

Paducah Citizens Advisory Board

DDFO Presentation

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February 16, 2012



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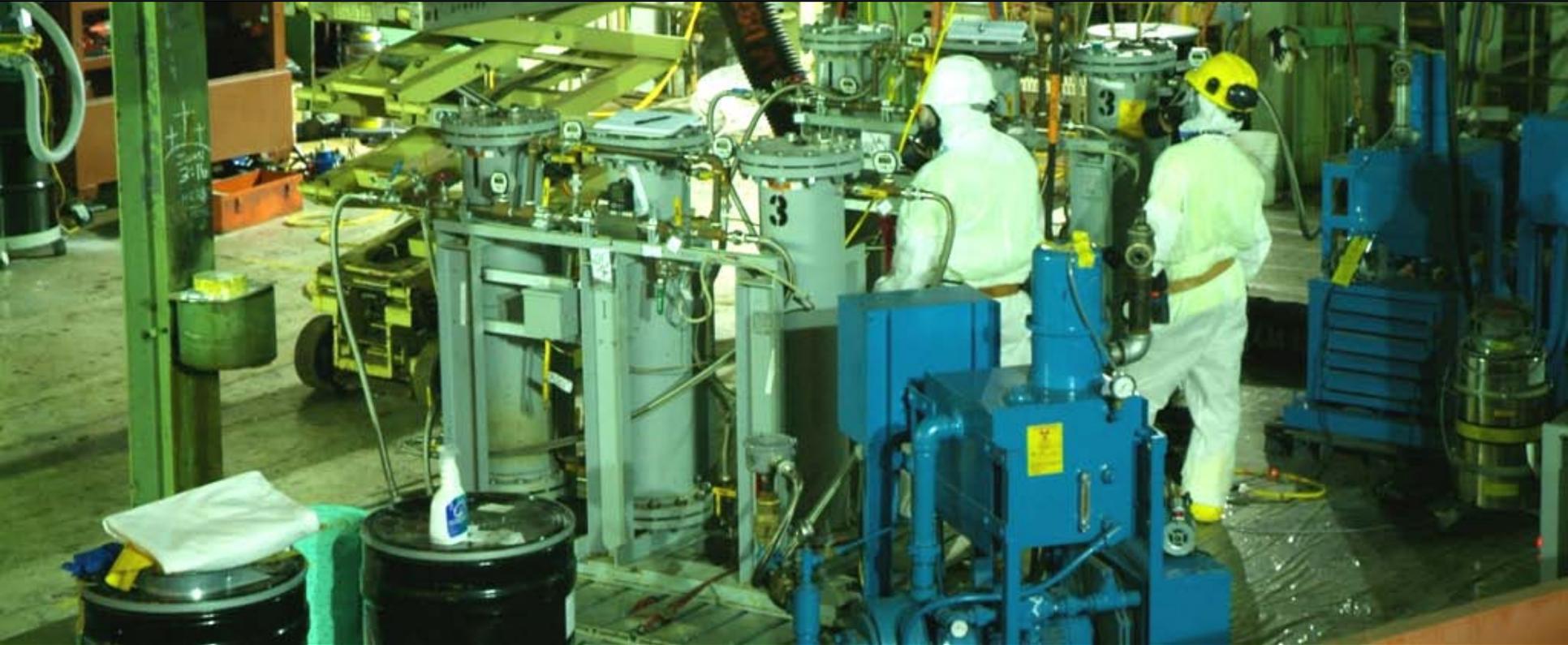
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Presentation Agenda

- Inactive facilities removal
- Groundwater cleanup
- Burial grounds dispute resolution
- DUF₆ plant update
- Community outreach
- Recent/upcoming documents

Inactive Facilities Removal: C-410 Feed Plant



- About 84,000 ft³ piping, equipment removed.
- Demolition of remaining 164,000 ft² to be completed by end of 2012.
 - LATA to issue Request for Proposals by March.
- Key elements to complete before demolition:
 - HVAC and vacuum system stabilization.
 - Cold trap and ash receiver stabilization and isolation.

Inactive Facilities Removal: C-340 Metals Plant



Fixative applied to C-340.

- Fixative applied outside in September to guard against airborne contamination during demolition.
- Very thorough fixative application planned inside based on lessons learned from DOE projects elsewhere.
- PCB in paint samples on structure collected and data undergoing evaluation.
 - May result in substantial waste volume requiring offsite disposal as PCB remediation waste.
 - Demolition could be delayed into FY 13.

Inactive Facilities Removal: Trailers and Metal Containers

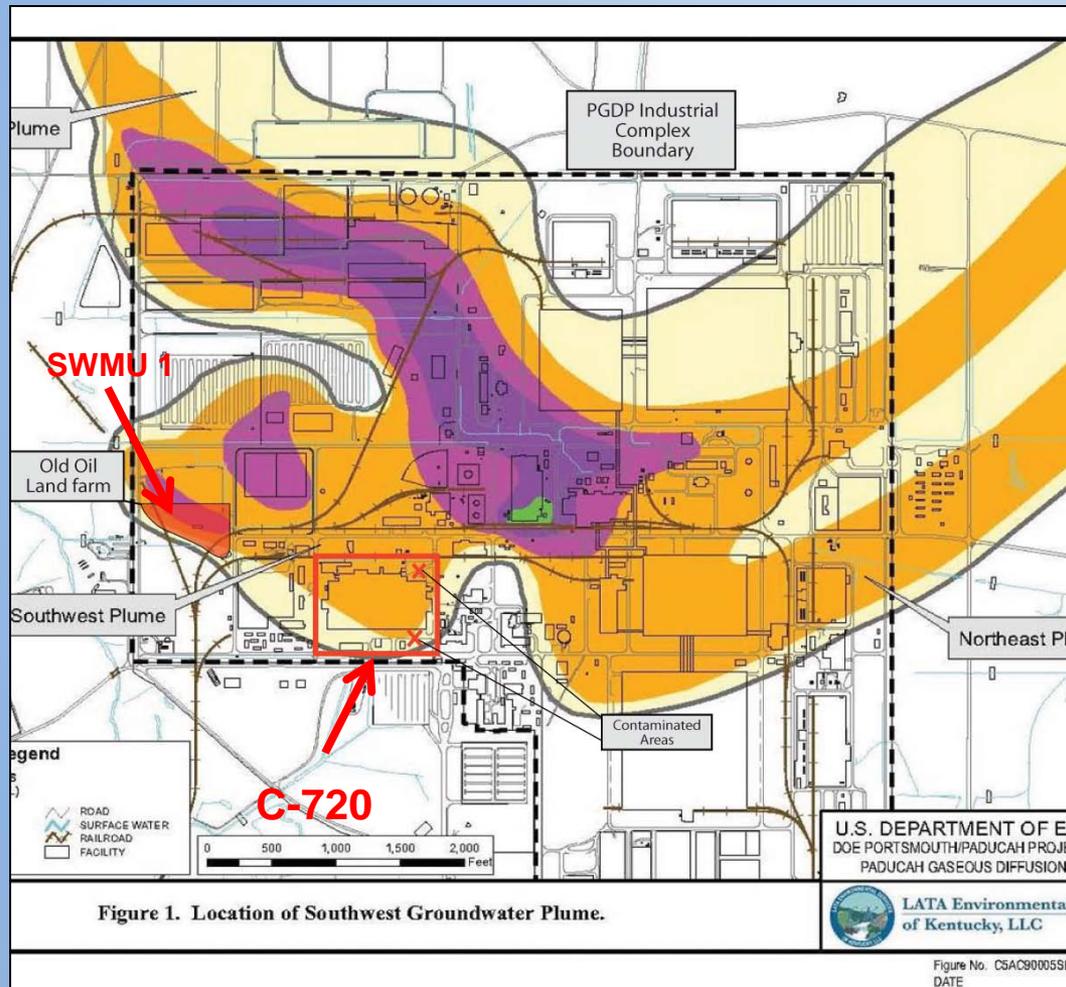


Old trailers, left, are cut up and placed into containers to be placed in the industrial landfill.

- Five old storage trailers removed in Dec-Jan from SW plant area and sent to industrial landfill; three more old trailers slated for removal.
- Removal/recycling of up to 85 large Sealand containers sitewide continues.
- Work done at no extra cost because of about \$150,000 in Waste Management budgetary efficiencies.
- Next project: Removing an old scale house in WKWMA southeast of site.
- > 142,000 ft² of inactive facilities scheduled to be removed through FY 14 as part of ongoing Decontamination & Decommissioning.

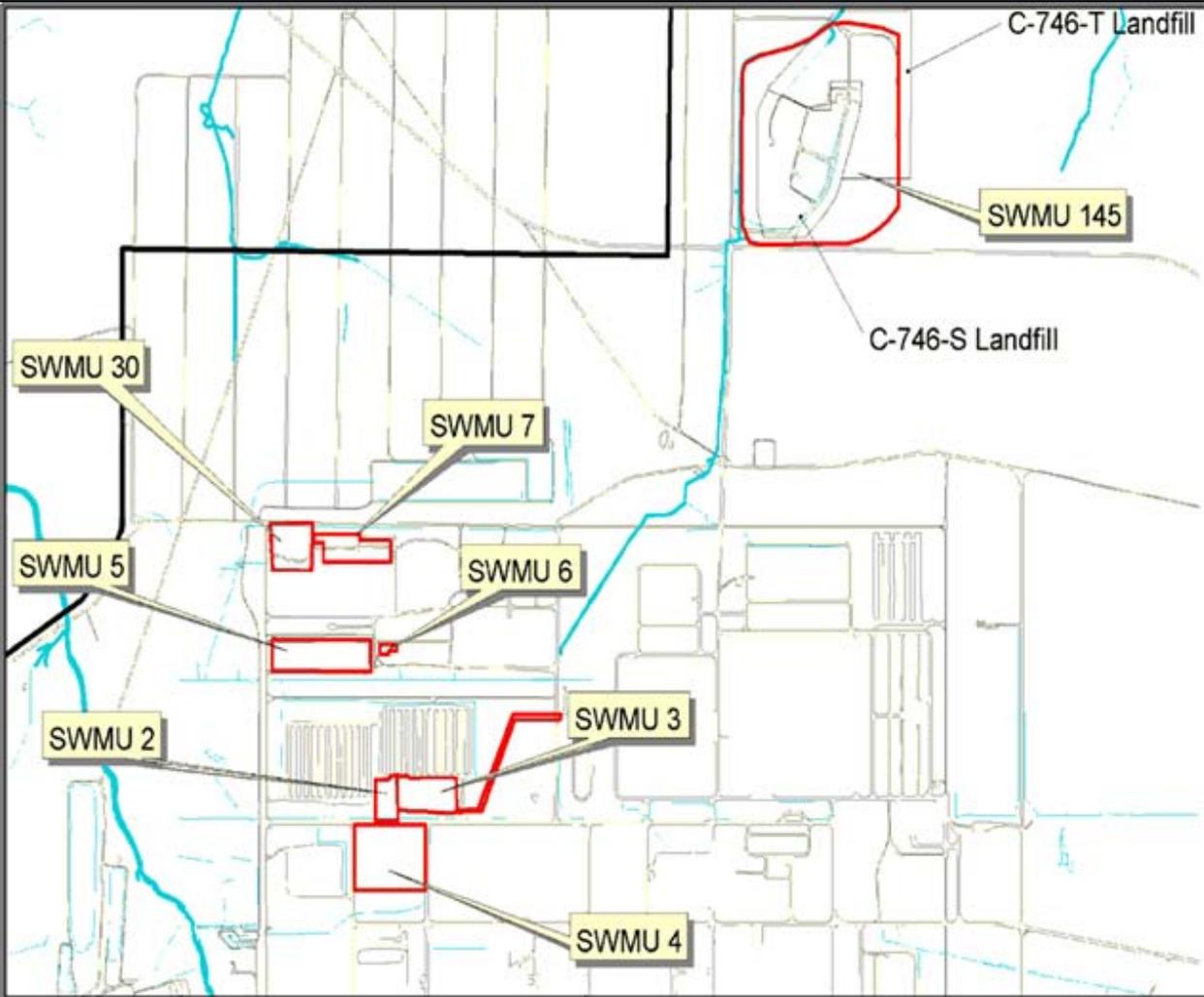
Groundwater Cleanup

Southwest Plume Sources Proposed Plan



- Record of Decision submitted to regulators in February; approval anticipated in 2012.
- Selected remedies:
 - Deep soil mixing with slurry at SWMU 1 (oil landfarm).
 - Enhanced microbial bioremediation or monitored natural attenuation at two areas near C-720 Maintenance/Stores building contingent upon the Remedial Design Site Investigation (RDSI) results.
- Three-month RDSI field work slated for summer 2012 to pinpoint locations for all remedies.
- Remedy construction to start in spring 2013.

Burial Grounds – Dispute Resolution



- Informal dispute Jan. 14- Sept. 26, 2011, resolved majority of regulatory concerns.
- Remaining concerns addressed in formal dispute starting Sept. 27.
- Formal dispute resolved Jan. 30, 2012.
 - Involves documenting principle waste (PTW) at SWMUs 2, 4, 7, in the FS and related CERCLA documents.
 - PTWs include TCE, uranium, PCBs
- Regulators to receive FS reports by Feb. 29 for SWMUs 5-6, and April 29 for SWMUs 2, 3, 7, 30.

Depleted Uranium Hexafluoride (DUF₆) Plant



- Babcock and Wilcox Conversion Services (BWCS) continues phased startup of conversion operations.
 - Extended operations on individual/multiple lines being executed to improve operations and logistics knowledge.
 - Plant operating with three lines in production mode, a milestone toward demonstrating design capacity.
- FY 2012 efforts focus on achieving sustainable, multiline production capacity.
- Operational employment is now about 200 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.

Community Outreach

Heath Middle School gifted-talented science project

- 26 students spending school year helping resolve environmental issue at Paducah Site.
- Mentors assigned to groups, who visited two outfalls Nov. 9, DUF₆ plant Dec. 9, USEC lab Jan. 27.
- Groups to present April 2 to DOE on how to reduce levels of zinc and tiny organism toxicity in outfall near DUF₆ plant.



Kelly Layne of the LATA Kentucky team tells Heath Middle School students how to use zinc pennies in an experiment with differing known and unknown solutions.



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Community Outreach

Department of Energy Third Regional Science Bowl

- Lone Oak won Feb. 10 HS competition at WKCTC.
- About 13 middle schools to compete Feb. 24.
- Winners advance to nationals April 26-30.
- Paducah Middle runner-up in 2011 model car challenge.
- DOE, contractors judging regionals.



Lone Oak High School team members, from left, Rana Edem, Ricky Grewelle, Nikolas Anderson, and Parijat Sharma ponder the answer to a question in the finals of the 2012 Regional Science Bowl.

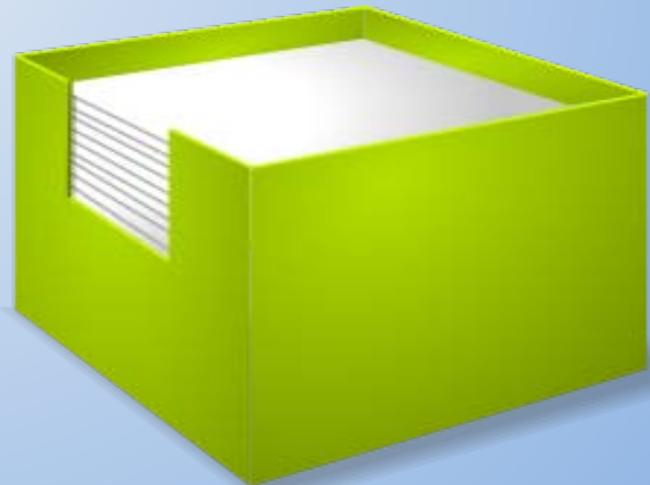


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Recent and Upcoming Documents

- SW Plume ROD and Remedial Design Work Plan – **submitted Feb. 3**
- C-400
 - Phase IIa Remedial Design Report – **due March 6**
 - Phase IIa Remedial Action Work Plan – **due March 28**
 - Phase IIb ROD amendment – **due Feb. 28**
- Integrated Priority List – **submitted Feb. 15**
- FY 12 Site Management Plan – **due Feb. 27**
- Waste Disposal Options Remedial Investigation/Feasibility Study – **projected for late February/early March**



Discussion...



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