federal site
- Shared site with operating enrichment plant
- Managed by LATA Environmental Services of Kentucky, LLC
 - ❖ B&W/Stoller team members
 - ❖ July 2010-July 2015
- Five Operable Units
 - ❖ Soils
 - ❖ Surface Water
 - ❖ Burial Grounds
 - ❖ Groundwater
 - ❖ D&D



Strong Safety Culture

- 45% reduction in safety incident reports (82 in FY 2011 vs. 149 in FY 2010)
- 1,186,029 man-hours without a Lost Workday Case (LWC); conducted an employee celebration to commemorate 1 Million Safe Man-Hours
- 440 days since our last LWC in November 2010
- 621,785 man-hours (272 days) since our last recordable in May 2011

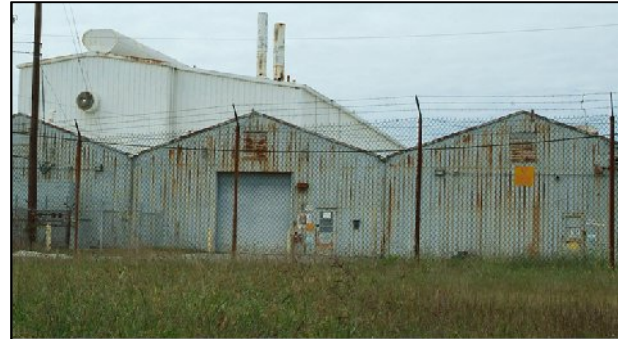
* Statistics are as of January 2012





Recent Contract Accomplishments

- Removed over 5,500 linear ft of UF₆ process piping to support demolition readiness.
- Identified and implemented over \$8M in cost-saving initiatives.
- Increased focus on project execution with over 50% of staff in the field.
- Implemented groundwater cleanup strategy to remove TCE degreaser from the groundwater, including supporting regulatory approvals.
- Submitted Remedial Action Work Plan to address off-site Surface Water Operable Unit.





Soils Operable Unit

- 86 SWMUs, > 200 acres, grouped to gain efficiencies.
- Completing remedial investigation report developing Feasibility Study in FY 2012.

Surface Water Operable Unit

- Includes two watersheds and about 6 miles of creeks accessible to the public.
- Primary contaminants include radionuclides and PCBs in sediments and surface soils.
- Monitoring discharges at 10 outfalls to assess drainage off-site.





Burial Grounds

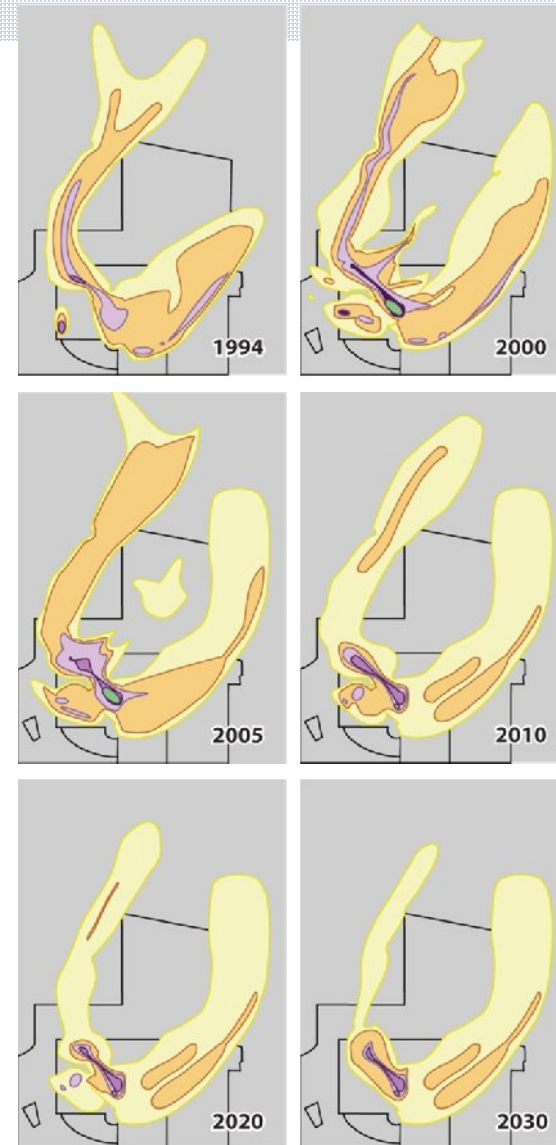
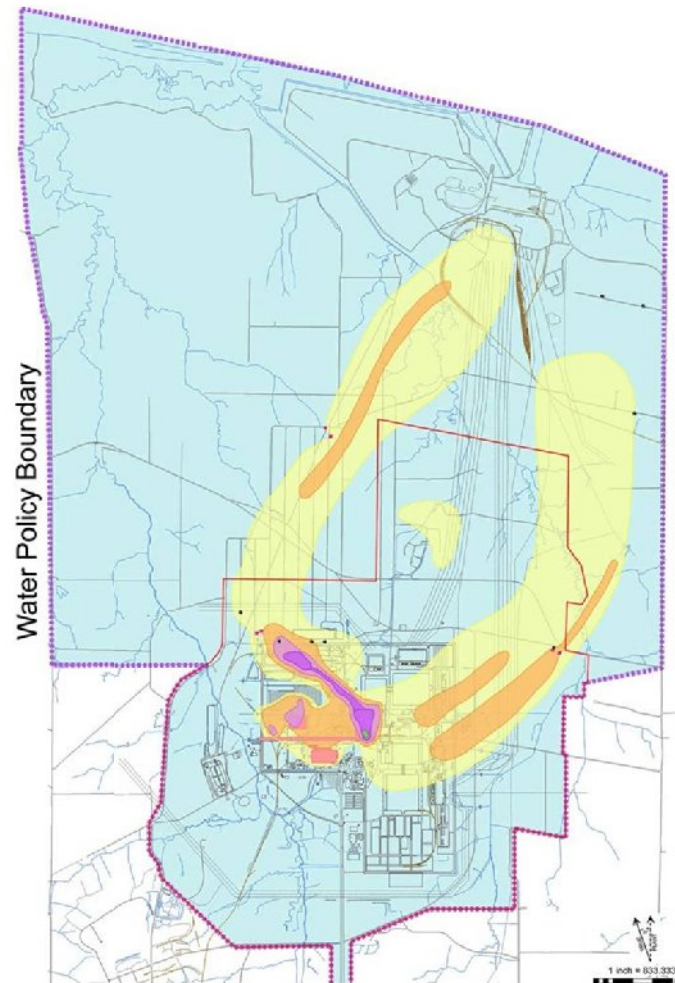
- About 66 acres of unlined burial grounds and landfills are broken into 10 solid waste management units; some contain hazardous, rad, pyrophoric, and/or mixed waste.
- New strategy: break into five subprojects.
- Record of Decision target for first subproject (SWMUs 5&6): 10/30/12.
- Cost-reduction initiatives include:
 - ❖ Using sensitivity analysis to refine assumptions.
 - ❖ 3D modeling to define source removals.
 - ❖ FFA requires completion by 9/30/19.



Groundwater Operable Unit

Groundwater Remediation Challenges

- Removing source-terms
- Reducing off-site plume

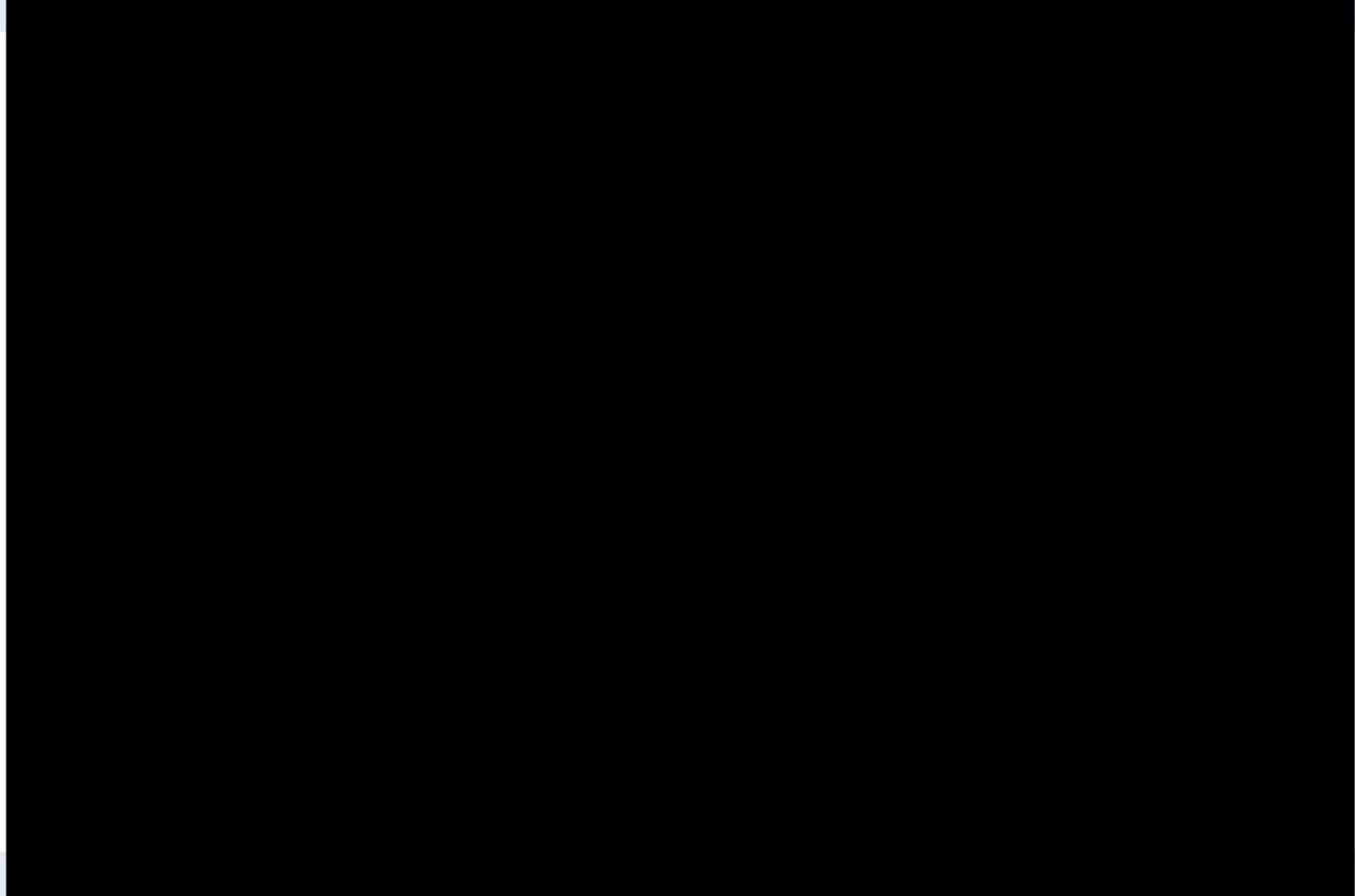


- 2,100-acres area of contaminated groundwater
- DOE continues to provide municipal water to about 100 homes and businesses.



Groundwater Operable Unit

C-400 Source Removal



- Nearly 6,000 gallons removed to date from the aquifer; ~8,100 gallons remain.
- Up to 7,000 gal of estimated TCE remains in the C-400 area:
 - ❖ Up to 3,000 gal in Upper Continental Recharge System (sand, silt, clay) to 60-ft deep.
 - ❖ Up to 4,000 gal in Regional Gravel Aquifer, 70–100-ft deep.



Demolition/Waste Disposition Challenges

- PCBs
- Asbestos siding
- Significant loose contamination

- 65,000 ft², 7-story structure.
- Significant challenges regarding height, transite, contamination, and safety considerations.
 - Scheduled to start demolition in 2012 through open competition—ongoing.
 - 70% disposal estimated for on-site landfill.
 - Complex is expected to be demolished by the end of 2013.



D&D Operable Unit

C-410 Feed Plant Demolition



Feed Plant

- Over 200,000 ft², 6-story structure operated from 1957–1977 to produce UF₆ and fluorine.
- Demolished ~ 36,000 ft² in FY 2011.
 - About 85,000 ft³ piping, equipment removed.
 - Demolition of remaining 164,000 ft² to be completed by end of 2012.



Path Forward – 2019 Vision

- Paducah is utilizing the CERCLA process to evaluate no action, off-site, and on-site alternatives for long-term waste disposal.
- Currently at the RI/FS Report stage
 - ❖ Considers a range of waste volume scenarios
 - ❖ Considers recycling
 - ❖ Includes PWAC
 - ❖ Includes conceptual design
- Path forward
 - ❖ Public involvement
 - ❖ Other stakeholder interaction

