



*Portsmouth
Public Update Meeting
March 18, 2008*

**Environmental Cleanup Update
Preparations for Decontamination and
Decommissioning of the Portsmouth
Gaseous Diffusion Plant
Public Involvement**



Agenda

Topics for tonight's meeting:

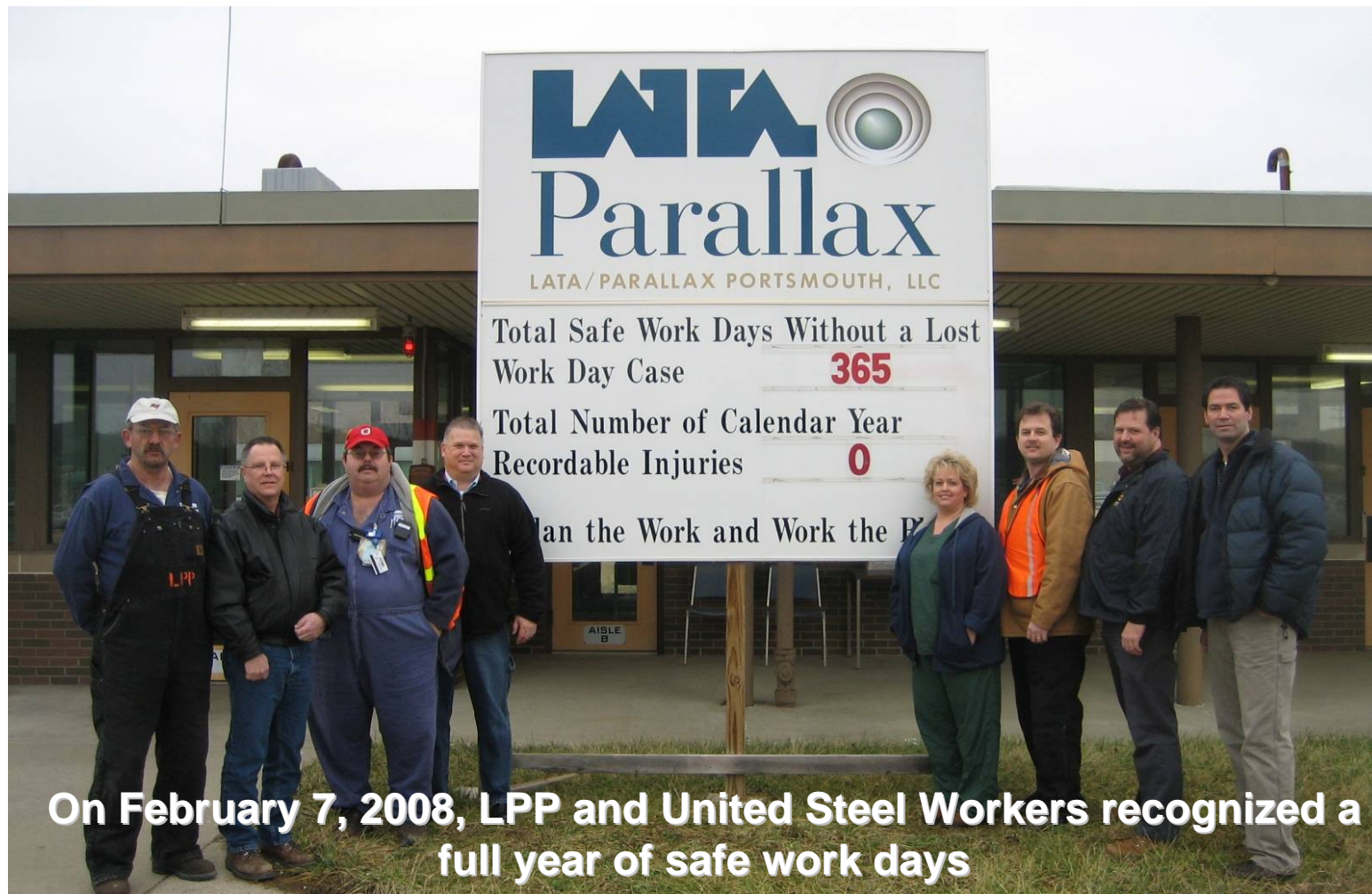
- Welcome/Introductions – William Murphie, U.S. DOE Portsmouth/Paducah Project Manager
- Contractor Updates on Plant Cleanup Progress and Planned Activities
 - Paul Kreitz, LATA/Parallax Portsmouth: Cleanup Progress
 - Wray Jordan, USEC: Work for DOE - Cold Shutdown and Tc-99 Cleanup Project
 - John McCoy, Uranium Disposition Services: DUF₆ Conversion Plant
 - Phil Moore, TPMC: Fog Road Upgrade Project
- Initial Planning for Decontamination and Decommissioning (D&D) of the Gaseous Diffusion Plant – Jud Lilly, U.S. DOE
- FY 2009 Budget – David Kozlowski, U.S. DOE Acting Site Lead
- Public Involvement in Future Decisions – Melissa Nielson, Director, U.S. DOE Office of Public & Intergovernmental Accountability
- Question and Answer Session

Cleanup Progress

***Paul Kreitz, LATA/Parallax
Project Manager***



Exceptional Safety Performance



LATA/Parallax's Scope of Work



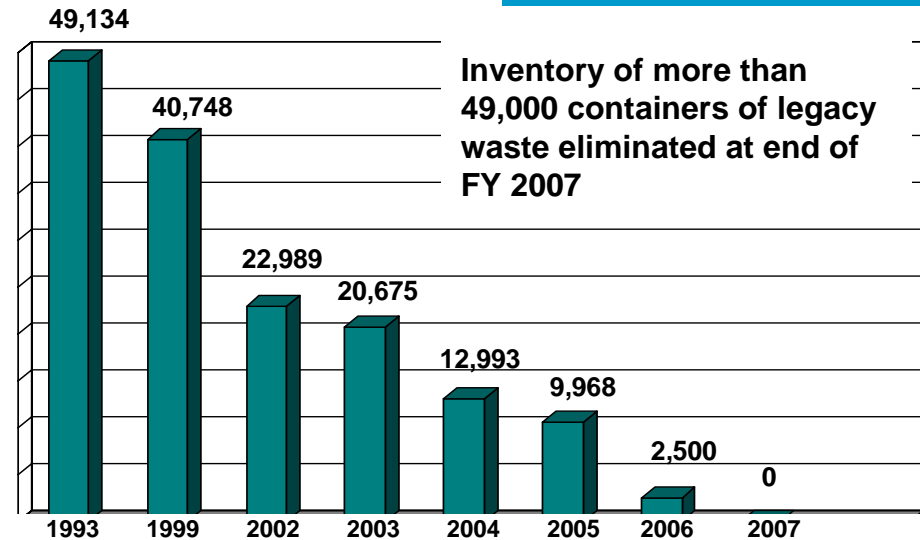
LATA/Parallax Portsmouth, LLC (LPP) was awarded the first small business prime contract by DOE at the Portsmouth Gaseous Diffusion Plant and assumed environmental remediation responsibilities on June 27, 2005. The contract is through September 2009.

- LPP is responsible for executing the following work safely:
 - Operation of waste storage and uranium management facilities
 - Disposition of legacy waste
 - Environmental remediation of contaminated areas
 - Monitoring and reporting on environmental compliance
 - Decontamination and decommissioning of inactive facilities

Cleanup Progress – Waste Disposition

For 1st time in 15 years waste is now being removed as it is generated

Off-site Disposition of Stored Legacy Waste Completed at end of 2007



Majority of Portsmouth waste has been shipped to EnergySolutions in Utah, the Nevada Test Site, or to the TSCA Incinerator in Tennessee

Cleanup Progress – Disposition of Converter Shells



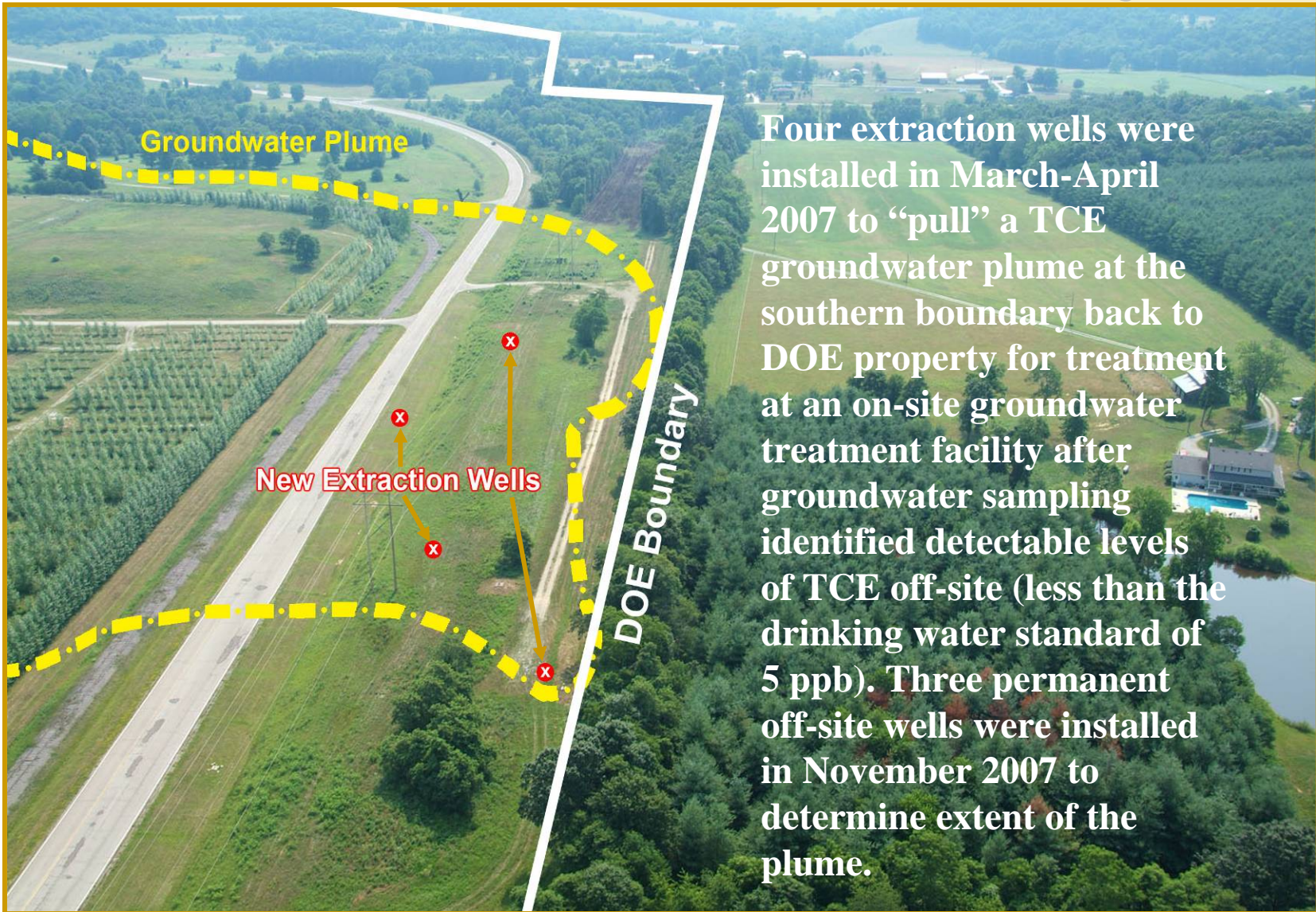
Project is underway to remove/dispose of 438 old process equipment 'converter shells' stored outside for 30 years. Shells are being sheared and size-reduced into containers to ship by truck to Nevada Test Site. Project will be complete by end of September 2008.

Cleanup Progress – Disposition of Converter Shells



Note: Trees have been digitally removed and photograph electronically altered to show progress of the project. Graphic rendering reflects removal of 100 shells through February 29, 2008.

Cleanup Progress – Groundwater Remediation Efforts at South Boundary

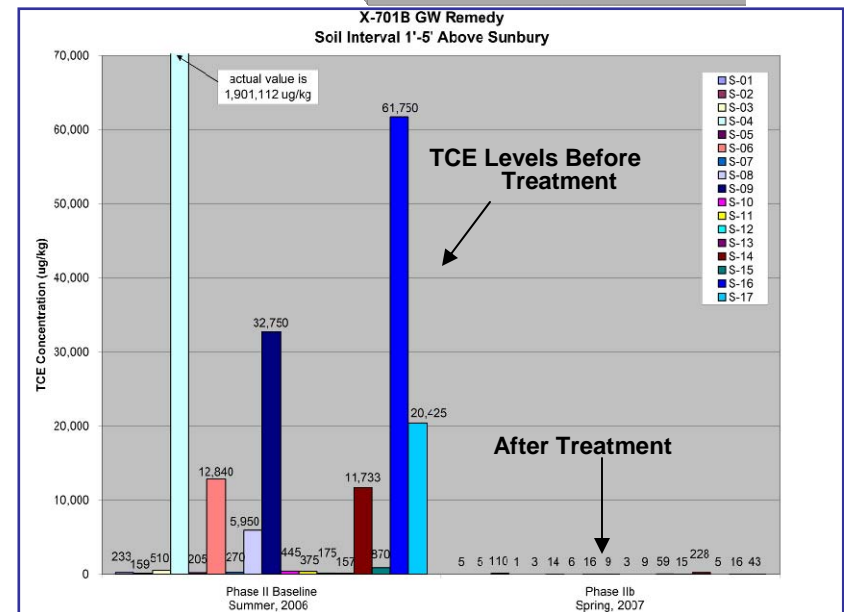
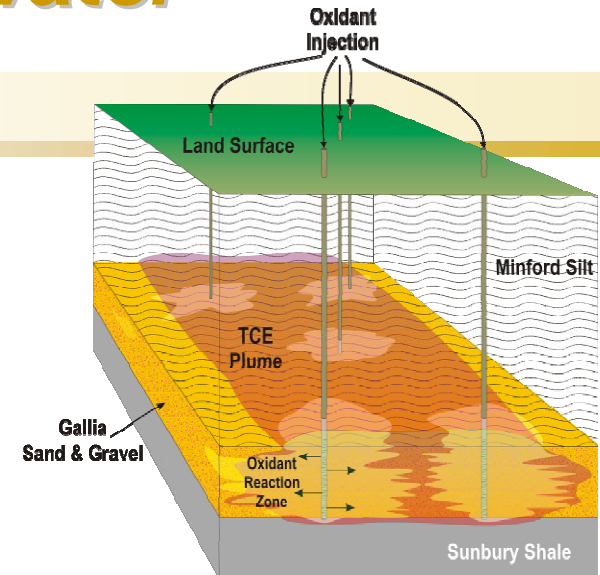


Four extraction wells were installed in March-April 2007 to “pull” a TCE groundwater plume at the southern boundary back to DOE property for treatment at an on-site groundwater treatment facility after groundwater sampling identified detectable levels of TCE off-site (less than the drinking water standard of 5 ppb). Three permanent off-site wells were installed in November 2007 to determine extent of the plume.

Cleanup Progress – Groundwater Treatment at X-701B Plume



Oxidant is injected into the X-701B Groundwater Plume Area on East Side of Plant to Chemically Break Down Contaminants (Primarily trichloroethylene, or TCE)



Oxidant Treatment Showing Positive Results at Plume with Highest TCE Levels in Groundwater

Cleanup Progress – Groundwater Remediation Efforts at X-701B Plume



Planned Activities – Additional Inactive Facilities to be Removed in 2008

X-744T and X-744U former Lithium Storage Warehouses



- LATA/Parallax completed removal of 14 inactive facilities in 2006-2007.
- Two additional surplus, inactive facilities (198,000 sq ft) shown above are scheduled for removal in 2008. Warehouses previously stored lithium hydroxide. All material was sold by DOE and removed from storage in 2000; buildings are empty.
- Demolition begins late March 2008.

Planned Activities – Additional Inactive Facility to be Removed in 2008



- The X-746 former Shipping & Receiving Building (19,975 sq ft) was recently returned to DOE from USEC as no longer needed.
- Demolition expected to begin later in 2008.

Planned Activities – X-770 Concrete Pad Removal / Potential Investigation



The X-770 Building was demolished in 2007; Concrete pad at site will be removed and soils will be investigated for any needed remediation.

LATA/Parallax Priorities for 2008



- Address the migration of groundwater at southern plant boundary
- Continue to treat X-701B groundwater plume with successful oxidant project
- Evaluate implementation of oxidant treatment at other groundwater plume areas on-site
- Complete removal/off-site disposal of all converter shells
- Safely demolish and remove surplus facilities for DOE

***USEC Work for DOE:
Cold Shutdown***

***Technetium (Tc-99)
Cleanup Project***

***Wray Jordan, USEC
General Plant Manager***



Cold Shutdown Activities



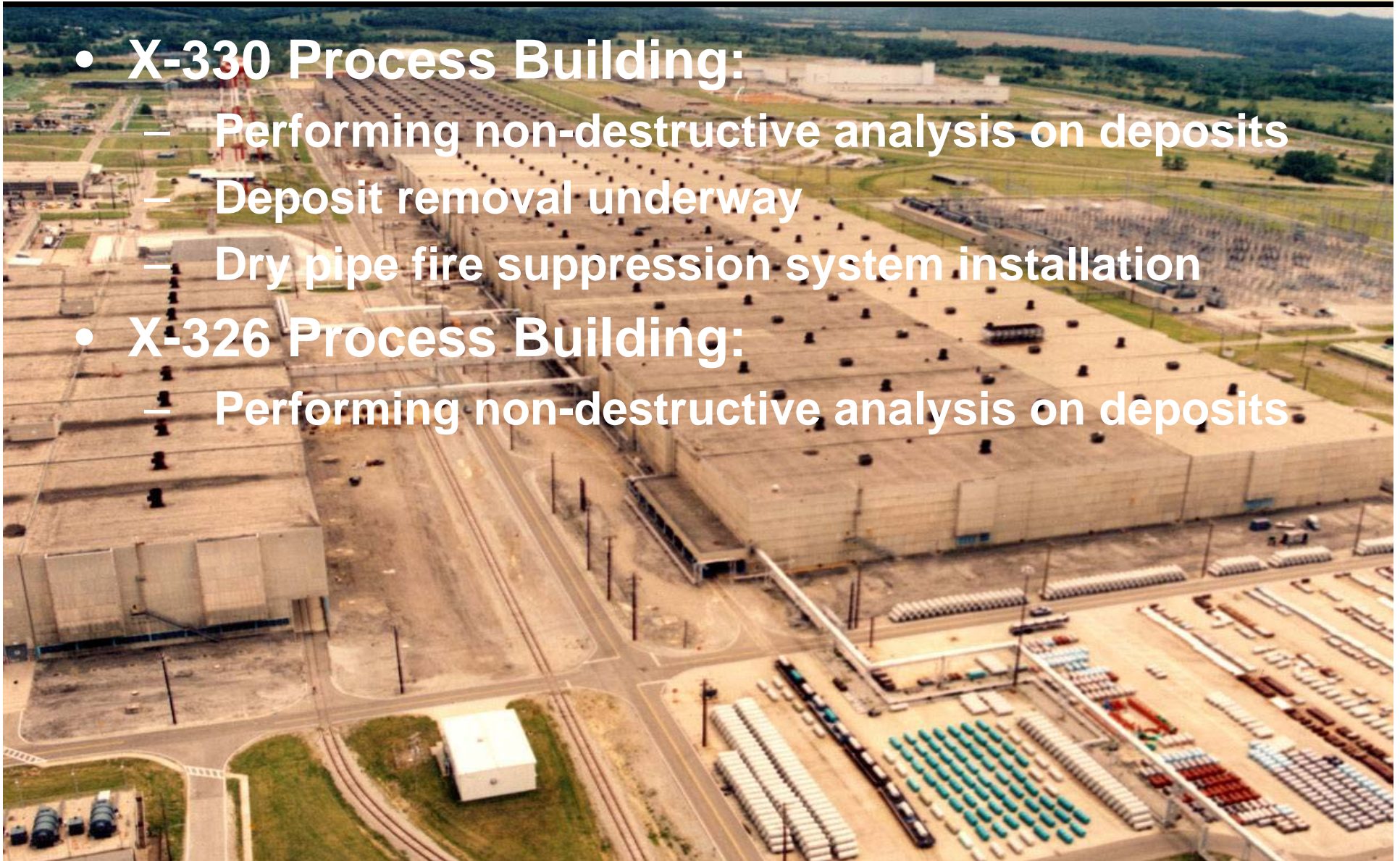
USEC is conducting activities under contract with DOE to transition the gaseous diffusion facilities now in Cold Shutdown to prepare for D&D

- X-333 Process Building:
 - Removal of lube oils and pyranol transformer oils; during FY 07, a total of 47,125 gallons of lube oil and 12,500 gallons of pyranol were shipped to the TSCA Incinerator in Oak Ridge. Thus far in FY 08, 4,830 gallons of lube oil and 6,200 gallons of pyranol oils have been removed
 - Dry pipe fire suppression system installation
 - Relocation of power supply from X-533 to X-530 Switchyard
 - Final Greater-than-Safe-Mass deposit removed in 2007; all other uranium deposits considered uncomplicated handling

Cold Shutdown Activities



- **X-330 Process Building:**
 - Performing non-destructive analysis on deposits
 - Deposit removal underway
 - Dry pipe fire suppression system installation
- **X-326 Process Building:**
 - Performing non-destructive analysis on deposits



Tc-99 Cleanup of Uranium Feed Cylinders



USEC is completing a project for DOE to clean cylinders of out-of-specification uranium contaminated with technetium (Tc-99) for reuse by the nuclear industry.

- Since the project began in 2002, 14,152 metric tons of uranium (MTU) have been cleaned:
 - 7,433 MTU owned by USEC completed in 2007
 - 6,719 MTU DOE-owned uranium
- 1,154 MTU DOE uranium cleaned to date in FY 08. Cleanup of remainder of DOE material is to be completed by September 2008 with project closeout by December 2008.



***Depleted Uranium
Hexafluoride
(DUF₆) Conversion Plant
Progress***

***John McCoy, UDS
Portsmouth Plant Manager***



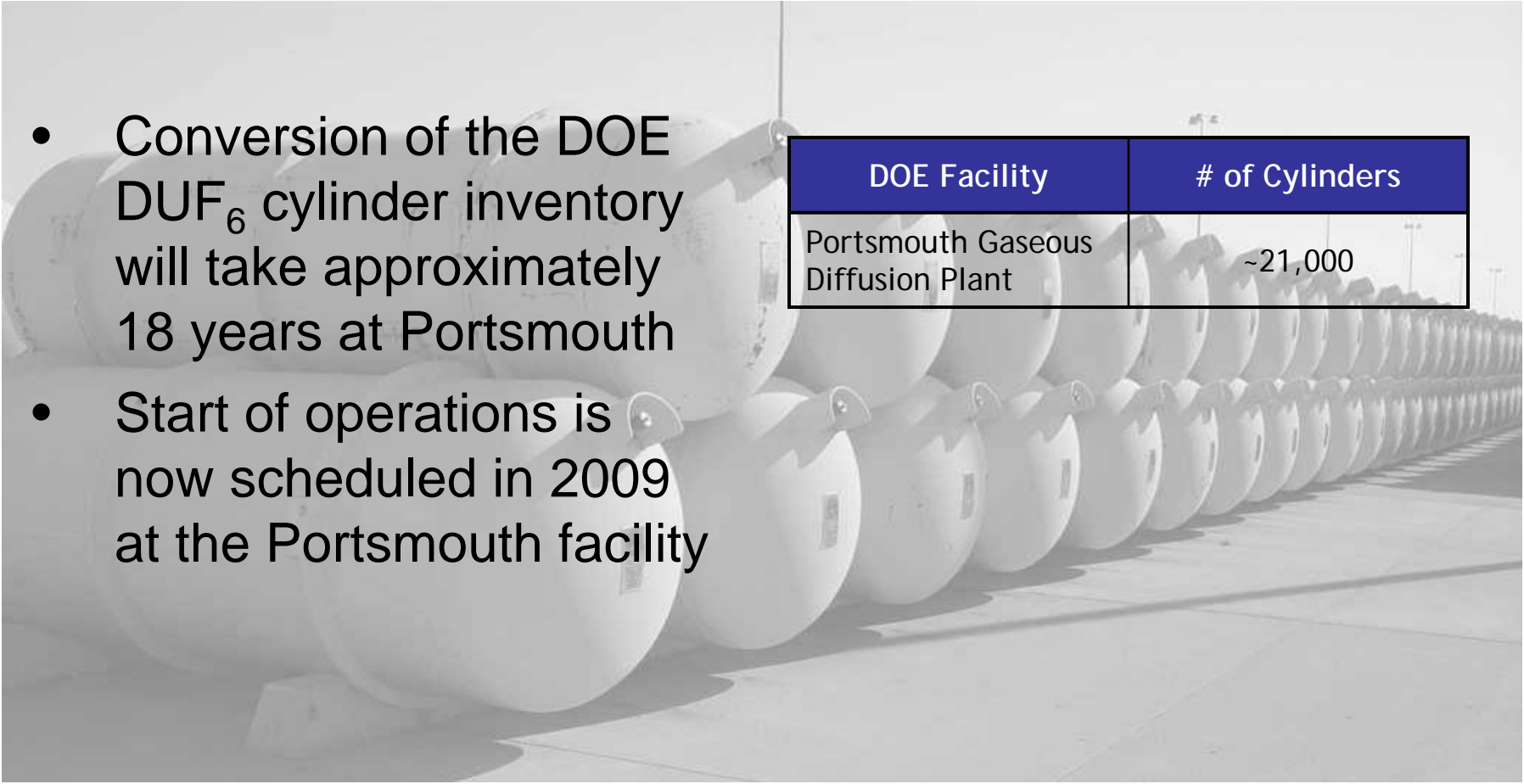
DUF₆ Conversion Plant Update



- Uranium Disposition Services (UDS) was contracted to design, construct and operate conversion facilities at DOE's Portsmouth, Ohio and Paducah, Kentucky sites
- These plants will convert DOE's large inventory of DUF₆ to a more stable chemical form (oxide) for reuse or disposal

DUF₆ Conversion Plant Update

- Conversion of the DOE DUF₆ cylinder inventory will take approximately 18 years at Portsmouth
- Start of operations is now scheduled in 2009 at the Portsmouth facility



DOE Facility	# of Cylinders
Portsmouth Gaseous Diffusion Plant	~21,000

DUF₆ Conversion Plant Update

Overall Construction is 95% Complete



Photo taken late February 2008

- Overall construction is proceeding with completion of physical construction anticipated on July 18, 2008 at Portsmouth
- Following construction, site will enter a period of testing/operational readiness prior to facility startup

DUF₆ Conversion Plant Update



- Other major project initiatives:
 - Over 1 million site hours worked safely without a lost time incident since project commenced in July 2004
 - \$143.3 million in subcontract awards and commitments made through January 2008 at Portsmouth
 - ~80% of actual site work awarded to small businesses in region
 - Jobs at peak of construction totaled about 240

DUF₆ Conversion Plant Update



- Full operations will start in 2009 after system testing and readiness reviews
- Construction activities are starting to ramp down from a peak of over 240 personnel to less than 140 now
- Operations staffing has increased to 90 from 25 at this time last year
- During testing and readiness, staff will build to approximately 140 and then over 160 during full operations

***Other Recent Activities –
Fog Road Upgrade***

***Phil Moore
Theta/Pro2Serve
Management Company***



Fog Road Upgrade Project Completion



- widened road to 2 nine-foot lanes
- paved entire 7,600 ft length
- constructed 2-foot gravel berms
- replaced guardrails
- repaired two bridges
- installed fences/gates



Project
Completed by
Theta/Pro2Serve
Management
Company (TPMC)



Fog Road Upgrade Project Completion

1.5 mile road provides improved public access around plant site for emergency responders





***Planning for
Decontamination and
Decommissioning (D&D) of
the Gaseous Diffusion Plant***

Jud Lilly, U.S. DOE

Introduction to D&D Planning for the Portsmouth Plant

- Portsmouth Gaseous Diffusion Plant is one of only 3 gaseous diffusion plants constructed in United States during the Cold War era.
- Uranium enrichment operations began in 1954 and ceased in 2001.
- Plant is now ready to proceed into decontamination and decommissioning (D&D).

Decontamination & Decommissioning *(D&D)*

- What is D&D?
 - The deactivation of equipment, including removal of transformer oils, lubrication oils and residual hold-up deposits of uranium in process equipment
 - D&D will safely remove and dispose of all equipment in the buildings
 - D&D is the dismantlement/disposal of the 134 facilities associated with the gaseous diffusion plant, encompassing more than 10 million total square feet under roof

Decontamination & Decommissioning (D&D)

- D&D Scope
 - D&D also includes investigation of soils/groundwater areas beneath buildings, and any necessary remediation of environmental media in accordance with regulatory requirements
 - Evaluation of Waste Disposition Options (e.g., off-site shipment of building debris/equipment to licensed facilities or disposal in on-site waste disposal cell)

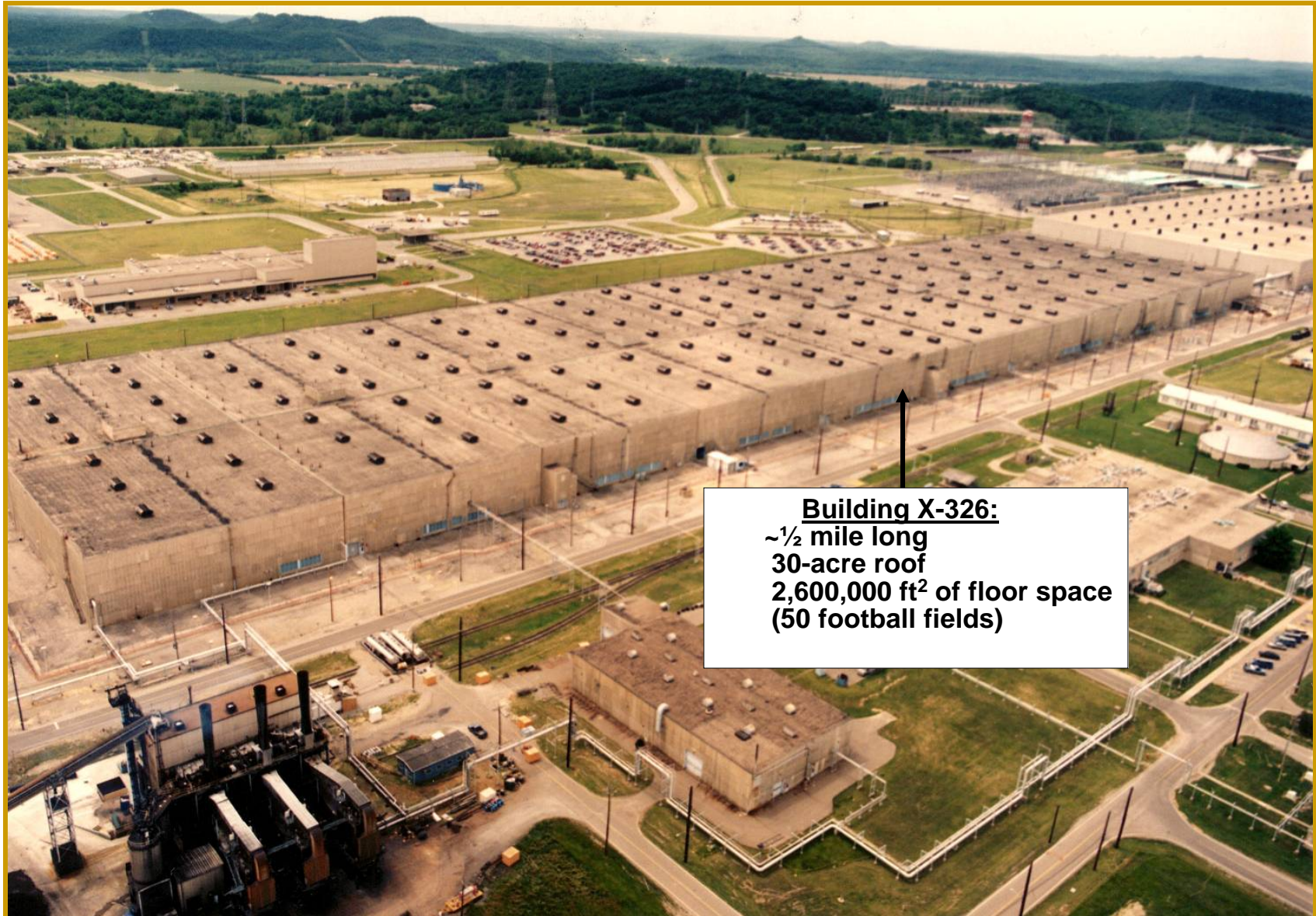
Major Scope of D&D Project Will Involve Demolition of 3 Process Buildings

10M sq ft – largest in complex today



Authorization by DOE HQ in August 2007 to proceed with D&D competitive procurement. FY 2009 budget proposes release of Request for Proposals by end of FY 2008 and contract award in FY 2009.

Proposed D&D of X-326 Process Building



Building X-326:
~ $\frac{1}{2}$ mile long
30-acre roof
2,600,000 ft² of floor space
(50 football fields)

Proposed D&D of X-330 Process Building



Proposed D&D of X-333 Process Building



Building X-333:
~ $\frac{1}{4}$ mile long
33-acre roof
2,824,640 ft² of floor space
(54 football fields)

Scope of D&D Project

- The scope of the Portsmouth plant D&D is significant for southern Ohio
 - Cost estimates range between \$5 billion to \$12 billion
 - Life of project is approximately 35 years with a clean-up project completion range 2044 to 2052
 - D&D Project will require an annual average employment of 1,000 workers

Current D&D Planning Activities

- DOE currently preparing competitive procurement package for D&D work
 - Expect Request for Proposals issued in September 2008
 - Projected Award Date by September 2009
 - Industry Day for prospective offerors scheduled March 31-April 1, 2008
- Discussions underway to return specific leased facilities from USEC/NRC oversight to DOE control prior to award of D&D contract

D&D at Portsmouth is envisioned to be similar to ongoing Oak Ridge, Tenn. project

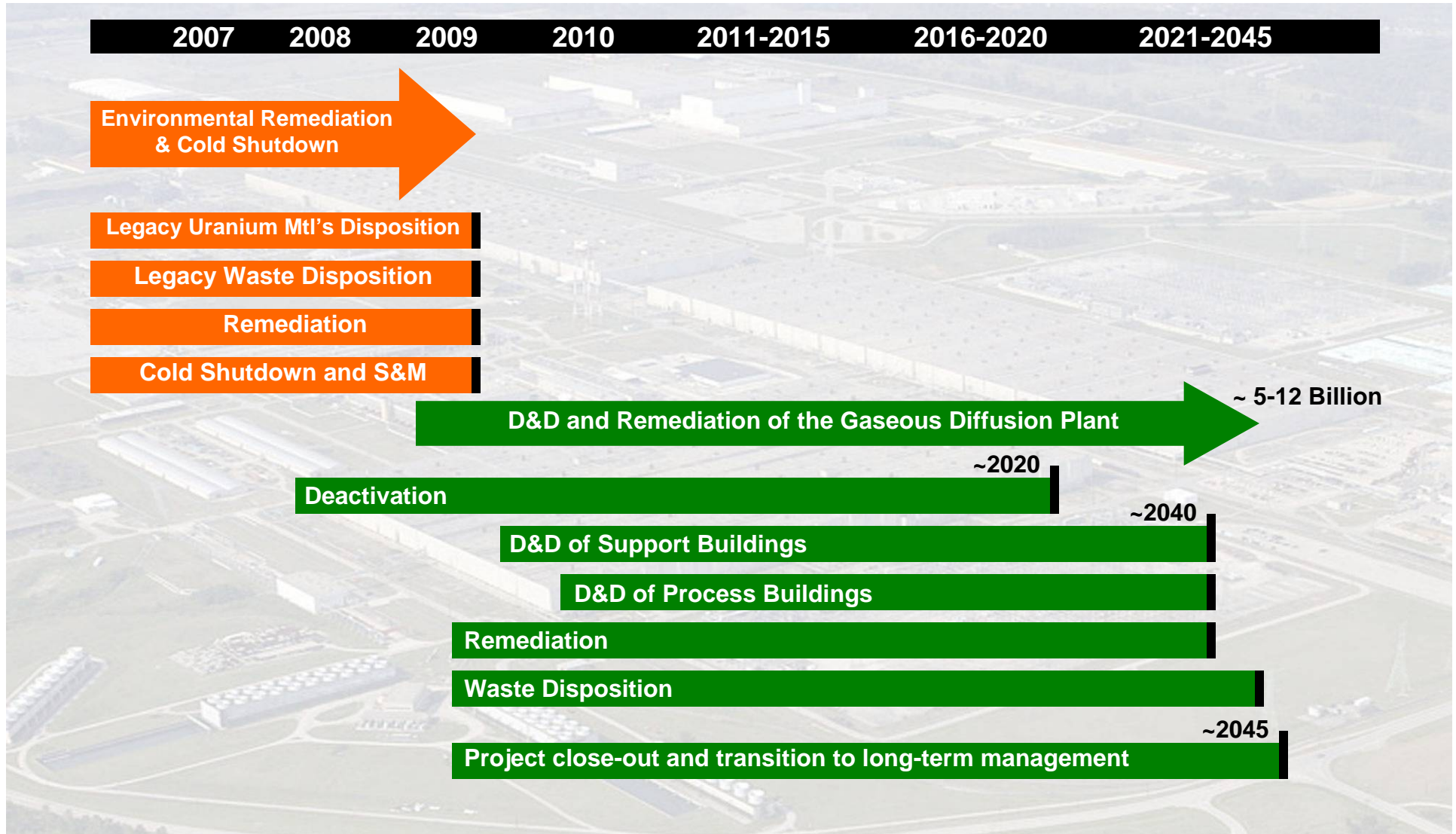
K-29 Building Demolition at East Tennessee Technology Park (ETTP)



Portsmouth D&D Programmatic Summary Schedule

Near-Term

Out - Years





***FY 2009 Budget for
Portsmouth***

***David Kozlowski, U.S. DOE
Acting Site Lead***

FY 2009 Budget for Portsmouth

Dollars in Thousands

	FY 2007	FY 2008	FY 2009
Portsmouth Environmental Management Program	\$225,346	225,026	242,561

Significant Changes from FY 2008 to FY 2009:

- Additional \$20.7M for DUF₆ Conversion Plant to begin operations
- Reduction of \$8.9M in Solid Waste Stabilization and Disposition due to completion of stored legacy waste disposition
- Increase of \$5M in Nuclear Facility D&D to address groundwater treatment, complete Cold Shutdown activities and initiate D&D

FY 2009-13 Budget for Portsmouth

Dollars in Thousands

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Portsmouth	242,561	284,963	253,970	261,766	267,787

Site Priorities in FY 2009:

- Complete shutdown and demobilization after successful completion of Technetium-99 project (first quarter FY 2009).
- Initiate operations of Depleted Uranium Hexafluoride (DUF₆) Conversion Facility.
- Complete conversion and final processing of highly enriched uranium recovery from inventory stored at commercial vendor.
- Complete Cold Shutdown activities in the former gaseous diffusion operations facilities.
- Award Gaseous Diffusion Plant decontamination and decommissioning contract and initiate large-scale decontamination and decommissioning activities.
- Complete X-701B oxidation injection system field treatment activities, and complete Quadrant II remedial actions, which are the last remedial actions at Portsmouth.
- Complete disposition of converter shell project.
- Initiate disposition of depleted uranium metal stored at the Uranium Management Center.

FY 2009-13 Budget for Portsmouth

Dollars in Thousands

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Portsmouth	242,561	284,963	253,970	261,766	267,787

Site Priorities in FY 2010:

- Continue operations of Depleted Uranium Hexafluoride (DUF₆) Conversion Facility.
- Initiate large-scale decontamination and decommissioning, including regulatory decision process and initiating deactivation and demolition activities
- Continue disposition of depleted uranium metal stored at the Uranium Management Center
- Submit final certification report for remediation of X-701B Solid Waste Management Unit to the United States and Ohio Environmental Protection Agency.

Portsmouth Near-Term Baseline (NTB)

- Site received validation approval of the Near-Term Baseline in November 2007.
- Site received HQ DOE/EM Critical Decision 2/3 approval in January 2008.
 - Formally approves the Near-Term Baseline and Out-Year Planning Range Estimate.
 - Places the life cycle costs under configuration control.



Opportunities for Public Involvement in Future Decisions

***Melissa Nielson, U.S. DOE
Office of Public &
Intergovernmental
Accountability***

Public Involvement



- DOE met with local stakeholder organizations in fall 2007
- Organizations expressed interest in a citizens advisory board
- DOE received a wide variety and diverse set of interests
- Public meetings to be scheduled as needed and in conjunction with any advisory committee to update community and seek input
- Increased public participation will be essential in D&D decision-making

Solving Cleanup Challenges Through Risk Reduction

The Federal Advisory Committee Act and the Environmental Management Site-Specific Advisory Board

Melissa Nielson

Director, Office of Public and Intergovernmental
Accountability

Department of Energy - Environmental Management

March 18, 2008



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FEDERAL ADVISORY COMMITTEE ACT - “BIG PICTURE”

- Enacted in 1972 (P.L. 92-463); codified at 5 U.S.C. App.
- GSA published its initial and revised “Federal Advisory Committee Management; Final Rule,” 41 CFR Part 101-6, in the *Federal Register* on December 2, 1987 and October 5, 1989, respectively.
- The new “Federal Advisory Committee Management; Final Rule,” 41 CFR Parts 101-6 and 102-3, was published in the *Federal Register* on July 19, 2001.



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FEDERAL ADVISORY COMMITTEE ACT - “BIG PICTURE”

- **The Act was designed to fulfill two basic purposes:**
 - ***To Enhance Public Accountability of Advisory Committees*** - To control the undue influence of special interests by balancing committee membership, and to ensure that public access to committee deliberations is maximized.
 - ***To Reduce Wasteful Expenditures on Advisory Committees*** - To improve the overall management of committee activities by establishing a set of management controls designed to:
 - Monitor Federal advisory committee costs;
 - Identify and eliminate unproductive and/or unnecessary committees; and
 - Provide for an annual report of committee activities and accomplishments to the Congress.



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FEDERAL ADVISORY COMMITTEE ACT MAJOR REQUIREMENTS

- **Committees must be chartered before they can meet or conduct any business.**
- **Charters must be renewed every two years.**
- **Advisory committee memberships are to be fairly balanced in terms of the points of view represented and the functions to be performed. [FACA Sec. 5(b)(2); 41 CFR §§ 102-3.30(c) & 3.60(b)(3); Appendix A-III. to Subpart B]**
- **Advisory committee meetings are required to be open to the public. Meeting notices and agendas must be published in the *Federal Register* to accommodate public participation. [41 CFR §§ 102-3.150, 3.155 & 3.175(c)]**



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FEDERAL ADVISORY COMMITTEE ACT MAJOR REQUIREMENTS

- **Designated Federal Officers (DFOs) must approve all meetings and agendas, and attend meetings. [41 CFR § 102-3.120]**
- **Detailed minutes of each advisory committee meeting must be kept and must contain:**
 - a. Time, date and place of the meeting;**
 - b. A list of all persons who were present;**
 - c. A complete and “accurate description of each matter discussed and the resolution, if any, made by the advisory committee regarding such matter” (i.e., any conclusions reached, including any advice or recommendations provided by the committee); and**
 - d. “Copies of each report or other document received, issued or approved by the advisory committee at the meeting.”**

[41 CFR § 102-3.165; see also §§ 102-3.170 & 3.175(e)]



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Environmental Management Site-Specific Advisory Board



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EM Site-Specific Advisory Board (EM SSAB) - Overview

- **The EM SSAB provides the Assistant Secretary for Environmental Management, the appropriate Site Manager(s), and any other DOE officials the Assistant Secretary designates, with information, advice, and recommendations concerning issues affecting the EM Program**
- **The EM SSAB was originally chartered in 1994; the charter has been renewed every two years since 1996**
- **The EM SSAB is a single FACA-chartered advisory board consisting of 7 local site-specific boards**

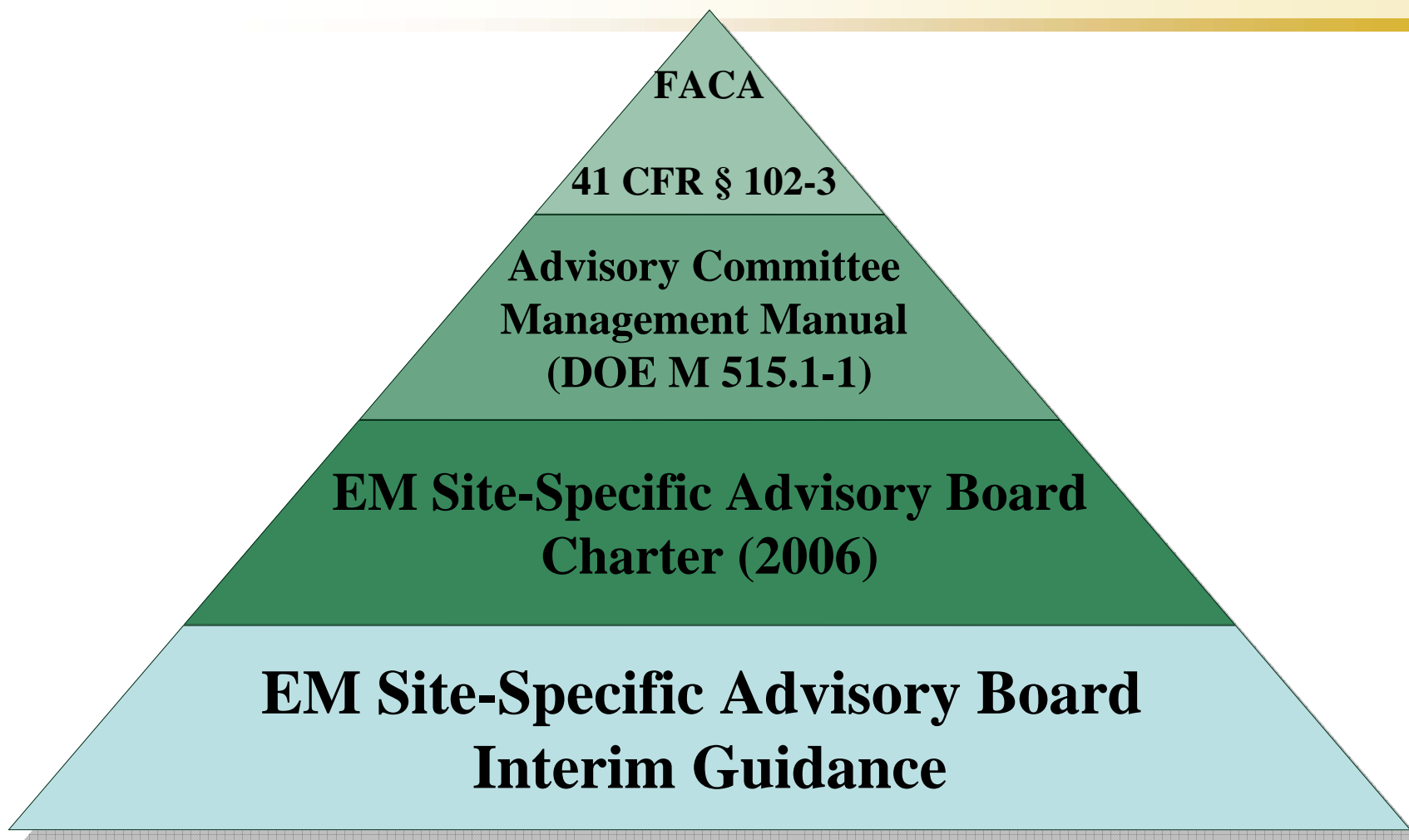


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HEIRARCHY OF EM SSAB REGULATION AND GUIDANCE



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What Are Local Site Board Responsibilities?

The local site board has the responsibility:

- To attend regular meetings and receive training;
- To review and comment on EM and other documents within their purview that come before the Board, and submit timely recommendations to EM;
- To work collaboratively and respectfully with other Board members and liaisons in the best interests of both the Board and the public;
- To serve on at least one Committee or Task Force during any given six month period as appointed by the Chair; and
- To abide by the terms and conditions of the EM SSAB Charter and these operating procedures



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What are DOE's obligations to the EM SSAB?

DOE's Obligations to the local site boards include:

- Keeping the Board informed about key issues and upcoming decisions
- Requesting advice well in advance of DOE deadlines
- Considering and responding in a timely manner to all Board recommendations
- Providing adequate funding for administrative and technical support
- Establishing uniform administrative guidelines and management controls



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Who Serves on the EM SSAB?

Local Site Board Membership:

- Reflects a full diversity of views, cultures, and demographics from affected communities and regions
- Is composed primarily of people who are directly affected by site cleanup activities
- May include stakeholders from:
 - Local Governments
 - Tribal Nations
 - Environmental and Civic Groups
 - Labor Organizations
 - Universities
 - Industry
 - Other Interested Citizens



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EM SSAB and Public Participation

- The goal of the EM SSAB is to more directly involve stakeholders in EM planning and decision-making processes for the nuclear weapons complex cleanup
- It is the policy of DOE and EM to conduct its programs in an open and responsive manner, thereby, encouraging and providing the opportunity for public participation in its planning and decision-making processes



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EM Site-Specific Advisory Board

- **The scope of the EM SSAB Charter includes:**
 - Clean-up Standards and Environmental Restoration
 - Waste Management and Disposition
 - Stabilization and Disposition of Non-Stockpile Nuclear Materials
 - Excess Facilities
 - Future Land-Use and Long-Term Stewardship
 - Risk Assessment and Management
 - Clean-Up Science and Technology Activities
 - Other EM projects or issues, at the direction of the Assistant Secretary, Site Manager(s), and/or other designated DOE officials



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EM SSAB Information

www.em.doe.gov/ssab



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Other Public Participation Vehicles

- Community Reuse Organizations
- State Chartered Oversight Boards
- Councils of Government
- Economic Development Organizations



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Next Steps for a Portsmouth Site Specific Advisory Board

- Field Manager nominates a Deputy Designated Federal Officer and appoints a Federal Coordinator
- Applications for membership are distributed to interested individuals
- Applications are reviewed and paneled; membership is a federal responsibility
- Nominees are forwarded to DOE HQ for review and appointment by the Assistant Secretary
- Administrative meeting is held to elect officers, adopt operating procedures, and schedule public meetings



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Questions/Answers