

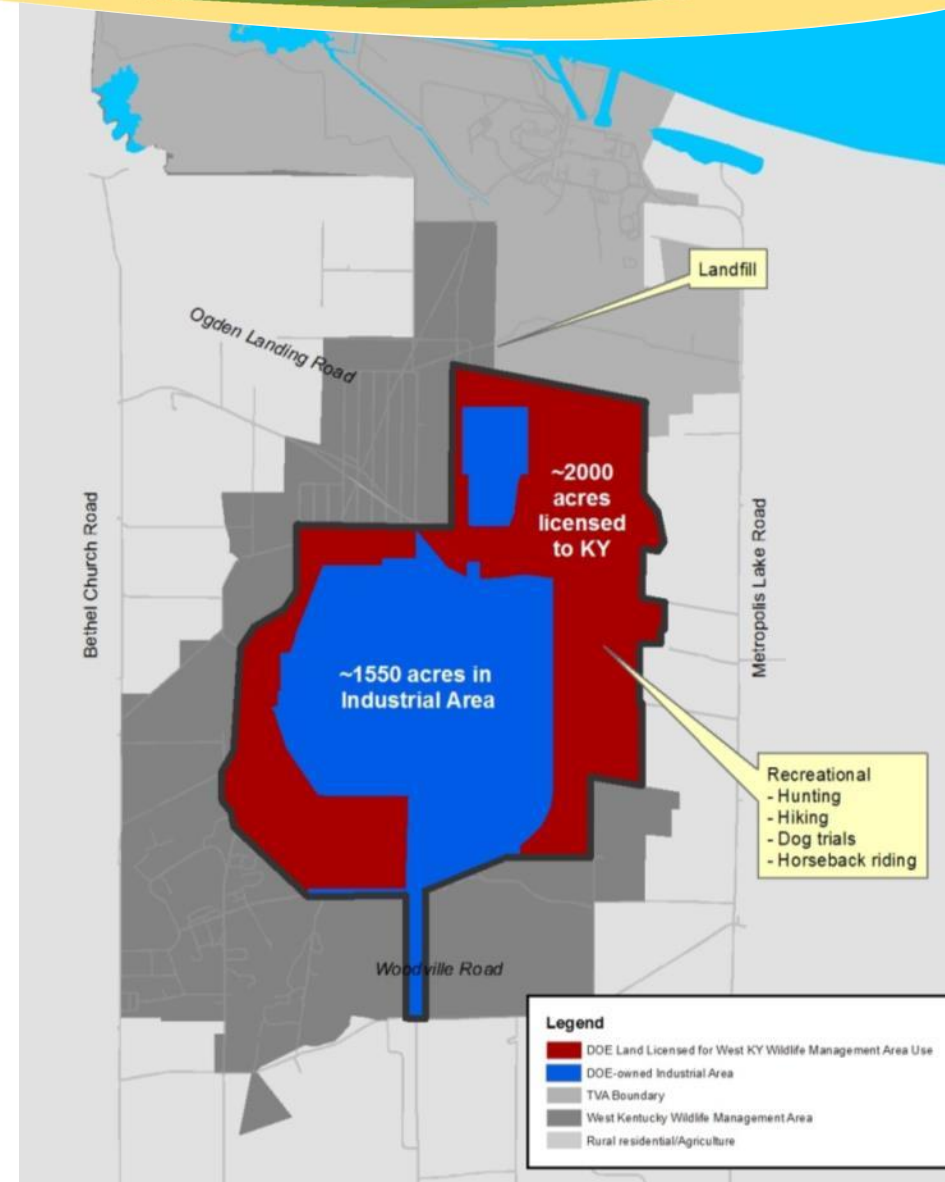


U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Paducah Site Overview

- U.S. Department of Energy (DOE) owned land consists of 3,556 acres with approximately 1,986 acres licensed to the Commonwealth of Kentucky (KY) as part of West Kentucky Wildlife Management Area (WKWMA).
- Over 500 Facilities currently managed under DOE
- Surrounded by WKWMA, Tennessee Valley Authority (TVA), and rural residents.





- Uranium Enrichment Operations: 1952-2013
- DOE Cleanup began in 1988
- Placed on the National Priorities List (NPL) in 1994
- Federal Facilities Agreement was signed in 1998
- Deactivation project for process buildings began in 2014

Site History

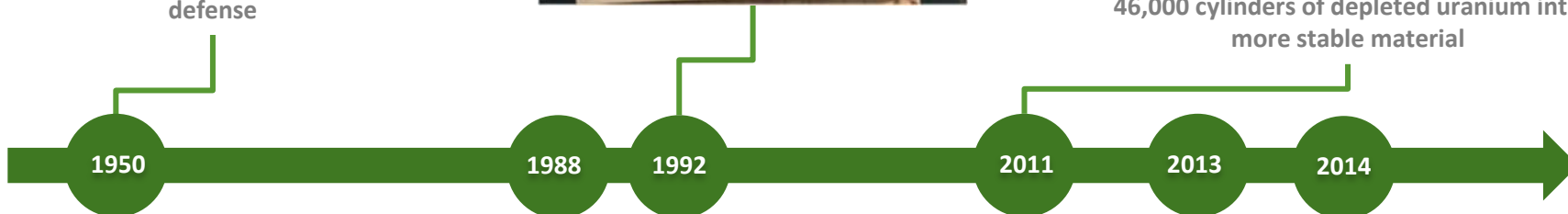


Paducah selected for second of three enrichment plants for defense

Energy Policy Act of 1992 establishes the United States Enrichment Corporation (USEC) to take over plant operations



A new plant is fully operational to convert 46,000 cylinders of depleted uranium into more stable material



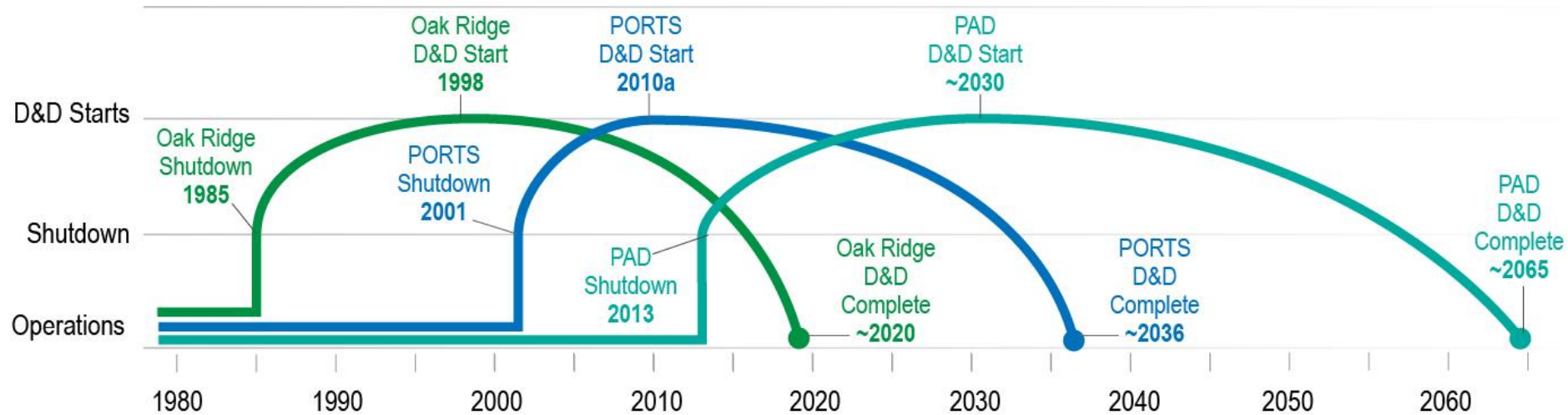
Contamination is discovered and response actions began



Uranium enrichment ends



DOE Cleanup mission expands by receiving the Paducah Gaseous Diffusion Plant



Oak Ridge

- Operations end 1985
- Cleanup begins 1989
- D&D starts 1998
- D&D complete ~2020

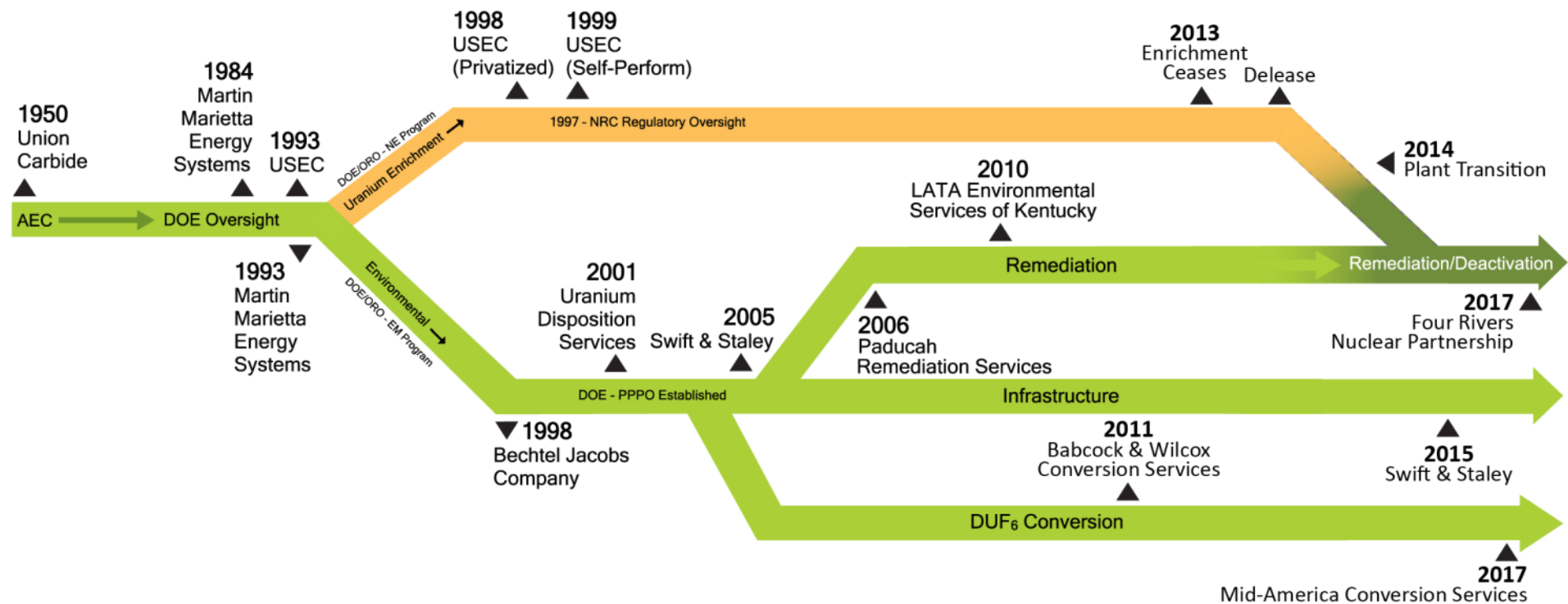
Portsmouth

- Operations end 2001
- Cleanup begins 1989
- D&D starts 2010
- D&D complete ~2036

Paducah

- Operations end 2013
- Cleanup begins 1988
- D&D starts ~2030
- D&D complete ~2065

Contracting History





Four Rivers Nuclear Partnership

- Project management
- Facility modification
- Infrastructure optimization
- Environmental remediation
- Decontamination
- ~1,000 employees



Swift & Staley Inc.

- Infrastructure (facility and road operations, maintenance)
- Security (classification)
- Records management
- Property and fleet management
- Information technology
- ~200 employees



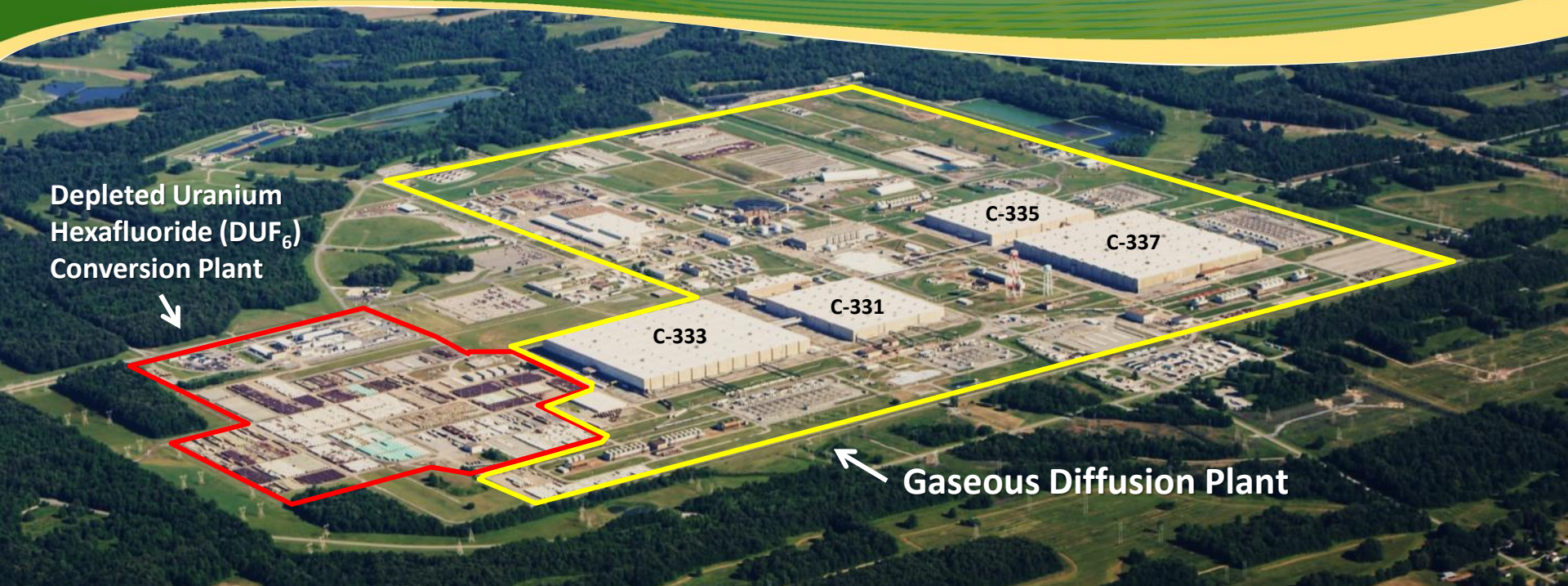
Mid-America Conversion Services

- DUF₆ plant construction
- DUF₆ plant operation
- Cylinder management
- ~225 employees (Paducah)



Environmental Advisory Technical Services

- Oversight support to site office
- Environmental technical services
- Project/program management support
- ~40 employees (Paducah)



The four process buildings (C-333, C-331, C-335, and C-337) have a floor space equal to almost 100 football fields. Deactivation of C-333 underway.

- C-333 and C-337 are each ~25 acres under roof
- C-331 and C-335 are each ~12 acres under roof

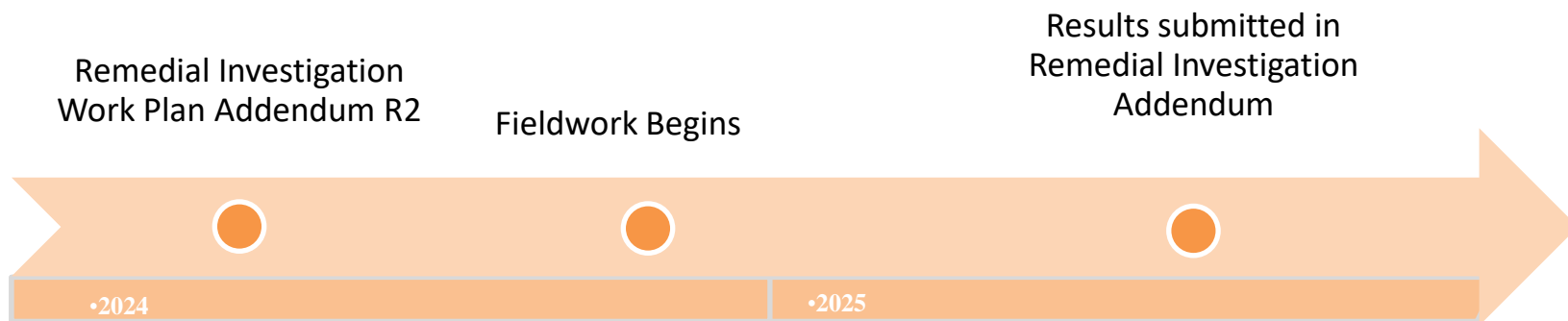
DOE's FY24 Strategic Vision



- Realign regulatory decision documents with long term cleanup mission
- Continue C-333 Process Building deactivation
- Continue “rightsizing” the site’s infrastructure to meet future deactivation and demolition needs

C-400 Complex

- Completed additional sampling in support of C-400 Remedial Investigation
- Results from fieldwork will be presented to EPA and KY in a Remedial Investigation Addendum due to EPA and KY by June 2025.

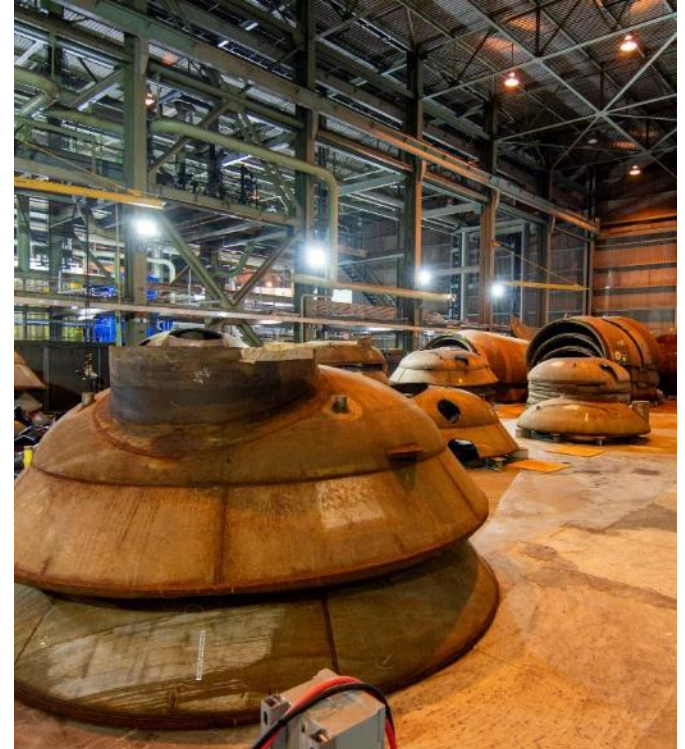
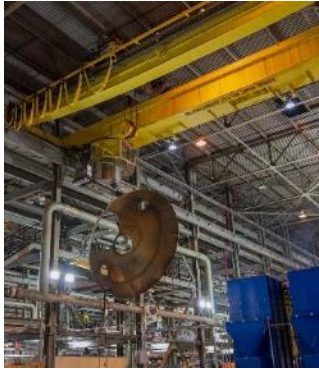


C-333 Material Sizing Area



- Continue to utilize lessons learned and institutionalize feedback to improve both safety and production.
- Completed segmentation, NDA measurement, and crushing of 236 converters to-date.

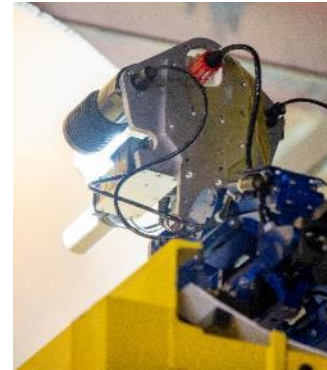
C-333 Material Sizing Area



C-333 Material Sizing Area



NDA & Characterization



C-333 Deactivation: Unit Bypass



- The Unit Bypass consists of more than 100 valves and over 3 miles of process gas piping connecting individual process components.
- Characterization sampling and deactivation activities to prepare for future building demolition continue with nearly 92% completed.



Utilities are being “right-sized” from former operation needs to the current site needs.

Electricity: Designed for 3,000 MW, usage ~7.5 MW.

Water: Designed for 30 Million Gals./day, usage ~0.8 Million Gals./day.

Steam: Designed for 300,000 lbs./hr. steam, now only need ~4,000 lbs./hr.

Plant Air: Designed for 25,000 scfm, now only need ~2,500 scfm.



- DOE awarded a \$2 million non-competitive financial assistance grant to lead a study for the future of PGDP to the Paducah Area Chamber of Commerce. This project will consist of site mapping, community studies, data analyses, and development of recommended strategies.