

Paducah Citizens Advisory Board

DDFO Presentation

Reinhard Knerr, Paducah Site Lead

October 20, 2011



CITIZENS
ADVISORY BOARD



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Presentation Agenda

- Inactive facilities removal
 - ✓ Continued Feed Plant cleanup
 - ✓ Metals Plant demolition preparation
- Southwest Plume Sources Proposed Plan
- Burial Grounds dispute
- DUF₆ plant update
- Contractor safety milestones
- Community outreach-Heath Middle School

Inactive Facilities: Big Picture

Metals Plant Before

- 65 ft² complex used until mid-80s, mainly to make uranium metal.



Metals Plant During

- Saved \$2.5 million by accelerating cleanup five years ahead of schedule.

East End Smelter Before

- 21,000 ft² complex used until 1986 to smelt nickel.



East End Smelter During

- Completed demolition One Year ahead of schedule and \$12 million under budget.

Feed Plant Before

- Nearly 200k ft² complex used until 1977 to produce UF₆ and fluorine.



Feed Plant During

- Half-acre eastern third complex (31,000 ft²) demolished three months ahead of schedule.

Inactive Facilities Removal: C-410 Feed Plant

- Cleanup accelerated with \$12 million in Smelter savings.
- Recovery Act buyback project completed 9/29/11, including demolition of half-acre eastern third of complex in late June.
- This marks the completion of the ARRA work at Paducah.



A worker practices operating a remote-controlled demolition machine for use in the Feed Plant.

Inactive Facilities Removal: C-410 Feed Plant



Workers dismantle UF6 tie lines.

- About 74,000 ft³ piping, equipment removed.
- Demolition of remaining 164,000 ft² planned for 2012.
 - LATA to issue Request for Proposals in January.

Inactive Facilities Removal: C-340 Metals Plant



- Metals Plant declared demo-ready in early August.
- Applied fixative in September to guard against airborne contamination during demolition.

Workers spray green fixative to prepare the Metals Plant for demolition.

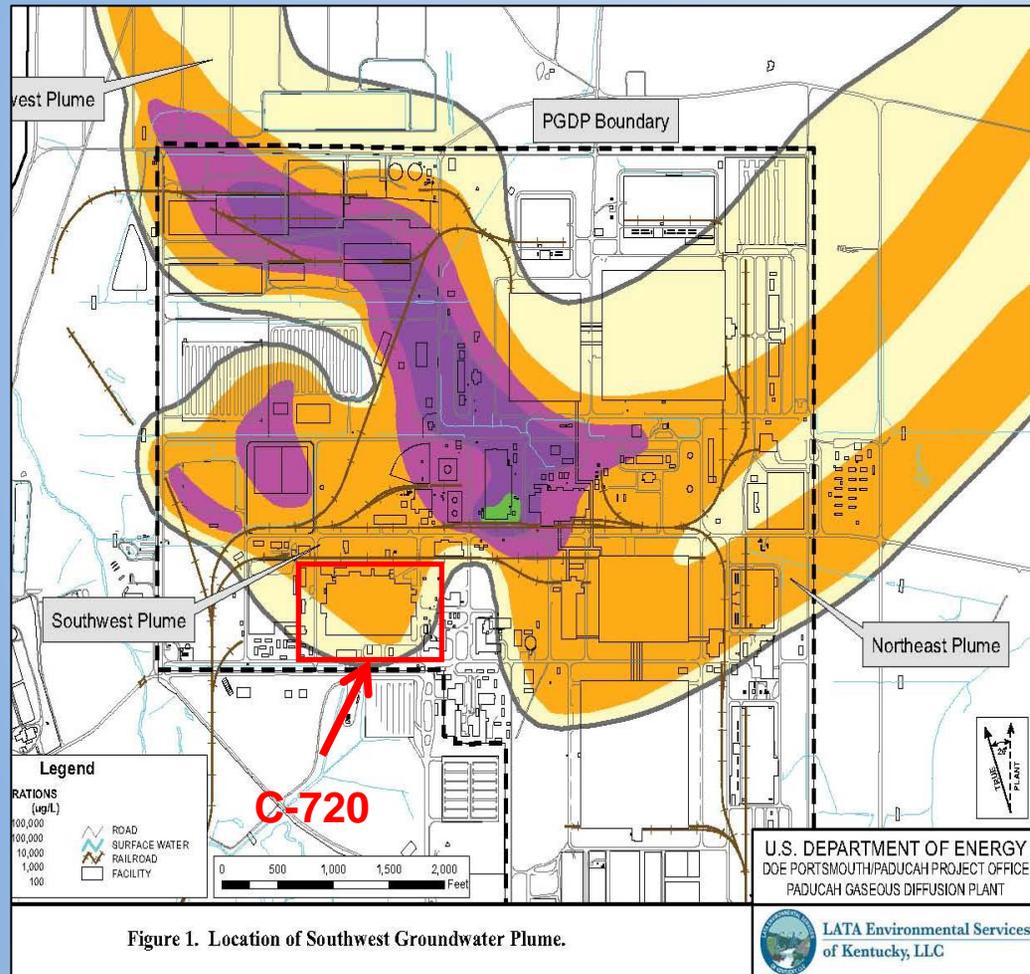
Inactive Facilities Removal C-340 Metals Plant



- Competitive bidding:
 - Issued Request for Proposals Aug. 10.
 - Potential bidders toured complex Sept. 8.
 - Received bids Sept. 26; under evaluation.
- Demolition to begin in first quarter 2012; cost: < \$10 million, including waste disposition.

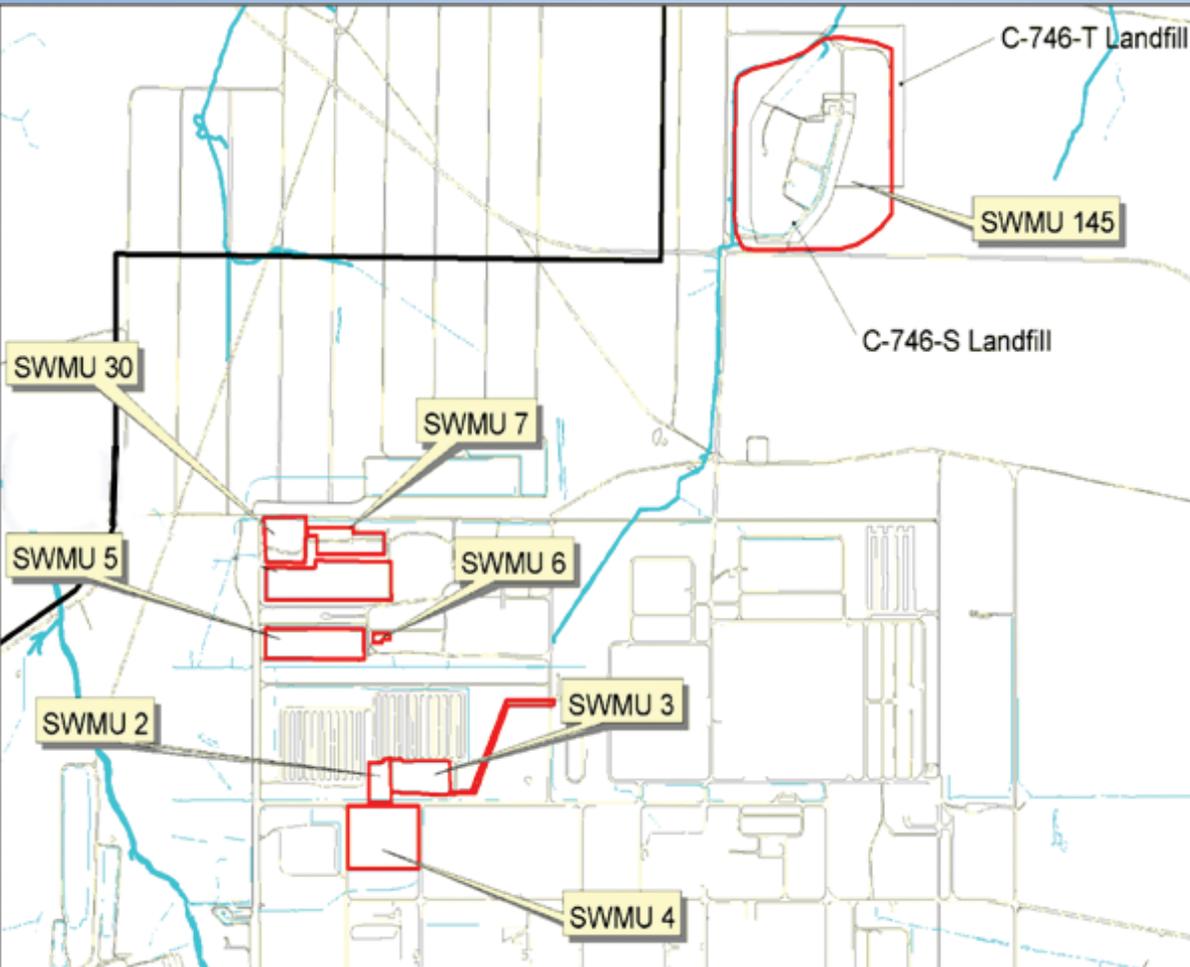
Groundwater Cleanup

Southwest Plume Sources Proposed Plan



- SW Plume smallest of three TCE-contaminated groundwater plumes
- About 70 gals TCE in ground at three source areas.
- Proposed Plan recommends:
 - ✓ Deep soil mixing at SWMU 1 (oil landfarm).
 - ✓ Enhanced in place bioremediation (micro-organisms) or long-term monitoring at two areas near C-720 Maintenance/Stores building. Remedy contingent on RDSI results.
- State, EPA approved Proposed Plan in late September.
- 45-day public comment period 10/2-11/16.
- Final ROD to regulators in December.

Burial Grounds – Formal Dispute



- Since January, DOE/regulators resolved 109 issues/comments involving FS process.
- New strategy: Divide burial grounds into subprojects for cleanup at the FS or PP/ROD
- Seven unresolved comments relate to designation of Principle Threat Waste (PTW).
- Formal dispute ongoing to resolve final concerns.
- Dispute delays completing Feasibility Study process.

Depleted Uranium Hexafluoride (DUF₆) Plant



- Babcock and Wilcox Conversion Services (BWCS) continues phased startup of conversion operations.
 - ✓ All four lines operated in September to process three cylinders without shutdown, demonstrating conversion capability.
 - ✓ Completing maintenance on lines 1 and 2.
- FY 2012 efforts focus on achieving sustainable, multiline production capacity.
- Operational employment is projected at more than 160 skilled hourly and salaried personnel.
- UF₆ in approximately 41,000 cylinders will be converted into a more stable chemical form for beneficial reuse or disposal.

Contractor Safety Milestones

1 million hours worked without lost workday due to job-related injury/illness.

- Infrastructure contractor Swift & Staley reached milestone 9/2, celebrated 9/29.
 - Represents > 6.5 years of plant work.
- Cleanup contractor LATA Kentucky targeting late October.
 - Represents work since mid-November 2010.
 - Accomplished during hazardous inactive facilities cleanup.



Spotters watch during a simulation as an excavator operator uses a grapple to grasp a plastic barrel during LATA Kentucky safety training exercises in summer 2011.



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Community Outreach

DOE developing program to enhance Heath Middle School gifted-talented science studies.

- Runs Oct. 2011-May 2012; may expand beyond gifted-talented in future years.
- Mentors assigned to each group of students.
- Students investigating, problem-solving Paducah site issues.
- Expanded from May 19, 2011 first-of-its-kind pilot project at site.



Heath middle school students use a field measurement tool to determine the acidity of samples they took during a field exercise



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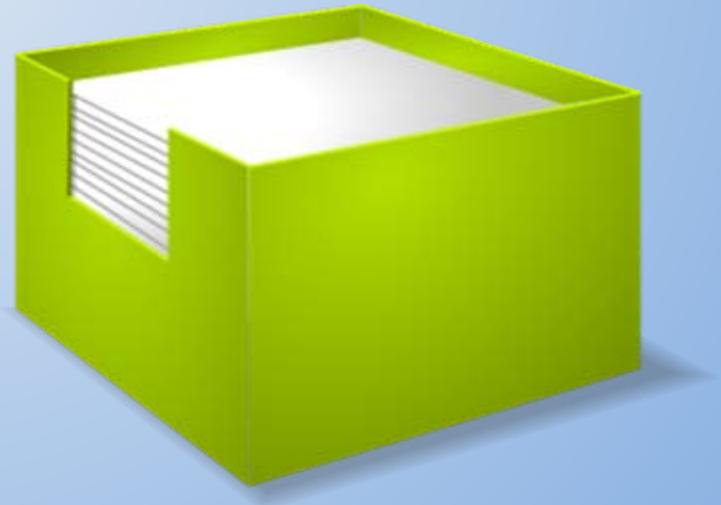
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Recent and Upcoming Documents

- FY 12 Site Management Plan – due mid November
- Waste Disposal Options – RI/FS targeted for end of November/first of December.
- BGOU feasibility study 5/6 targeted for the first of December.
- BGOU SWMU 4 SAP targeted for end of October.

C-400:

- Proposed plan revision with new alternative analysis targeted for October 28.



Discussion...



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