



Paducah Gaseous Diffusion Plant
Citizens Advisory Board

July 16, 2009

Proposed Agenda for the July Board Meeting

Chair

Bobby Ann Lee

Chair-Elect

Judy Clayton

Board Members

John Anderson

Anna Brewer

Allen Burnett

Robert Coleman

Matt Duncan

Jonathan Hines

Shirley Lanier

Margaret Morgan

Dianne O'Brien

Elton Priddy

Alex Roman

Mark Sullivan

Don Swearingen

Ralph Young

Board Liaisons

Reinhard Knerr

DOE DDFO

Buz Smith

DOE Federal Coordinator

Ed Winner

Division of Waste

Management

Turpin Ballard

Environmental Protection

Agency

Mike Hardin

Fish and Wildlife Resources

Stephanie Brock

Rob Gresham

Radiation Health Branch

Support Services

EHI Consultants, Inc.

111 Memorial Drive

Paducah, KY 42001

Phone 270.554.3004

Fax 270.554.3248

www.pgdpcab.org

info@pdpcab.org

6:00

Call to order, introductions

Review of agenda

DDFO's Comments

-- 20 minutes

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 10 minutes

Committee Chair Comments

-- 10 minutes

Presentations

-- 30 minutes

Administrative Issues

-- 10 minutes

Motions

Public Comments

-- 15 minutes

Final Comments

Adjourn



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

111 Memorial Drive • Paducah, Kentucky 42001 • (270) 554-3004 • PaducahCAB@bellsouth.net • www.pgdpcab.org

Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes July 17, 2008

The Citizens Advisory Board (CAB) met at the CAB office in Paducah, Kentucky, July 17, 2008, at 6 p.m.

Board members present: John Anderson, Judy Clayton, Bobby Lee, Shirley Lanier, John Russell, Jim Smart and Don Swearingen

Board members absent: Allen Burnett, Elton Priddy and Alex Roman

Board Liaisons and related regulatory agency employees: Ed Winner, Kentucky Division of Waste Management (KDWM); Turpin Ballard, U.S. Environmental Protection Agency (EPA); Tim Kreher, Kentucky Department of Fish and Wildlife Resources (KDFWR); Stephanie Brock and Rob Gresham, Kentucky Radiation Health Branch (RHB)

Deputy Designated Federal Official: Reinhard Knerr

DOE Federal Coordinator: Rob Seifert

U.S. Department of Energy (DOE) related employees: Rich Bonczek, Russ Boyd, Pete Coutts, Kim Crenshaw, Tracey Duncan, Bruce Gardner, Steve Manning, Jerry Mayes, Bill Murphie, Todd Nelson, Eric Roberts, Scott Smith, Ted Theopolos and Barry Tilden

Agenda

The agenda was modified to include discussion of issues and accomplishments for the September Chairs meeting and a discussion on scenario planning. **The Board approved the agenda as modified.**

Deputy Designated Federal Official Comments

Knerr presented project updates to the Board. All presentations are available on the CAB Website at www.pgpdcab.org. Questions and answers (paraphrased) appear below.

Questions/Comments	Answers
Kreher: What is the location of the five rubble piles that will be removed for disposal?	Knerr: The piles are located on DOE owned property on the west side of the plant outside the fence. Some of the property is leased to KDFWR. Knerr asked Duncan to ensure Kreher understands the locations of the piles. Murphie: A chart and map can be provided to the CAB to identify locations and update progress as completed.
Russell: DOE should coordinate with Kreher to see if there is an opportunity to improve the habitat in the area where the rubble piles will be removed.	Knerr: The rubble piles are rather small but he is interested in speaking with Russell to explore opportunities for that area.

Liaison Comments

Federal Coordinator Comments

Seifert said there are two outstanding CAB recommendations that are being reviewed. DOE hopes to have responses to the CAB by the August Working Session. DOE will also be responding to the CAB’s letter requesting information on cylinder wash drums and information relating to the Kentucky Ordnance Works.

Kentucky Division of Waste Management

Winners said Steve Hampson had presented information on biodegradation at the June Working Session and at that time he was unsure if the EPA expert had agreed with some of the information. After additional conference calls, he believes the presentation was fair and apologized if he had indicated otherwise.

Environmental Protection Agency

Ballard said EPA, KDWM and DOE are conducting additional scoping discussions on the 2009 Site Management Plan to get all parties in agreement to meet Federal Facilities Agreement deliverables in a timely manner.

Kentucky Department of Fish and Wildlife Resources

Kreher applauded DOE on the removal of the C-611 Water Towers from the Wildlife Management Area. KDFWR has expressed interest in consolidating ownership of two islands of property surrounding the towers.

Russell requested an update on the Comprehensive Radiological Survey Plan. Knerr said the plan was provided to the CAB in May. DOE will provide the CAB a map grid that identifies the survey locations. The map will be updated as work progresses across the DOE property.

Bonczek said the Survey Scoping Plan is to conduct a 100% visual survey to identify surface anomalies on DOE owned property outside the security fence on a grid. In an area without an anomaly, 10% of a grid area which is about 100 sq. ft. will be surveyed by hand through a random path and sent to a database. For anomalies such as debris or soil piles, a 100% survey will be conducted. All anomalies will be identified through a Global Positioning System and logged into a database. If a radiation signature is found indicating a problem, grab sampling will be used. The same approach for the soil piles will be utilized.

The planned radiation monitoring flyover has been delayed due to security issues with the United States Enrichment Corporation. DOE and Paducah Remediation Services are considering a multispectral analysis. The radiological survey plan has been reviewed by the regulators and milestones have been incorporated into the Site Management Plan. Knerr said the sampling effort submitted to the regulators is generic so a standard regulator approved terminology can be immediately implemented if needed.

Kreher said some of the earlier identified soils piles are on state property and that isn't included in the survey. Knerr said many of the soil piles located on state property have been investigated and that documentation is being provided to KDWM. Kreher applauded DOE on the generic sampling plan.

Administrative Issues

Motions

The following approved recommendations are available on the CAB Website at www.pgpdcab.org.

The CAB recommended that DOE incorporate the following into its public communication plan:

- Determine when (A) public education is appropriate vs. (B) public information gathering activities and clearly inform the community of the intent (A or B) prior to each public meeting.
- DOE should expand its use of communication tools to disperse their information and fact sheets.

The Board approved the proposed recommendation.

The CAB recommended that DOE develop and implement a public education program to consist of, but not be limited to, the following components:

- Conduct multiple public meetings to enhance the public understanding and input for waste disposal options in addition to the meeting listed in DOE's proposed plan
- Develop and distribute fact sheet(s)
- Develop display model(s) of the potential CERCLA cell
- In addition to the planned public meetings, DOE should initiate and promote opportunities to educate and solicit input from a diverse and broad mix of local organizations.

The Board approved the proposed recommendation.

The CAB recommended the following with regard to the Draft Environmental Assessment of Disposition of Radioactively Contaminated Nickel and the potential solicitation of nickel:

- If *de minimis* levels of nickel contamination can be achieved, it is recommended the moratorium on nickel release be rescinded.

- DOE should proceed with a Request for Proposal (RFP) for nickel processing. Based upon responses to the RFP, existing technology for nickel decontamination should be assessed and demonstrated.
- DOE release the RFP in draft form and the RFP should incorporate weighting factors to encourage nickel processing in the communities of Paducah and/or Oak Ridge areas.
- Evaluate a fourth alternative: Decontamination to Internal Recycle/Storage. DOE should store processed nickel with *de minimis* levels of contamination, until the moratorium is lifted or until future internal use is identified.
- If DOE proceeds with the RFP and a specific technology is offered by a successful bidder/vendor, it is recommended a more detailed Environmental Impact Assessment be prepared and submitted for public/community consideration.

The Board approved the modified recommendation.

The CAB recommended that a greater emphasis be placed on recycling, reclamation, and reuse of materials from the Paducah Gaseous Diffusion Plant (PGDP). The CAB recommends that DOE:

- Identify an individual/department with specific responsibilities to identify/quantify/maximize the practice of recycling, reclamation, and reuse.
- Encourage Paducah Area Community Reuse Organization as the designated community reuse organization to participate in an increased emphasis by providing assistance in identification of market opportunities and the sale of materials to entities external to the PGDP.
- Provide incentives available to all DOE and contractor employees to identify new or enhanced methods of eliminating waste and to employ waste minimization and pollution prevention awareness techniques in their day-to-day operations.
- Create a “Lay Down Yard” to store materials for possible later reuse/recycle or until sufficient quantities are available to justify reclamation. Develop solutions with regulators in developing long term storage of recyclables within regulatory guidelines.
- Use empty or soon to be emptied storage facilities to store materials where contamination from runoff or classification issues might be of concern.

The Board approved the modified recommendation.

Lee presented a recommendation to DOE with considerations for remediation plans for treating contaminated groundwater associated with the Southwest Plume. DOE said the bioremediation strategies identified in the recommendation have been tested at the Portsmouth site. The recommendation was declined but Knerr suggested a presentation on the different strategies that have been attempted at the Portsmouth site.

Roberts presented two letters prepared in the Hanford Chairs Meeting. The first letter commended DOE on the establishment of the Office of Communication. The second letter recommended that Quarterly Project Reviews be shared with the Environmental Management Site Specific Advisory Board. **The Board approved adding the Chair’s signature to both letters.**

Scenario Planning

Lee provided a presentation on Scenario Planning. The overview included the following:

- Introduction to Scenario Planning
 - Identify the focal issue
 - Assessment of the various influences
 - Identify alternatives based on various influences
 - Build scenario narratives tracing history to possible futures (3 or 4 scenarios)
 - Test scenarios using various stakeholders

- Policy screening, or how do policies differ under the different scenarios
- Scenario Planning Example
- CAB: Potential Future Uses of the Site
 - Describe potential future site uses
 - Identify viable stakeholders and incorporate their input
 - Determine relationships between clean-up activities and different scenarios
- Conclusion
 - Synergy may exist when various stakeholders work together
 - The CAB is in a unique position to initiate scenario planning process for the PGDP in the community.

The CAB agreed to fund Lee's participation in a two week training class and lead the CAB in developing scenario planning.

Chairs Meeting

Roberts will provide a draft template of the top three issues and the top accomplishment to be presented at the Fall Chairs Meeting in Washington D.C. for the Executive Committee for discussion. The issues will then be emailed to the full Board for review and comment prior to submittal to DOE Headquarters (HQ). Suggestions for the accomplishment include significant influence on HQ on the moratorium for nickel disposition and creating focus and attention on the recyclable metals as a national issue across the complex.

Annual Planning Retreat

The Annual Planning Retreat is tentatively scheduled for August 29-30 at Kentucky Dam Village. Board members will inform staff by Monday, August 4 if they plan to attend.

Executive Committee Meeting

The Executive Committee meeting is scheduled for Thursday, July 24 at 4:00.

The meeting adjourned at 9 p.m.

Solving Cleanup Challenges Through Risk Reduction

Progress at the Paducah Project

Update to the
Paducah Citizens Advisory Board

July 17, 2008



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Purpose of Presentation

- Program successes
- Main topics
 - D&D
 - DMSAs
 - Update on other projects



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D&D – C-342 Ammonia Dissociator



- Loose material removal began in June; completed week of July 7
- Continuing asbestos abatement
- Continuing removal of ammonia dissociators and other equipment
- Building demo scheduled to begin in August and will be completed in ~2 weeks

Workers remove pipes leading to process equipment located inside C-342.

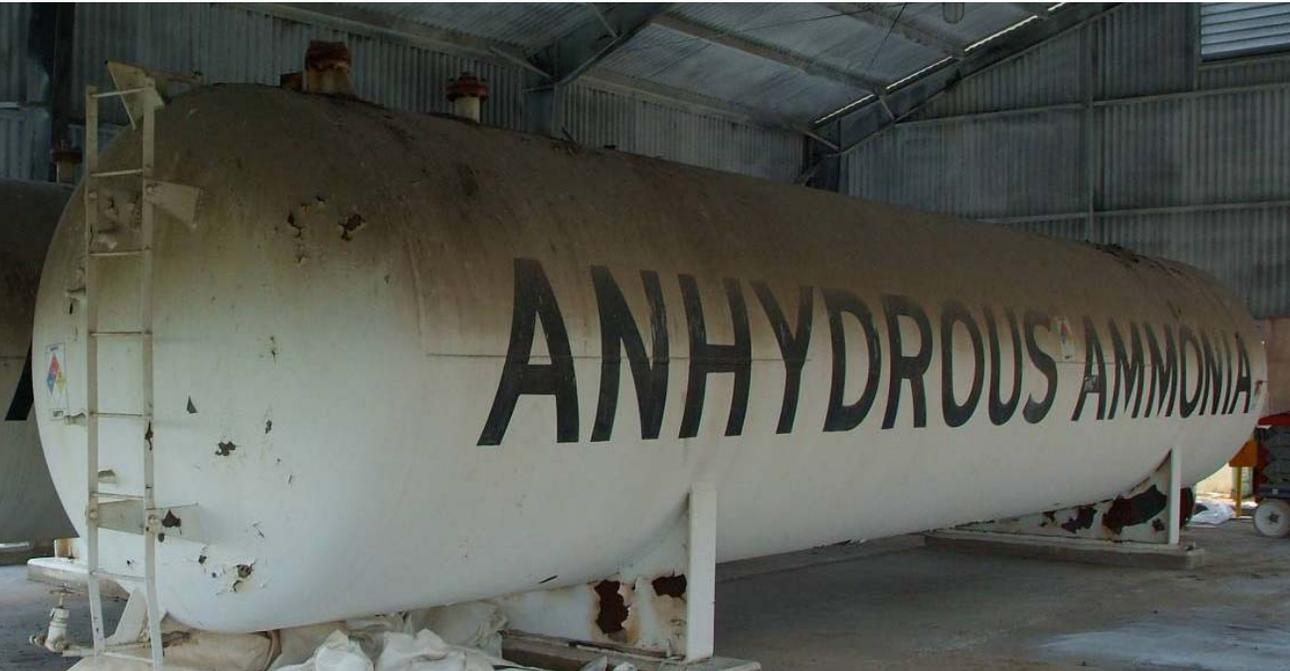


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D&D – C-342 Potential Material Reuse



One of the two old ammonia tanks that will be reused as leachate storage tanks at C-746-U.

- USEC evaluating reuse of some electrical equipment
- Two ammonia storage tanks will be reused at C-746-U Landfill as leachate storage tanks
 - Will add 40,000 gal of storage capacity needed for landfill expansion
 - Avoids \$70,000+ cost of buying new tanks



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D&D – C-611 Water Towers



- Two 180 ft water towers will be demolished
- Bids for demolition have been received; contract will be awarded by early August
- Demolition will be scheduled after contract award
- Goal is to drop the towers in August and have debris removed by January



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DOE Material Storage Areas



- Characterization 93% complete; scheduled to finish by 12/31/08 (9 months ahead of regulatory milestone)
- Disposition 88% complete; scheduled to complete by 3/31/09 (6 months ahead of PRS contract milestone)
- 83 DMSAs returned to use

A worker uses a hoist to lift the lid off a container of waste so the material can be inventoried.



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Other Projects

C-400 Interim Remedial Action

- D2/R1 Remedial Design Report approved by EPA and KY
- D2 Remedial Action Work Plan submitted to KY and EPA 6/19/08
- D2 Construction Quality Control Plan scheduled for transmitted to EPA and KY on 7/18/2008

Burial Grounds Operable Unit

- D1 Remedial Investigation Report scheduled for submission to EPA and Kentucky 7/25/08



Other Projects



Phase I sampling was conducted in an area on the east side of the plant and was completed in 2007.

Soil/Rubble Areas

- D1 Soil Pile I Site Evaluation Report to be submitted to KY and EPA on 7/18/08
- Final approval of Sampling and Analysis Plans (SAP) for remaining soil piles expected soon; sampling tentatively set to begin mid-August
 - Addendum 2 sampling will take 4-6 weeks
 - Addendum 1B sampling to follow; will take 4-6 weeks to complete
- Removal of 5 rubble piles for disposal at the C-746-U Landfill scheduled for August
- D1 Rubble Pile SAP issued for regulatory review on 5/19/08



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DOE Portsmouth/Paducah Project Office

Proposal for the
Citizens Advisory Board to Initiate

Scenario Planning

- Bobby Ann Lee, Summer 2008 -

Presentation Overview

1. Introduction to Scenario Planning
2. Scenario Planning Example
3. CAB: Potential Future Uses of the Site

Introduction

- Developed in 1960s by Herbert Kahn of the RAND Corporation
- Implemented by business, government and non-profit organizations where future uncertainty is high
 - Shell Oil
 - United Nations
 - State Agencies

What is Scenario Planning?

- Scenarios are carefully crafted stories about the future embodying a wide variety of ideas and integrating them in a way that is communicable and useful.
- Scenarios help us link the uncertainties we hold about the future to the decisions we must make today.

- Royal Dutch Shell

Purpose

- Understanding the nature and impact of the most uncertain and important driving forces affecting the future.
- Encourages knowledge exchange and development of mutual deeper understanding of central issues important to the future

Scenario Planning: A Systemized Process

1. **Identify the focal issue**
2. **Assessment of the various influences (internal, external and links)**
3. **Identification of alternatives based on various influences**
4. Building scenario narratives tracing history to possible futures (narrow down to 3-4 scenarios)
5. Testing scenarios using input from various stakeholders
6. Policy screening, or how do policies differ under the different scenarios



1. Identify the focal issue:

- Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history
- These problems, unless addressed, will substantially diminish the benefits that future generations obtain from ecosystems

2. Assessment of the various influences

- Reverse degradation of ecosystems while meeting increasing demands for their services
- Changes in policies, institutions, and practices that are not currently under way.
- Options exist to enhance ecosystem services in ways that reduce negative trade-offs or that provide positive synergies with other services.



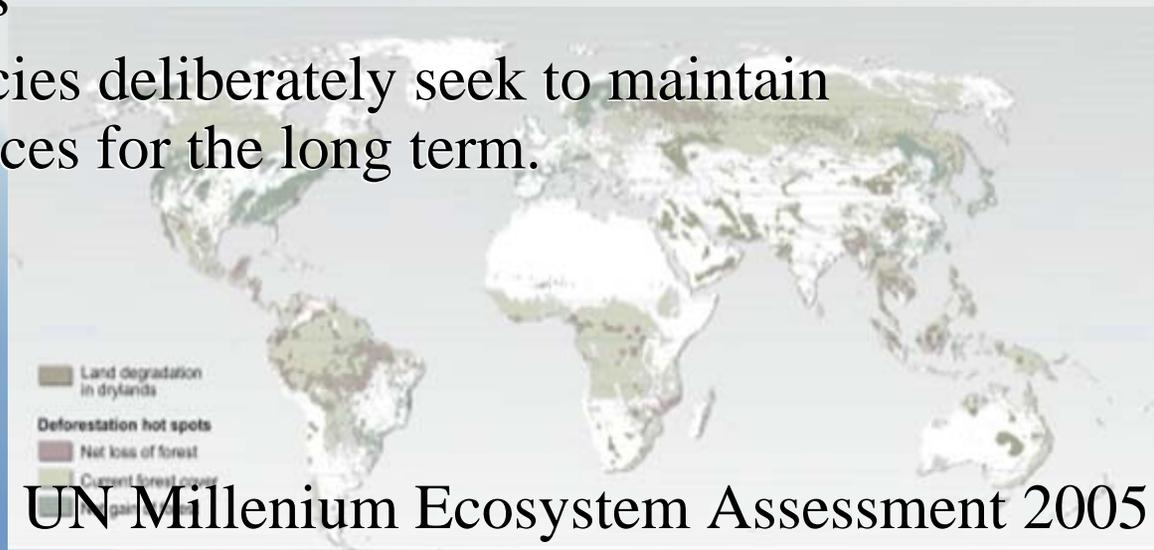
3. Identification of alternatives based on various influences

Global development paths:

- global
- regional

Ecosystem management:

- reactive - most problems are addressed only after they become obvious
- proactive - policies deliberately seek to maintain ecosystem services for the long term.



Global Development
Regional Global

Ecosystem Management
Reactive
Proactive

<p><i>Order from Strength</i></p> <ul style="list-style-type: none">-security priority-regional markets	<p><i>Global Orchestration</i></p> <ul style="list-style-type: none">-economic liberalization- low population
<p><i>Adapting Mosaic</i></p> <ul style="list-style-type: none">-local watershed scale-slow economic growth	<p><i>Techno-Garden</i></p> <ul style="list-style-type: none">-highly engineered-high economic growth

Scenario Planning: A Systemized Process

1. Identify the focal issue
2. Assessment of the various influences (internal, external and links)
3. Identification of alternatives based on various influences
- 4. Building scenario narratives tracing history to possible futures (narrow down to 3-4 scenarios)**
- 5. Testing scenarios using input from various stakeholders**
- 6. Policy screening, or how do policies differ under the different scenarios**

CAB Scenario Planning

CAB members recognize that decisions made today will impact the future use of the site. Conversely, future site uses should influence current decision-making.

1. Identify the focal issue:

Possible future uses for the Paducah site



Scenario Planning Objectives

I. Describe potential future site uses
(up to four scenario narrations)

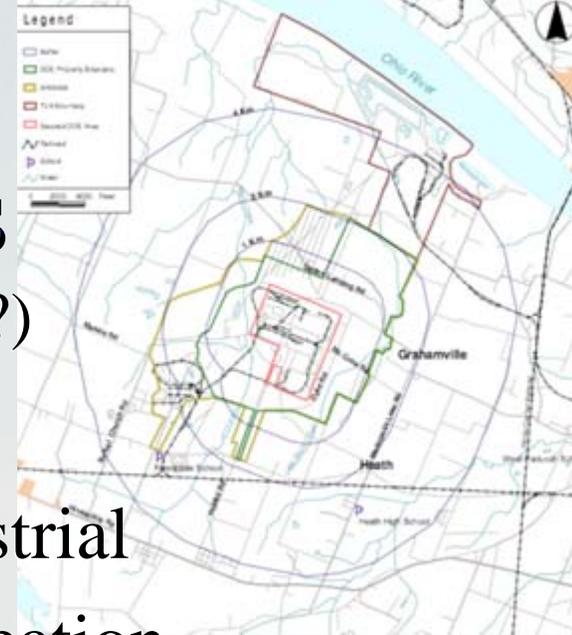
I. Identify viable stakeholders and incorporate their
input (present scenarios to the public)

II. Determine relationships between clean-up activities
and different scenarios (ongoing discussions with
Department of Energy and stakeholders)



Future Site Uses

(Starting point for discussion?)



↑ Industrial
↓ Recreation

↑ Industrial
↑ Recreation

↓ Industrial
↓ Recreation

↓ Industrial
↑ Recreation

Presentation Conclusion

- Both qualitative and quantitative inputs are embraced, recognizing that **multiple scenarios are possible in an uncertain future, and that synergy may exist when various stakeholders work together.**
- The CAB is in a unique position to initiate the scenario planning process for the Paducah Gaseous Diffusion Plant (PGDP) in our community.



U.S. Department of Energy Portsmouth/Paducah Project Office

Paducah Project Updates

**Prepared for the PGDP Citizens Advisory Board
July 2008**

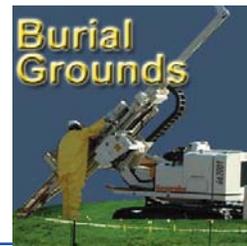


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U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Burial Grounds Operable Unit



(July 2008)

PROJECT SCOPE

The scope for the Burial Grounds Operable Unit (BGOU) includes a Remedial Investigation (RI), Feasibility Study (FS), baseline risk assessment, evaluation of remedial alternatives, remedy selection, and implementation of actions, as necessary, for

protection of human health and the environment.

The material in the burial grounds includes hazardous radioactive and pyrophoric wastes.

For a list of the burial grounds included in the unit, see the map on the reverse side.

RECENT ACCOMPLISHMENTS

- RI sample borings completed
- RI/FS Work Plan implementation complete



A sample boring is taken during the Burial Grounds Operable Unit Remedial Investigation.

BACKGROUND:

An RI/FS Scoping Document and Work Plan have been developed utilizing information collected on and around PGDP over the course of the last 10 years. The BGOU includes Solid Waste Management Units (SWMUs) 2, 3, 4, 5, 6, 7, 30, and 145. Sample borings drilled for the RI/FS Work Plan are complete.

UPCOMING WORK

- Work planned in next 60 days:
- Submit D1 RI Report to Kentucky and EPA on 7/25/08
 - Continue scoping for FS

Documents Scheduled (D1 versions)



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Contacts:

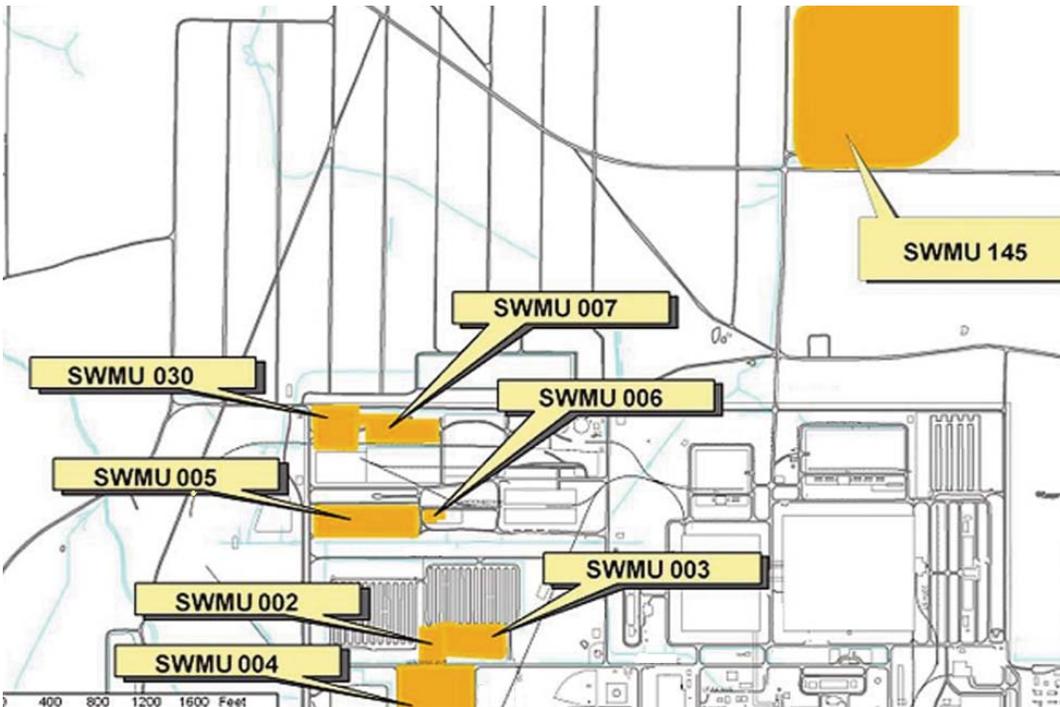
DOE: Jeff Snook/Jennifer Woodard
PRS: Tracey Duncan/Karen Holland
Kentucky: Ed Winner/Brian Begley
U.S. EPA: Turpin Ballard

Next Document:

D1 RI Report for the BGOU due July 25, 2008.



The C-404 Burial Ground (SWMU 3) as it appears today.



This map shows the SWMUs included in the BGOU.

Portsmouth/Paducah Project Office

DOE Project Manager - Jennifer Woodard, (270) 441-6820, jennifer.woodard@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Legacy Waste Disposition

(July 2008)



PROJECT SCOPE

DOE is responsible for positioning and/or recycling legacy wastes (wastes generated at the PGDP prior to establishment of USEC on July 1, 1993); wastes generated from ongoing DOE projects; and a limited amount of waste generated by USEC.

After characterization to assure selection of the appropriate disposition method, nonhazardous and nonradioactive wastes are disposed of in the DOE Solid Waste Contained Landfill. (See C-746-U Landfill fact sheet.)

Hazardous and radioactive wastes are treated, if necessary, and shipped off-site to approved DOE or commercial disposal facilities.

Wastewater (collected from sumps in diked areas in DOE waste storage facilities at PGDP) is treated and discharged in accordance with the Kentucky Pollutant Discharge Elimination System permit.

Nearly two-thirds of the about 572,000 ft³ of legacy waste once stored at the site has been removed. The project is scheduled to be completed 9/30/09.



Above, the C-746-B storage facility is shown before and after recent shipments. Part of the disposal effort included 45 shipments of PCB-contaminated debris.



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Contacts:

DOE: Rob Seifert
PRS: Matt LaBarge/Greg Shaia
Kentucky: Ed Winner
U.S. EPA: Turpin Ballard

Next Document:

Site Treatment Plan Quarterly Report,
July 31, 2008

MILESTONES

- Completion of non-transuranic legacy wastes by 9/30/09 (Site Treatment Plan milestone).

RECENT

ACCOMPLISHMENTS

- Sampled 3 m³ of cylinder wash sludge that may have reclamation potential to support Expression of Interest.

UPCOMING WORK

Work planned in next 60 days:

- Treat and discharge wastewater
- Continue disposal of legacy waste
- Will issue Expression of Interest to potential vendors for reuse of cylinder wash sludge



Above, waste is loaded onto a truck for off-site disposal.

Portsmouth/Paducah Project Office

DOE Project Manager - Rob Seifert, (270) 441-6823, rob.seifert@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Surface Water Operable Unit



(July 2008)

PROJECT SCOPE

The Surface Water Operable Unit (On-Site) Project includes a site investigation to identify contamination zones posing unacceptable risks in ditches and outfalls, including Sections 3, 4, and 5 of the North-South Diversion Ditch.

The site investigation scope also includes an evaluation of whether additional sediment control measures are needed, as well as actions for potential legacy releases associated with the storm sewer system.

Project documents that have been submitted to regulators include a Site Investigation and Baseline Risk Assessment Report and a Non-Time-Critical Removal Notification. These will be followed by an Engineering Evaluation/Cost Analysis, Action Memorandum, and Removal Action Work Plan.

A Surface Water (Off-Site) action will follow. This action will focus on creeks and contaminant migration from internal ditches and will include an ecological risk assessment.



Outfall 15 is one of the areas where DOE is evaluating an action to remove contamination "hot spots."

UPCOMING WORK

Work planned in next 60 days:

- Issue the D2 EE/CA
- Continue development of Removal Action Work Plan

FFA MILESTONES

The regulatory milestone for the Action Memorandum is October 2008; the Removal Action Work Plan milestone is December 2008.

KEY MILESTONES ACCOMPLISHED

Issued the D1 Engineering Evaluation/Cost Analysis issued to Kentucky and EPA on 2/10/08
Site Investigation and Baseline Risk Assessment approved February 2008



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Contacts:

DOE: David Dollins
PRS: Tracey Duncan/Craig Jones/Jana White
Kentucky: Ed Winner
U.S. EPA: Jennifer Tufts

Next Document:

D2 EE/CA 8/02/08



Included in the scope of the “hot spot” evaluation are portions of the North-South Diversion Ditch located outside the plant security fence. Portions inside the fence previously were remediated.

Documents Scheduled (D1 versions)



Portsmouth/Paducah Project Office

DOE Project Manager - David Dollins (270) 441-6819, dave.dollins@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Groundwater Operable Unit



(July 2008)

PROJECT SCOPE

This project addresses environmental remediation of groundwater contamination on a sitewide basis at PGDP.

The main contaminants of concern are trichloroethene (TCE) and technetium-99 (Tc-99). The contaminants are present in three "plumes": Northeast, Northwest, and Southwest.

Remedial/removal actions will be designed and implemented after completion and signing of Records of Decision (RODs).

Specific projects include:

■ Northeast and Northwest Plumes Pump and Treat -

Treatment systems that extract contaminated groundwater from the Northwest and Northeast Plumes and return it to

beneficial use

■ **Southwest Plume** - A decision on addressing contamination for the third plume is being developed (*see reverse side for more detail*)

■ **C-400 Interim Remedial Action** - In 2009, operation begins of a system that will significantly reduce the amount of TCE under the surface at the major source of off-site contamination

■ **Dissolved-Phase Plumes Remedy** - DOE has begun the process of determining the best long-term solution for off-site contamination. This includes a study TCE degradation in the groundwater.



Overhead power lines are run to the area where a treatment system is to begin extracting TCE from beneath the surface and significantly reduce the site's largest source of off-site contamination.

UPCOMING WORK

Work planned in next 60 days:

- Obtain regulatory approval of the Remedial Design Report (submitted 7/9/08)
- Obtain regulatory approval of the D2 Remedial Action Work Plan (submitted 6/20/08)
- Hold scoping meetings with EPA and KY to discuss Southwest Plume Focused Feasibility Study
- Continue TCE Degradation Study

RECENT ACCOMPLISHMENTS

- D2 C-400 Source Reduction design submitted February 2008
- D2 Land Use Control Implementation Plan submitted February 2008



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Contacts:

DOE: David Dollins
PRS: Tracey Duncan/Mike Clark/Bryan Clayton
Kentucky: Edward Winner
U.S. EPA: Turpin Ballard

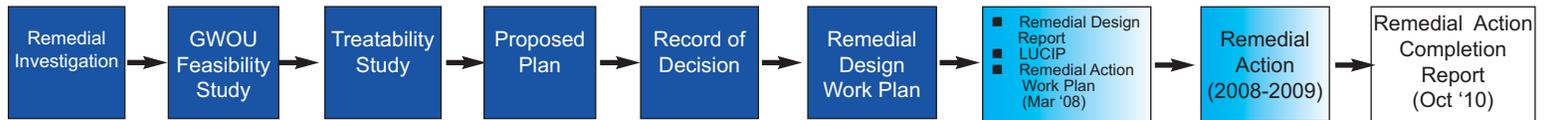
Next Document:

Final approval of the Remedial Design Report and the Remedial Action Work Plan

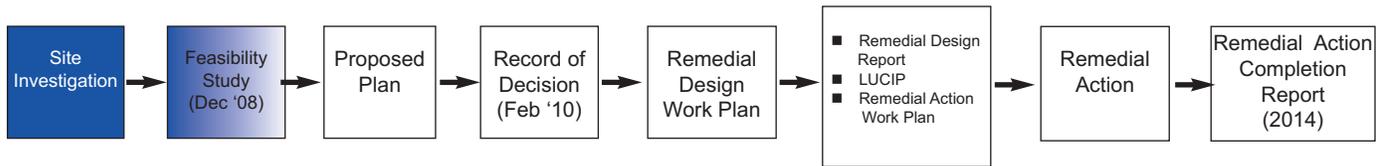


Power to the C-400 treatment system will be supplied by both overhead and underground transmission lines.

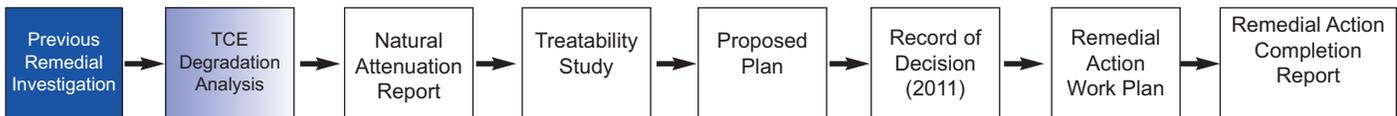
C-400 Documents Scheduled (D1 versions)



Southwest Plume Documents Scheduled



Dissolved-Phase Plume Documents Scheduled



Portsmouth/Paducah Project Office

DOE Project Manager - David Dollins (270) 441-6819, dave.dollins@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update D&D Operable Unit



(July 2008)

PROJECT SCOPE

The scope of this project includes decontamination and decommissioning of inactive PGDP facilities that have no reuse potential. To date, 21 facilities have been designated for removal and 12 of those have been removed.

Major projects within the scope of the D&D project include the following:

- Infrastructure (piping, equipment, and material) removal and demolition of the C-410/C-411/C-420 Feed Plant Complex (ongoing)

- Infrastructure removal and demolition of the C-340 Metals Plant (planned)
- Surveillance and maintenance of the C-340 Metals Reduction Facility (ongoing)
- Demolition of inactive facilities, including the C-746-A West End Smelter (complete); the C-342 Ammonia Facility (under way); and the C-611-M and N Sanitary Water Storage Tanks (planned for 2008)



Workers remove pipes leading to process equipment located inside C-342.

CURRENT STATUS - WEST END SMELTER REMOVAL

The C-746-A West End Smelter was built as a storage facility in the early 1950s. Two furnaces later were added for smelting metals, including gold, nickel, and aluminum. The facility continued operation through the 1970s.

The structure was demolished in April 2008. Prior to demolition, loose material, debris, equipment, furnaces, and interior offices had to be removed.

NEW DOCUMENTATION PROCESS

Work is continuing on a proposed new process for comprehensive D&D Removal Action documentation. The proposed new process will streamline gaining regulatory approval prior to implementing D&D activities. The process will save time and money now spent on writing regulatory documents. Similar processes are used at other DOE sites. DOE, Kentucky, and EPA are meeting to discuss the proposal.

FFA MILESTONES

Regulatory approval of Removal Action Completion Reports (RACR) for Incinerator and West End Smelter, 2008; Generic EE/CA, 2/2/10.

RECENT ACCOMPLISHMENTS

- Removed C-410 HF Tank Farm
- Removed Hydrogen Holder Tank
- Removed C-603 Nitrogen Complex
- Removed C-402 Lime House
- Removed C-405 Incinerator
- Removed C-746-A West End Smelter
- Removed C-612 Clamshell



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CURRENT STATUS - C-410 COMPLEX D&D

The C-410 Feed Plant Complex consists of nine facilities covering nearly 200,000 ft². It was built in 1955 to convert reactor returns from other DOE facilities to uranium hexafluoride.

The facility, which is contaminated with various radionuclides, operated until 1977.

D&D work involves three phases that must be completed before structural demolition can begin. These phases overlap. The phases are as follows:

1. Removal of pipes, wiring, loose equipment,

and debris - Work continues to dispose of loose material once stored inside the facility.

2. Asbestos abatement - More than five miles of asbestos insulation was used inside the complex. Removal work continues.

3. Removal of installed equipment and potentially hazardous chemical residue inside the old process equipment - This phase begins in the second half of 2008. Building demolition is scheduled to begin by 2012.



UPCOMING REMOVALS

The C-342 Ammonia Dissociator Complex (two facilities) now is scheduled for demolition in late July or early August 2008. Loose material removal in the complex has been completed and asbestos abatement is continuing.

The C-611 M&N Water Towers located in the West Kentucky Wildlife Management Area will be demolished later in 2008. A contract for a demolitions company to topple the towers is pending. Plans call for the towers to be removed before hunting season starts in the WKWMA.

Contacts:

DOE: Rob Seifert

PRS: Don Ulrich/Brad Montgomery

Kentucky: Brian Begley

U.S. EPA: Turpin Ballard



Left, one of the C-611 Water Towers located in the West Kentucky Wildlife Management Area. A contract to demolish the towers is pending.

Below left, one of two 20,000-gallon tanks in the C-342 Ammonia Dissociator facility. The tanks will be removed, refurbished, and sent to the C-746-U Landfill for use as leachate storage tanks.

Portsmouth/Paducah Project Office

DOE Project Manager - Rob Seifert (270) 441-6823, rob.seifert@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update DOE Material Storage Areas



(July 2008)

PROJECT SCOPE

The 160 DMSAs are nonleased areas inside buildings, as well as outdoor areas. DOE accepted the return of the areas and the material and equipment they contained from USEC on December 31, 1996, to facilitate Nuclear Regulatory Commission certification of the plant.

At that time, most of the contents needed detailed inventory, characterization, and disposition.

Since then, DOE and its contractors have been documenting contents; resolving environmental concerns, such as draining and disposing of oils from old equipment; and segregating and disposing of wastes.

The DMSAs initially contained more than 800,000 ft³ of material that needed characterization and about 600,000 ft³ of material that needed dispositioning.



Drums of waste are loaded onto a pallet for shipment.

UPCOMING WORK

Work planned in next 60 days:

- Continued characterization and packaging of DMSA materials in C-335, C-400, C-337, and C-310.
- Disposition remaining 19 of 42 process motors to NTS.

MILESTONES

Complete characterization of Priority "C" DMSAs by 9/30/09

KEY ACCOMPLISHMENTS

- Completed characterization of Priority "A" DMSAs by 9/30/2004
- Completed characterization of Priority "B" DMSAs by 9/30/2006

(NOTE: DMSAs were separated into three categories for characterization and disposition. The "A" areas were those with the greatest risk, followed by "B" and "C," depending on potential for risks to human health and the environment.)



A worker labels asbestos samples.

Characterization -- 93 percent complete

Disposition -- 88 percent complete



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Contacts:

DOE: Rob Seifert

PRS: John Samples

Kentucky: Leo Williamson

U.S. EPA: Turpin Ballard

CURRENT STATUS

- Characterization is 93% finished; completion estimated in December 2008.
- Disposition is 88% finished; completion estimated in March 2009.



The lid of a waste container is rigged for removal so that the contents can be inventoried prior to disposition.

Portsmouth/Paducah Project Office

DOE Project Manager - Jeff Snook (270) 441-6814, jeff.snook@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Soils Operable Unit

(July 2008)



PROJECT SCOPE

The short-term objectives of the Soils Operable Unit include evaluation of newly identified areas of possible contamination and the removal of three inactive facilities where soil contamination is present. These are the facilities:

- C-218 Firing Range
- C-403 Neutralization Pit
- C-410-B Sludge Lagoon

Planning for the removal of the facilities has begun and the first phase of sampling for the soil and rubble pile areas has been completed.

Long-term, the project includes a Remedial Investigation to identify any soils contaminated with PCBs or radioactivity. That will lead to a 2012 ROD and a Removal Action for contaminated soils above action levels. That action will be completed by 2016.



The C-403 Neutralization Pit is one of three inactive facilities with soil contamination included in the Soils Operable Unit.

UPCOMING WORK

Work planned in next 60 days:

- Issue D2 EE/CA for the removal of three inactive facilities with soil contamination
- Continue development of Action Memorandum for inactive facility removal
- Issue Site Evaluation Report for Phase I sampling of soil areas (7/18/08)
- Removal of five DOE rubble piles currently is being planned as a maintenance action to be implemented in Aug/Sept.

RECENT ACCOMPLISHMENTS

- Issued D1 Engineering Evaluation/Cost Analysis for the three inactive facilities on 3/24/08
- EPA and Kentucky approved Sampling and Analysis Plan (SAP) 1A for the soil piles
- Issued Rubble Piles SAP on 5/19/08
- D2 Addendum 1-B and 2 issued on 6/16/08

FFA MILESTONES

- 4th quarter 2011 – D1 Removal Decision Document
- 3rd quarter 2012 – D1 ROD
- September 30, 2015 – D1 Remedial Action Completion Report



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Contacts:

DOE: David Dollins/Rich Bonczek
PRS: Tracey Duncan/Craig Jones
Kentucky: Ed Winner
U.S. EPA: Turpin Ballard

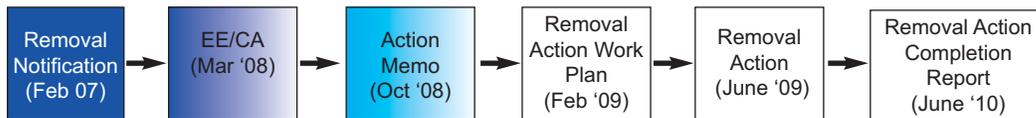
Next Document:

D2 Soils Inactive Facilities Engineering
Evaluation/Cost Analysis, July 27, 2008

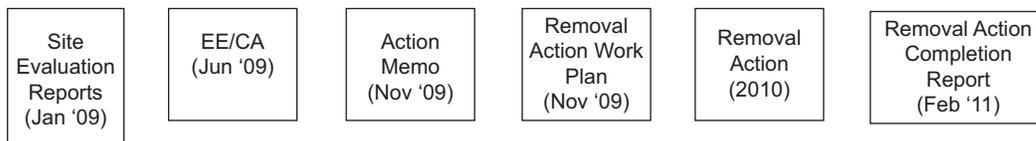


Above, sampling one of the Soil Pile areas along Little Bayou Creek; above right, the C-410-B Sludge Pit; below right, the C-218 Firing Range.

Soils Removal Action Documents Scheduled (D1 versions)



Soil/Rubble Areas Documents Scheduled (D1 versions)



Portsmouth/Paducah Project Office

DOE Project Manager - David Dollins (270) 441-6819, dave.dollins@lex.doe.gov



U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update C-746-U Contained Landfill

(July 2008)



PROJECT SCOPE

The C-746-U Contained Landfill and support facilities are located on 60 acres of DOE property near Ogden Landing Road, operating under a permit from the Kentucky Division of Waste Management.

Landfill disposal operations began in 1997. DOE uses the landfill for disposal of solid waste generated from its operations at the Paducah site.

Examples of wastes accepted include nonhazardous soil and debris from DOE projects, such as protective clothing worn by workers, paper, packaging, and landfill office wastes.

No material classified as hazardous waste or low-level radioactive waste is accepted.



The water level in one of the landfill's 31,000-gallon leachate storage tanks is measured.



The C-746-U Contained Landfill also receives non waste materials produced by USEC operations at the Paducah Gaseous Diffusion Plant. The materials are used by landfill operations for daily cover."

RECENT ACCOMPLISHMENTS

Continued accepting waste and debris from DOE and USEC operations; treated and discharged leachate; submitted minor permit modification to add leachate storage capacity.

Contacts:

DOE: Jeff Snook
PRS: Paul Corpstein/Matt LaBarge/
Paul Gagnon
Kentucky: Todd Hendricks
U.S. EPA: Turpin Ballard

Portsmouth/Paducah Project Office

DOE Project Manager - Jeff Snook,
(270) 441-6814,
jeff.snook@lex.doe.gov



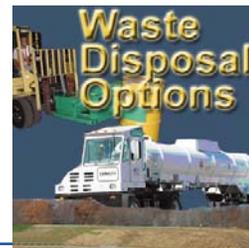
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U.S. Department of Energy Portsmouth/Paducah Project Office Paducah Project Update Waste Disposal Options Project

(July 2008)



PROJECT SCOPE

DOE is evaluating waste management options for the disposal of wastes generated at PGDP from CERCLA response actions and PDGP D&D.

The intent of this evaluation will be to support a comprehensive sitewide decision for the disposal of hazardous, low-level radioactive, and mixed waste resulting from CERCLA response actions at PGDP and PDGP D&D.

Waste disposal action

alternatives that will be evaluated in the RI/FS are expected to include off-site and on-site disposal and combinations of these alternatives.

The waste disposal options will be considered by following the RI/FS evaluation and decision documentation process required by CERCLA.

DOE has sought early public input in the evaluation process.

BACKGROUND

An estimated 3.7 million yd³ of waste will be generated during CERCLA response actions and D&D. In order to more effectively manage these wastes, a sitewide waste management strategy is being examined to determine a reliable protective solution for the disposal of those wastes.

The CERCLA RI/FS process will be used to identify and evaluate waste management alternatives.

By following the CERCLA decision and documentation process, documents prepared after the scoping document will include an RI/FS Work Plan, RI/FS Report, Proposed Plan, and Record of Decision.

RECENT ACCOMPLISHMENTS

- Issued D1 Scoping Document April 7, 2008

Contacts:

DOE: Jeff Snook
PRS: Fraser Johnstone
Kentucky: Ed Winner
U.S. EPA: Turpin Ballard

UPCOMING WORK

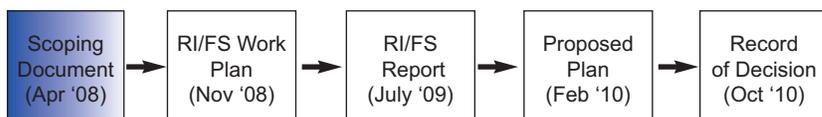
Work planned in next 60 days:

- Continue meetings with KY and EPA to discuss the project
- Continued drafting RI/FS Work Plan
- Continue developing material for first planned public meeting

Next Document:

RI/FS Work Plan,
November 18, 2008

Documents Scheduled (D1 versions)



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DOE Project Manager - Jeff Snook,
(270) 441-6814,
jeff.snook@lex.doe.gov