



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Welcome

**Public Meeting ~ Waverly High School  
November 17, 2014**

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## Topics

**Proposed Plan: Process Buildings  
Proposed Plan: Waste Disposition**

# Agenda for Tonight

- Welcome (5 min)
- DOE's Overview of the Decision Process (5 min)
- Highlights of the Two Proposed Plans (20 min)
- Ohio EPA & Ohio Department of Health Remarks (10 min)
- Informal Q&A (30 min)
  - Break --
- Public Comment Session #1: Waste Disposition
- Public Comment Session #2: Process Buildings

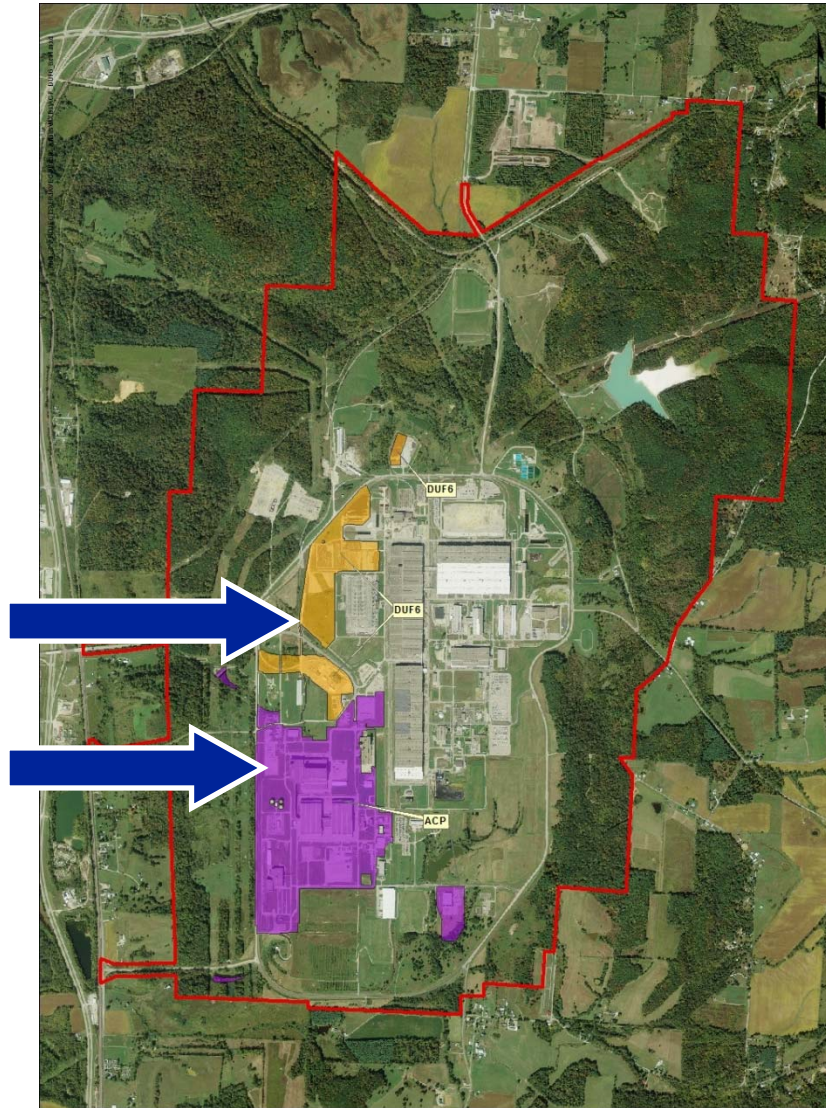
# Five Key Decisions Provide the Cleanup Roadmap for PORTS

| Decision                                      | Final Decision Document   | Anticipated Decision Date  |
|---|---|--|
| D&D of 46 Support Buildings and Structures    | Action Memorandum- DFF&O  | Completed March 2012  |
| Site-wide Waste Disposition Decision          | Record of Decision - DFF&O                                      | 2015   |
| D&D of Process Buildings & Complex Facilities | Record of Decision - DFF&O                                      | 2015   |
| Contaminated Soil Remedy Decision             | Soil Remediation Decision Document - Ohio Consent Decree        | 2016-2017  |
| Groundwater Remedy Decision                   | Groundwater Remediation Decision Document - Ohio Consent Decree | TBD  |

**Two of these decisions (in yellow) are the topics for tonight.**

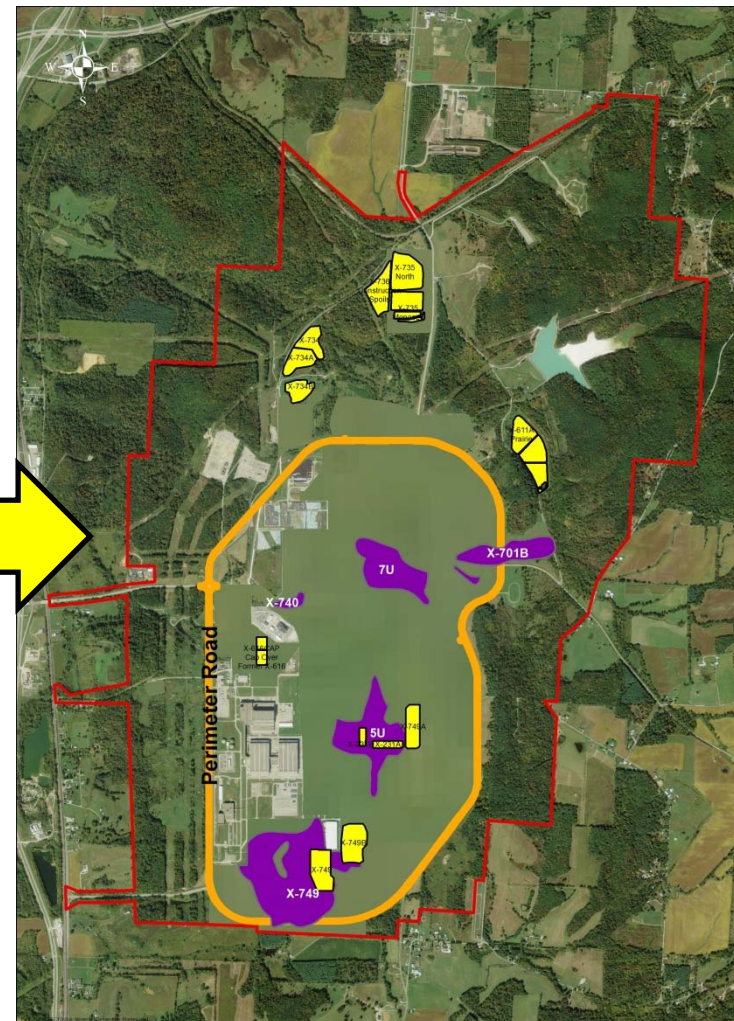
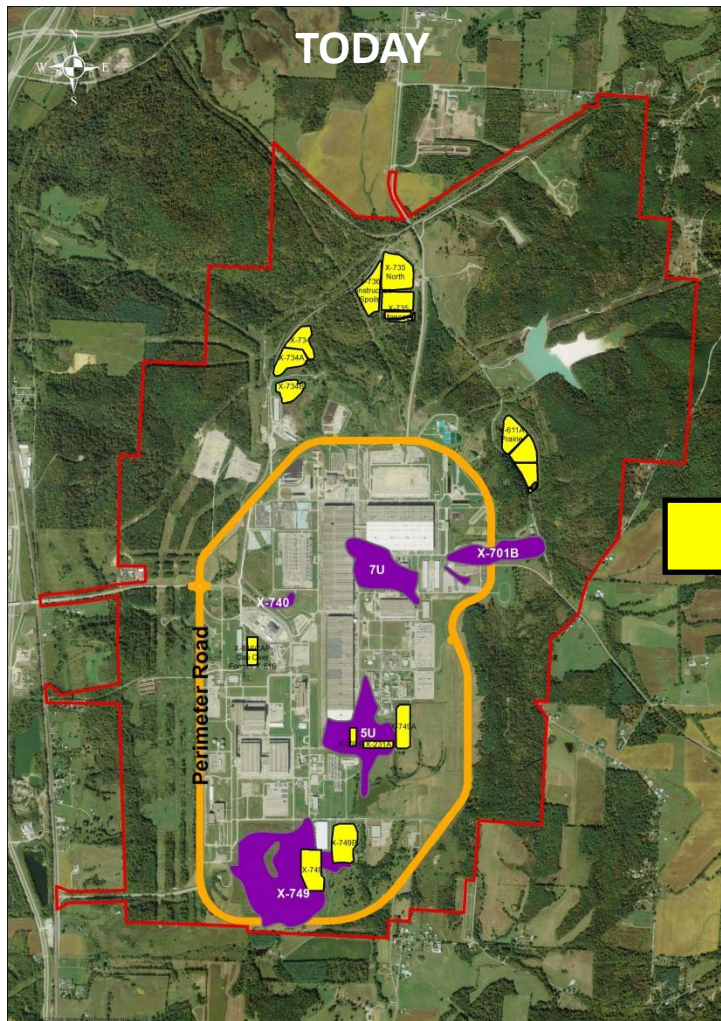
# Two Operations at the Site are Not Part of These Decisions

**DUF6 Conversion Project**  
**American Centrifuge Plant**



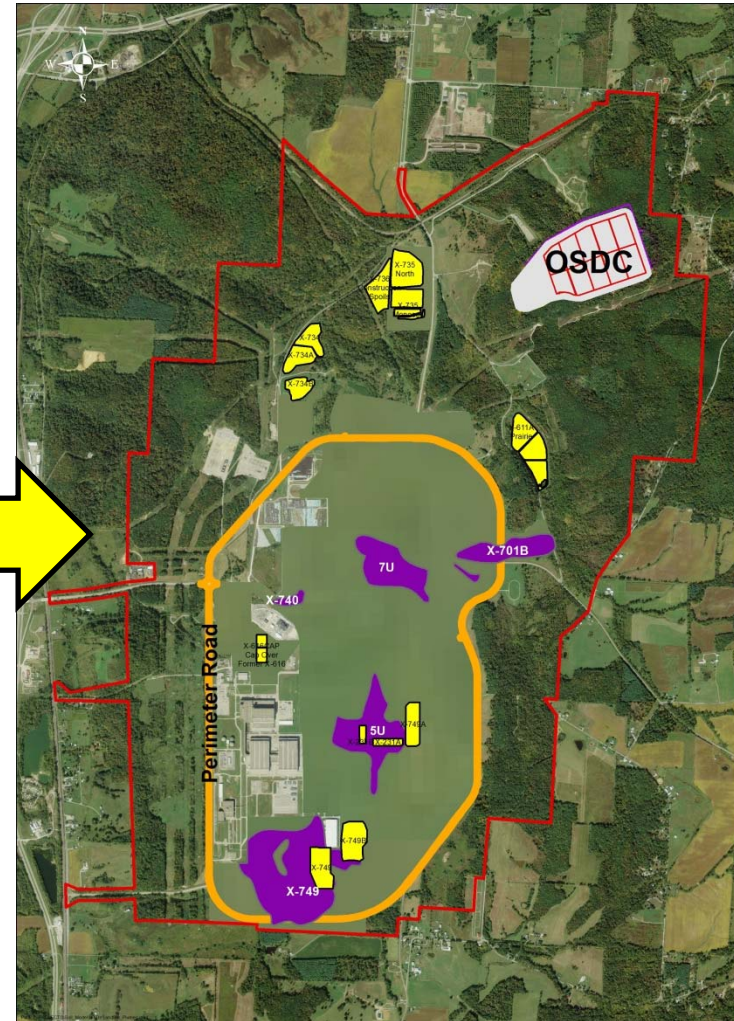
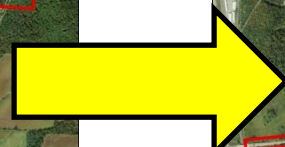
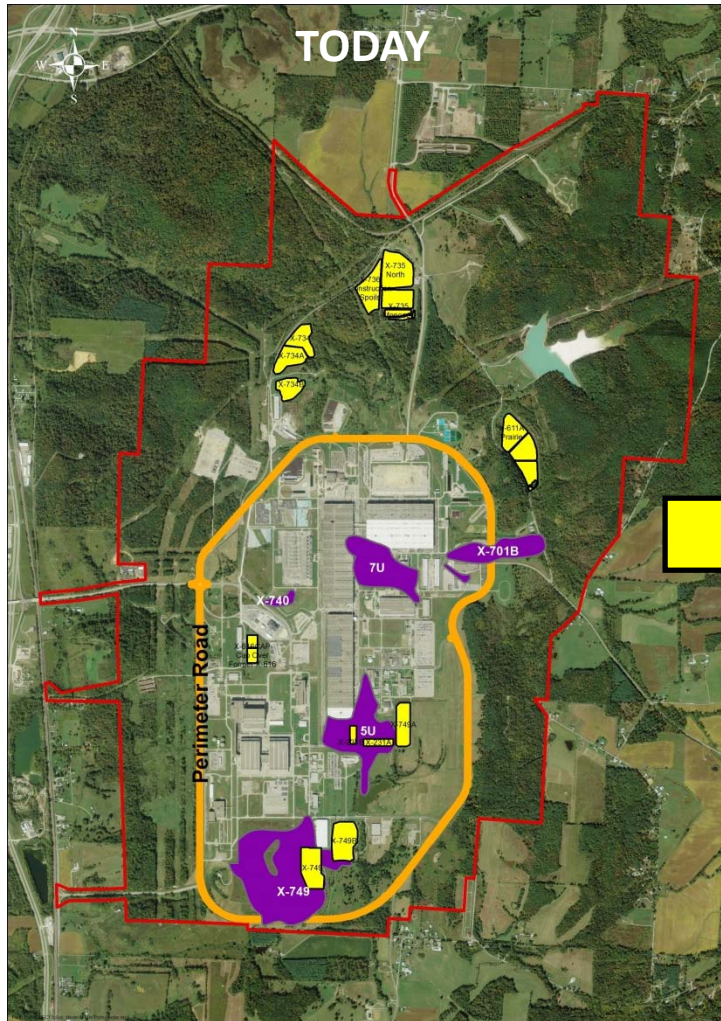


# The Preferred Alternatives Take Steps Toward a Final Cleanup End State





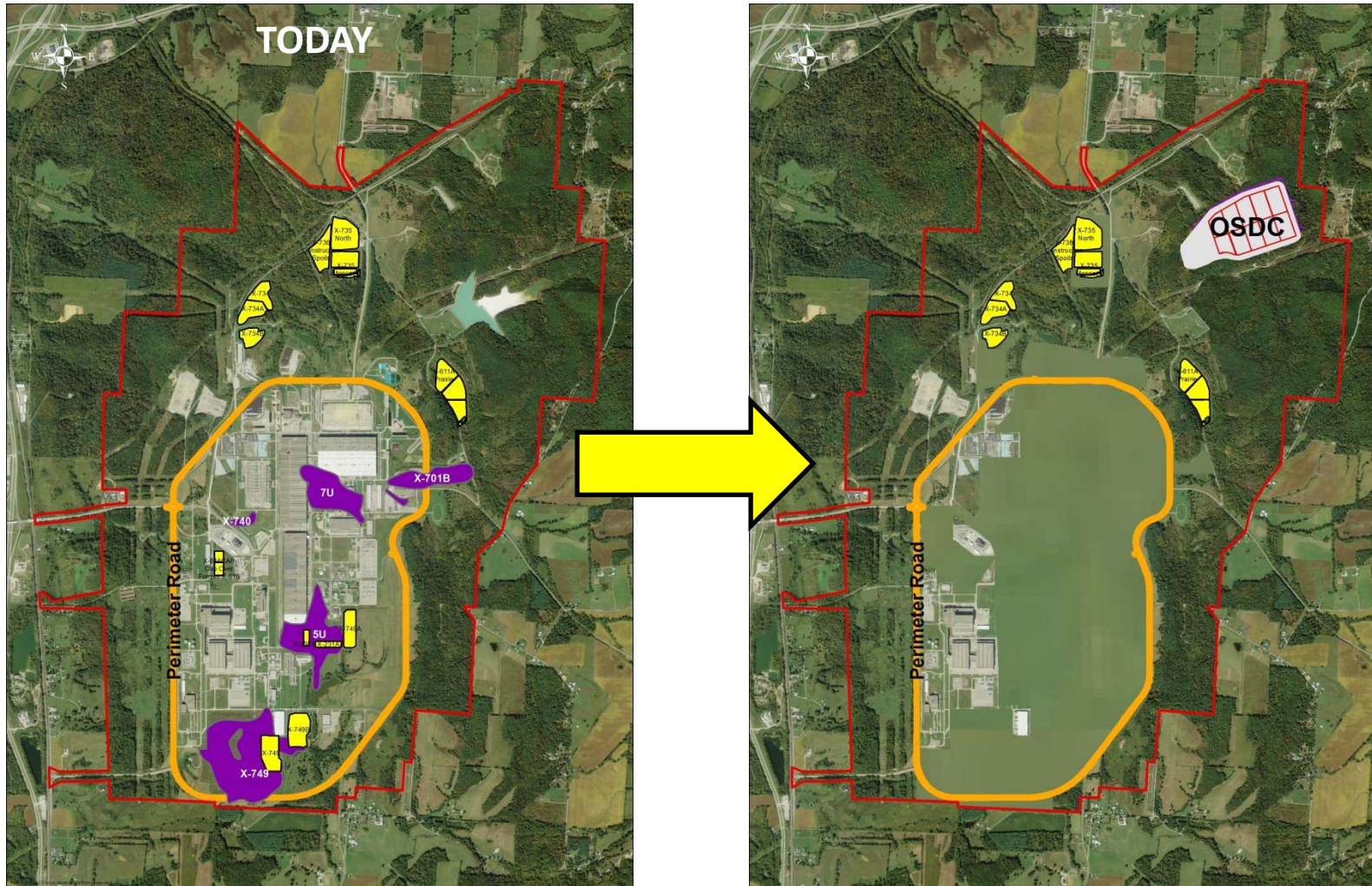
# The Preferred Alternatives Take Steps Toward a Final Cleanup End State





# Cleanup End State After All 5 Decisions

Preferred Alternatives Take Two Steps Towards The End State





# Proposed Plan for the Process Buildings

**Proposed Plan for the Process Buildings and Complex Facilities Decontamination and Decommissioning Evaluation Project**

This document has been approved for public release:  
Sam Eshelizer (Signature on File) Date 10-7-2014  
Classification & Information Officer Date 10-7-2014  
Sam Eshelizer (Signature on File) Date 10-7-2014  
Expert Controlled Information Officer Date 10-7-2014

U.S. Department of Energy, Piketon, Ohio  
October 2014

**Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**



Aerial photo of the Portsmouth Gaseous Diffusion Plant, showing large industrial buildings and surrounding infrastructure. The photo is taken from an elevated perspective, showing the layout of the facility and its proximity to roads and other structures.

**PUBLIC COMMENT PERIOD**  
NOVEMBER 12, 2014 TO JANUARY 10, 2015

**HOW YOU CAN PARTICIPATE**  
Read this Proposed Plan and review related documents in the Administrative Record.  
Comment on this Proposed Plan by mail, email, phone, or fax to:  
Ms. Kristi Wiehle  
Department of Energy  
P.O. Box 3700  
Piketon, OH 45656

**Process Buildings**

DOE invites public comments on the Proposed Plan for the **decontamination and decommissioning** of the buildings at the Portsmouth Gaseous Diffusion Plant (PORTS), located in Pike County, 20 miles north of Portsmouth, Ohio, and 4 miles south of the village of Piketon in Pike County.

DOE has completed its evaluation of a D&D alternative required by a legal agreement between DOE and the Ohio Environmental Protection Agency (Ohio EPA) called the **Director's Final Findings and Orders (DFF&O)**.

Pursuant to Section I of the DFF&O, the DFF&O was issued to DOE pursuant to the authority vested in the Director of Ohio EPA under **Ohio Revised Code** Sections 3704.03, 3734.13, 3734.20, 6111.03, and 3745.01 and DOE entered into the DFF&O pursuant to Section 104 of

|  |           |
|--|-----------|
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| PORTS Characteristics .....  | 5         |
| Scope and Role of the Response Action .....                            | 6         |
| Summary of Site Environmental Risks .....                              | 6         |
| Remedial Action Objectives .....                                       | 7         |
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The first use of technical and administrative terms in this Proposed Plan is shown in bold italics in the text. Explanations of these terms are provided in the boxes.

FDP-ER-RIFS-BG-PLN-0036 Rev. 6 1 DOE/PPPO/03-0383&04



# Process Buildings Proposed Plan Evaluated Two Alternatives

## Two Alternatives:

1. No-Action.
2. Remove Structures, Treat as Necessary, and Package Waste for Final Disposition.

**Alternative 2 is DOE's Preferred Alternative.**

# Key Elements of the Preferred Alternative

1. Demolition of man-made structures.
2. Removal of materials for recycling.
3. Recovery of barrier material.
4. Deactivation/removal or redistribution of utility systems, as necessary.
5. Preparation of waste for final disposition.





# Why is Removing the Structures Preferred?

1. There is no identified use.
2. Leaving the structures is not safe.
3. Removing the structures protects human health and the environment in the short-term and long-term.
4. Supports the potential for transfer of appropriate portions of the site back to the community for its use.


**Proposed Plan for the Site-wide Waste Disposition Evaluation Project**

U.S. Department of Energy, Piketon, Ohio

This document has been approved for public release.  
 Date: 10-2-2014  
 Sam Elshor (Signature on file) Export Controlled Information Officer  
 Date: 10-2-2014

October 2014

**Portsmouth Gaseous Diffusion Plant, Piketon, Ohio**



**Waste Disposition**

**PUBLIC COMMENT PERIOD**  
 NOVEMBER 12, 2014 TO JANUARY 10, 2015

**HOW YOU CAN PARTICIPATE**  
 Read this Proposed Plan and review related documents in the Administrative Record.  
 Comment on this Proposed Plan by mail, email, or fax to:  
 Ms. Kristi Wiehle  
 Department of Energy

**Inside this Plan:**

- Introduction ..... 1
- PORTS Background ..... 5
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- Appendix A: Overview of an OSDC ..... A-1
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<sup>1</sup> The first use of technical and administrative terms in this Proposed Plan is shown in bold italics in the text. Explanations of these terms are provided in the boxes.

# Proposed Plan for Waste Disposition



# Waste Disposition Proposed Plan Evaluated Three Alternatives

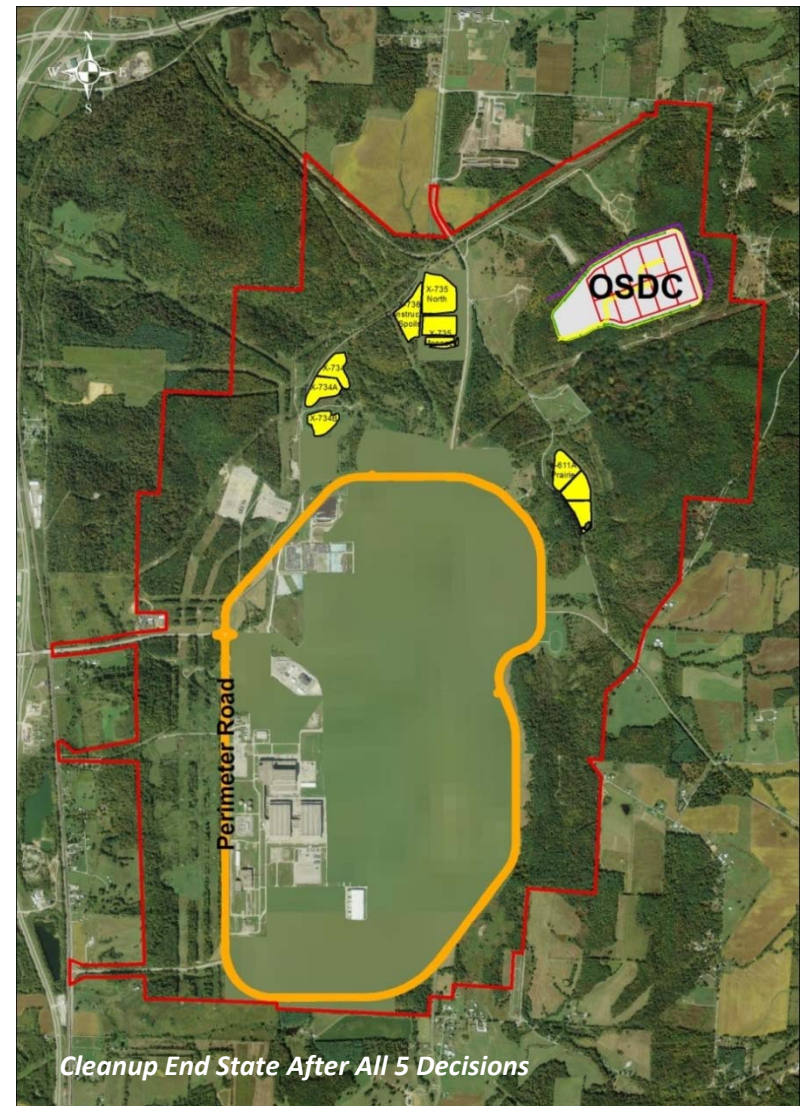
## Three Alternatives:

1. No-Action.
2. Combination of On-Site and Off-Site Waste Disposal.
3. Full Off-Site Waste Disposal.

**Alternative 2 is DOE's Preferred Alternative.**

# Key Elements of the Preferred Alternative

1. Construction of an on-site engineered disposal cell (OSDC) at the location with the best geology.
2. On-site disposal of waste that meets Ohio EPA approved waste acceptance criteria (WAC).
3. Off-site disposal of waste that does not meet WAC.
4. PORTS Gaseous Diffusion Plant waste only.
5. Continued recycling/reuse.
6. Opportunity to use soil from landfills and plumes as OSDC fill -- provides the potential for earlier transfer of appropriate portions of the site back to the community for its use.





# On-Site Disposal Cell -- Location is Driven by Best Geology ("Bedrock")

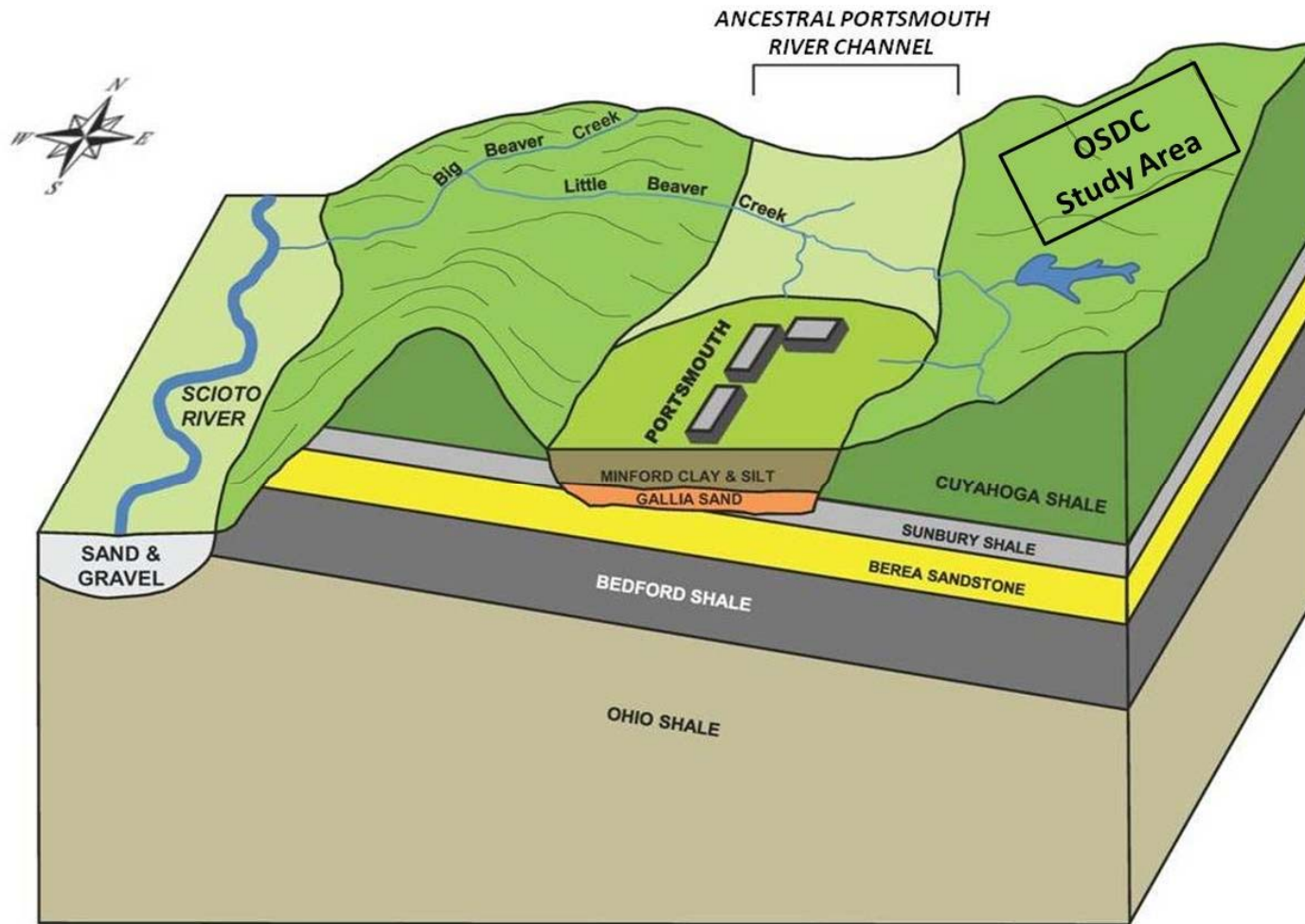
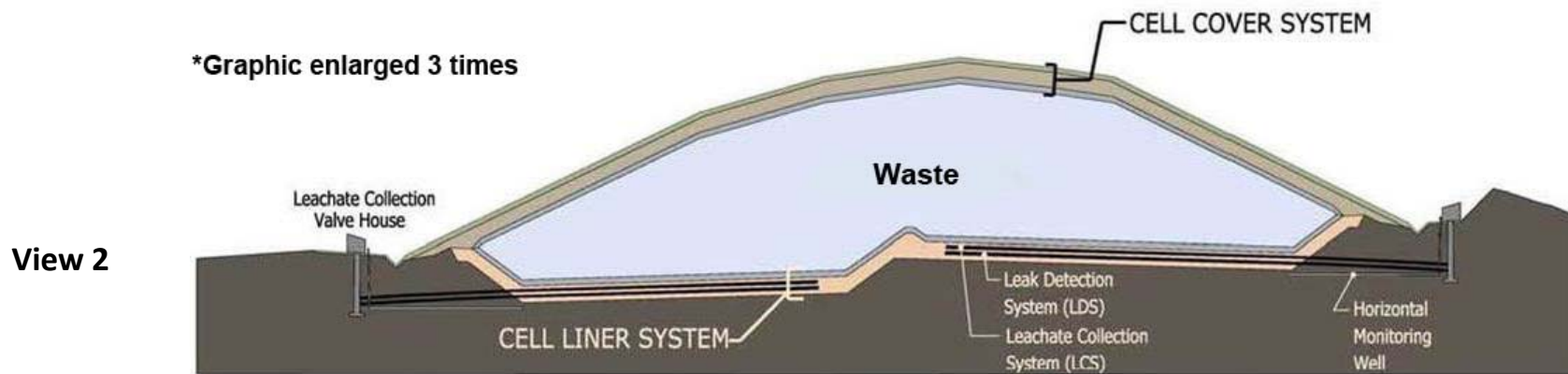
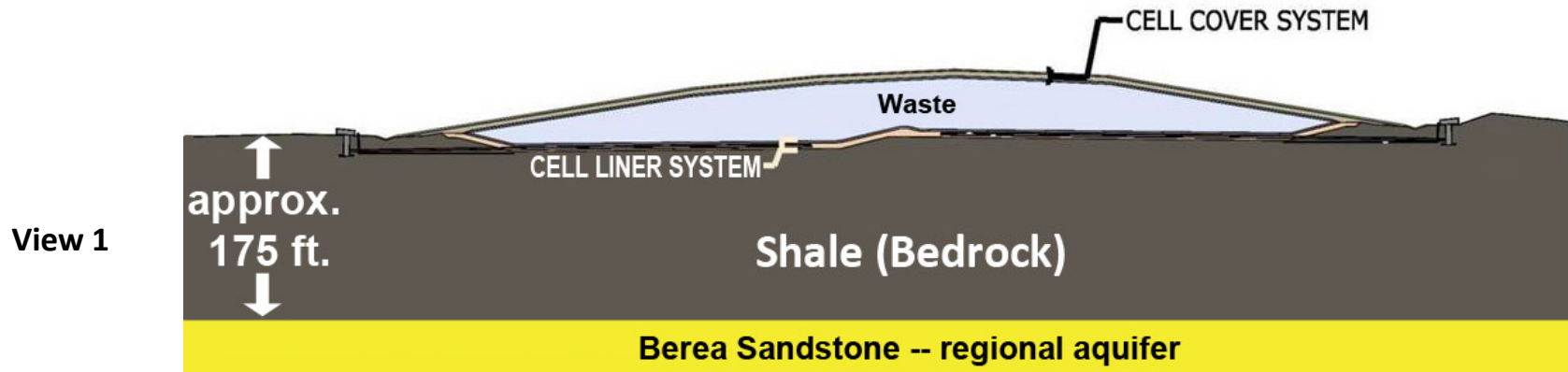


DIAGRAM IS VERTICALLY EXAGGERATED AND NOT TO SCALE

# On-Site Disposal Cell -- Design Requirements Structured to Permanently Isolate the Waste



*Continued federal ownership of the 100-acre disposal area.  
Maintenance and monitoring to assure performance.*



# Special Regulatory Considerations

1. The preferred remedy has about 300 regulatory requirements known as Applicable or Relevant and Appropriate Requirements (ARARs).
2. Key ARARs are summarized in the Proposed Plan; all ARARs are activated when the Record of Decision (ROD) is finalized.
3. Of the 300+ requirements, some ARARs warrant special highlight tonight:
  - Because of the location of the best geology -- a waiver has been requested of Ohio EPA to allow the OSDC to be sited within 200 feet of a small stream.
  - Establishment of the OSDC as a Corrective Action Management Unit (CAMU) supports excavation of landfills and plumes for use as fill.

## Why is Combined On-Site/Off-Site Disposal Preferred?

1. Protects human health, safety, and the environment.
2. Reliable over the long term.
3. Uses proven technologies.
4. Meets regulatory requirements.
5. Reduces transportation risks because less waste would be shipped off site.
6. Less costly.
7. Shortest time for waste disposal.

*Opportunity to use soil from landfills and plumes as OSDC fill provides the potential for earlier transfer of appropriate portions of the site back to the community for its use.*



# Remarks from Ohio Environmental Protection Agency Maria Galanti

# Remarks from Ohio Department of Health Mike Rubadue



# INFORMAL QUESTIONS & ANSWERS

## Have Questions After Tonight?

### Contact:

**Jeff Wagner, FBP: (740) 897-3933**

**Karen Price, FBP: (740) 970-1239**



# FORMAL PUBLIC COMMENT SESSION #1



## Proposed Plan for the Site-Wide Waste Disposition Evaluation Project

# FORMAL PUBLIC COMMENT SESSION #2



## Proposed Plan for the Process Buildings and Complex Facilities Evaluation Project



## Have Questions After Tonight?

### Contact:

Jeff Wagner, FBP: (740) 897-3933

Karen Price, FBP: (740) 970-1239

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## Submit Comments Until January 10, 2015

Send by email, fax or postal mail using the contact information provided in each Proposed Plan.