

**OUR SITE.  
OUR FUTURE.**

# The U.S. Department of Energy and Fluor-B&W Portsmouth Welcome You to Stay Informed

Gaseous Diffusion Plant Cleanup

September 13, 2011

Waverly High School, Waverly, OH



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# What To Expect Tonight

- How will this meeting be structured.
- Why we are holding this meeting today.
- What specifically will be happening at the Gaseous Diffusion Plant in the next few years.
- How this work impacts the community.



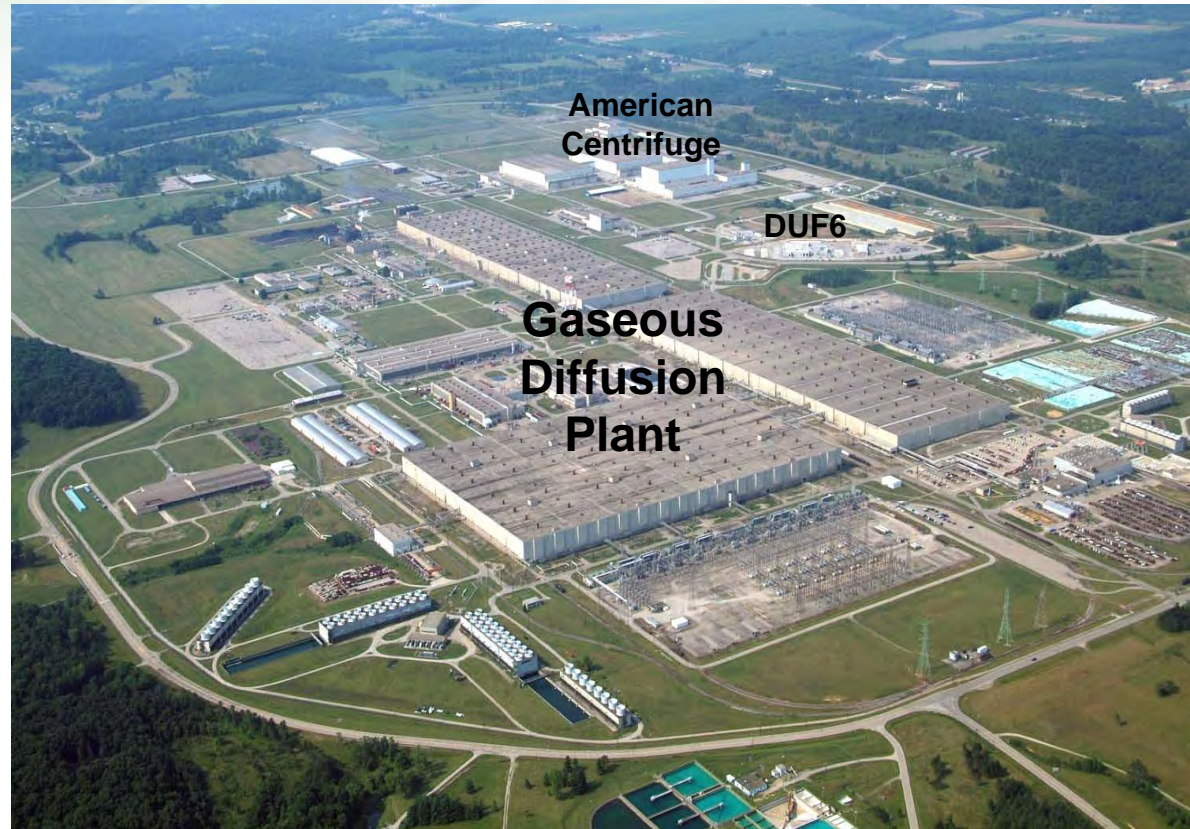


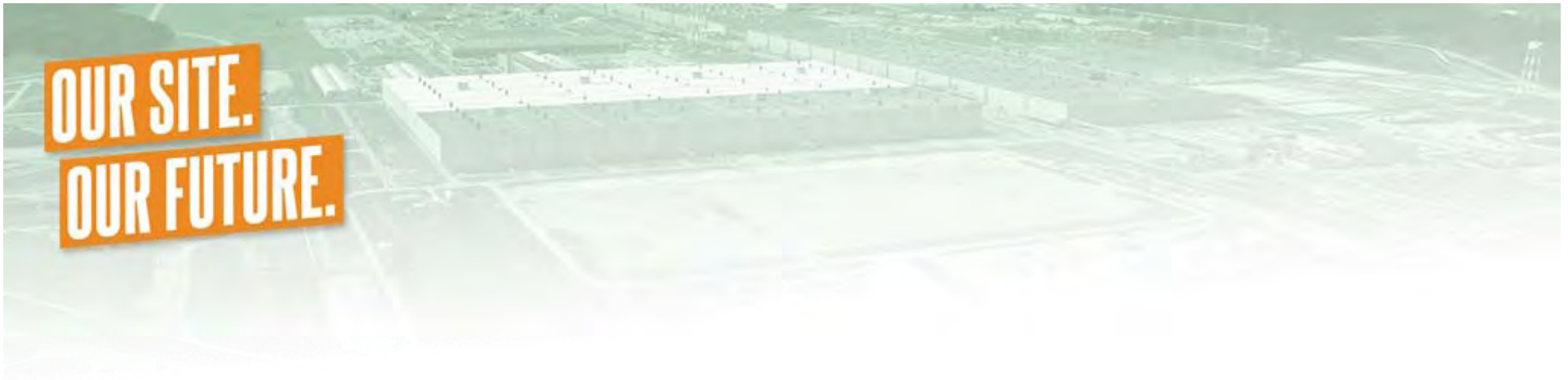
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Decontamination &  
Decommissioning  
(D&D) Team:



# Who's Who at the Site?



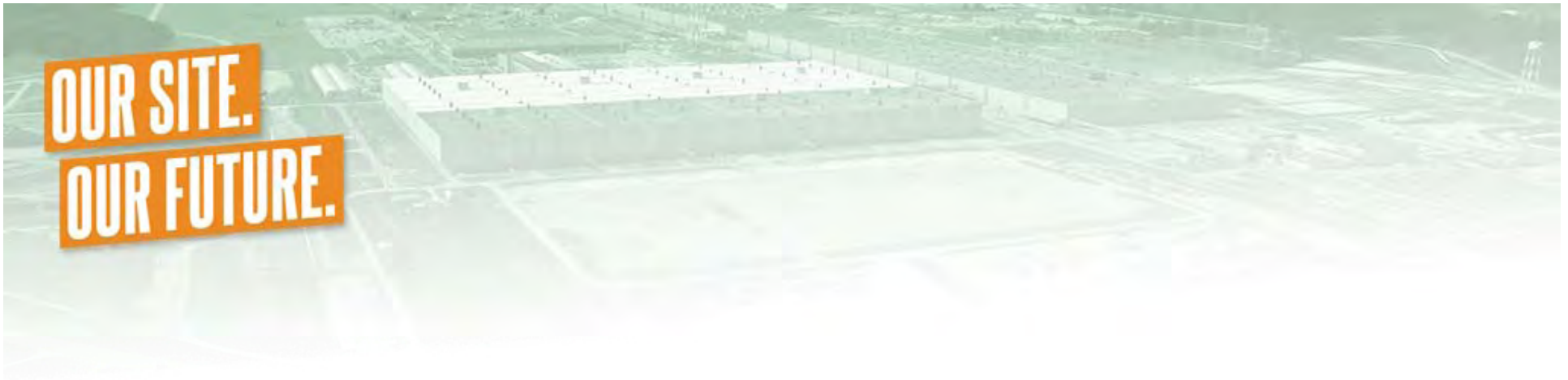


Jamie Jameson, Fluor-B&W Program Manager

Vince Adams, DOE Site Director

## **OPENING REMARKS**





Marc Jewett

# ENVIRONMENTAL REMEDIATION





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# Fluor-B&W Scope of Work

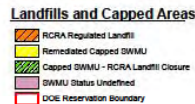
- Dismantle and dispose of Gaseous Diffusion Plant facilities
  - 3 large processing facilities: X-326, X-330, X-333
    - About 96 acres under roof
    - Each about 1/2 mile long
  - Other ancillary GDP support facilities
- Clean up contaminated soil
  - From historical leaks, spills, and releases
  - Dispose of waste
- Ensure effective groundwater remediation
  - 5 plumes actively being cleaned up
- Assess existing closed/capped landfills
  - 16 sites in 5 general areas; about 94 acres total
- Leave site in a condition that supports the community's vision







# Existing Site Landfills and Capped Soil Contamination Areas



- 





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# 5 Groundwater Plumes On-Site



- X-701B
- X-740
- X-749
- 7-Unit Area
- 5-Unit Area



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# Decisions to Set Course for Clean-up

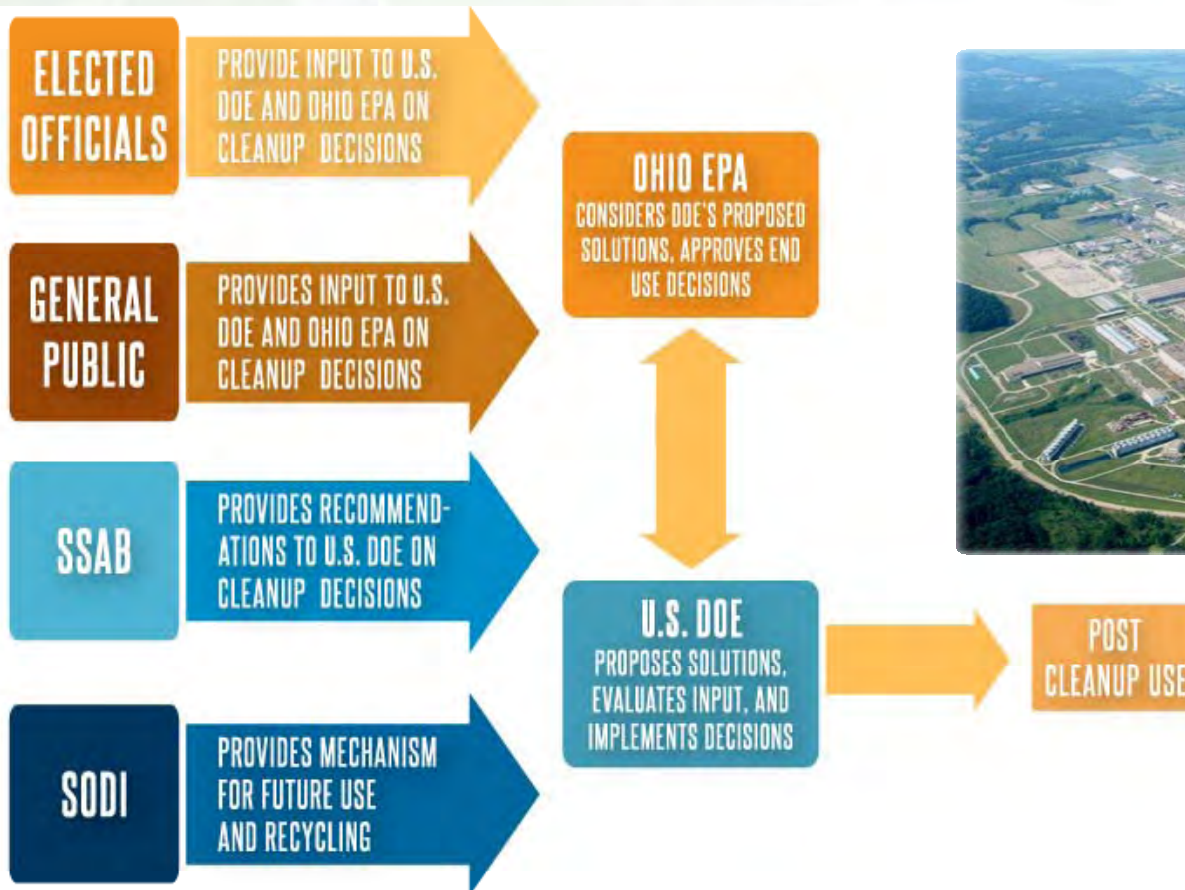
- Land use after cleanup
- Final cleanup levels for water and soil
- Where the waste will go?





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# Participants in Key Decisions



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## Preparing the Site for Future Use

- The community has provided substantial input to date. DOE appreciates this input.
- The final clean-up remedy must leave the site in a configuration that is most attractive to future land use needs.
- NOW, we must work together to define what the site is to look like to meet these future land use needs.





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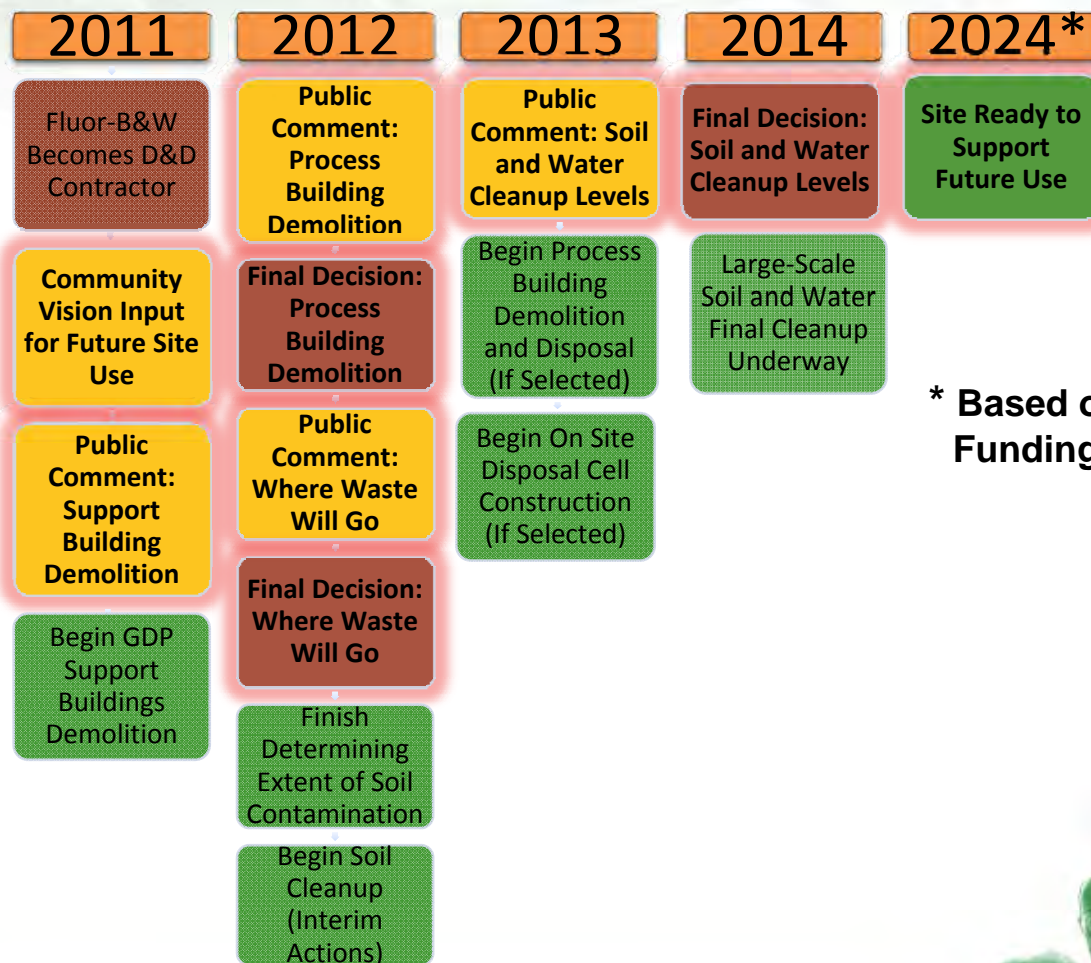
## Cleanup Levels

- Input from the community
- Recommended by DOE
- Approved by Ohio EPA
- Protective of human health and the environment
- Support future use of the site



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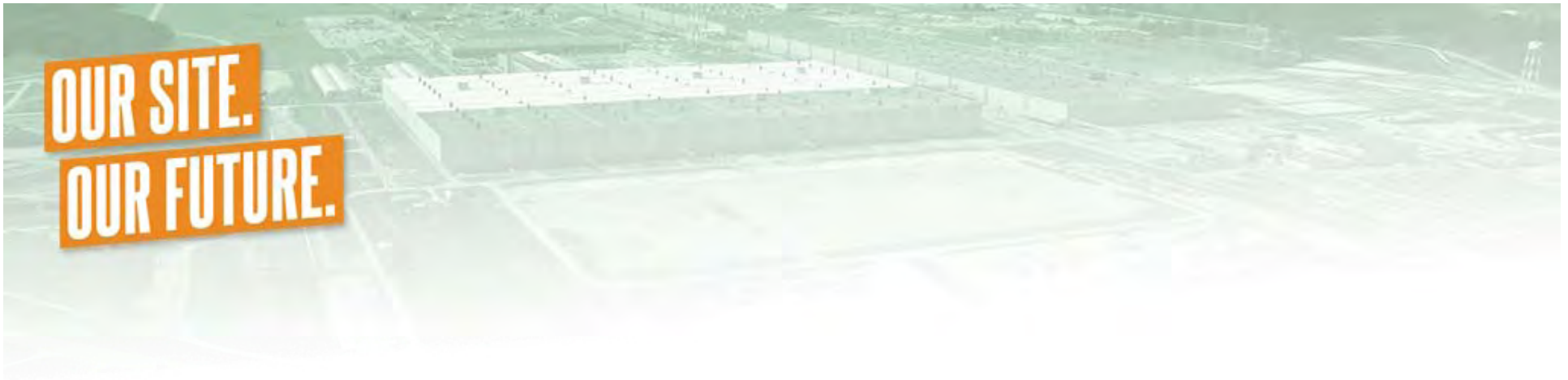
# Path Forward to 2024\*



**\* Based on Current DOE Funding Projections**







Bob Nichols

# **FACILITY SURVEILLANCE & MAINTENANCE AND D&D**



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## Work Scope Features

- Deactivation, demolition and disposal of over 400 facilities and associated material inventories and equipment.
- Three major process buildings alone are 96 acres under roof.
- Fully operational utility systems and infrastructure management.
- Continued support to the other site tenants.





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# Planned Work Scope

- Five Segments:
  - Three separate process buildings (X-326, X-330, X-333)
  - Balance of Plant
  - Utilities and Infrastructure



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# Work Planning Process

- Prioritization and sequencing
- Facility investigation
- Sampling and characterization
- Engineering
- Work package development

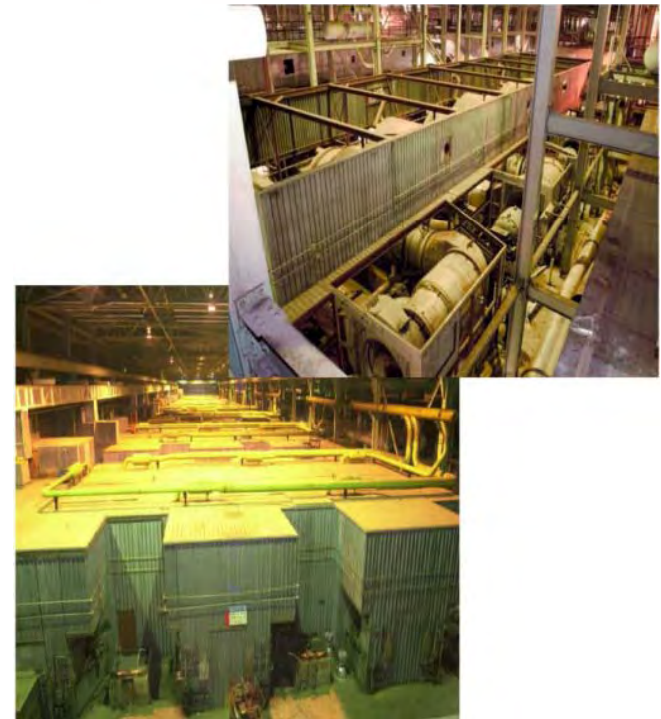




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# Work Execution

- Readiness review
- Remove hazardous material (lube oil, mercury switches)
- Dismantle and remove process equipment
- Abate asbestos within the buildings
- Deactivate utilities (cold and dark)
- Remove exterior asbestos
- Demolish the structure



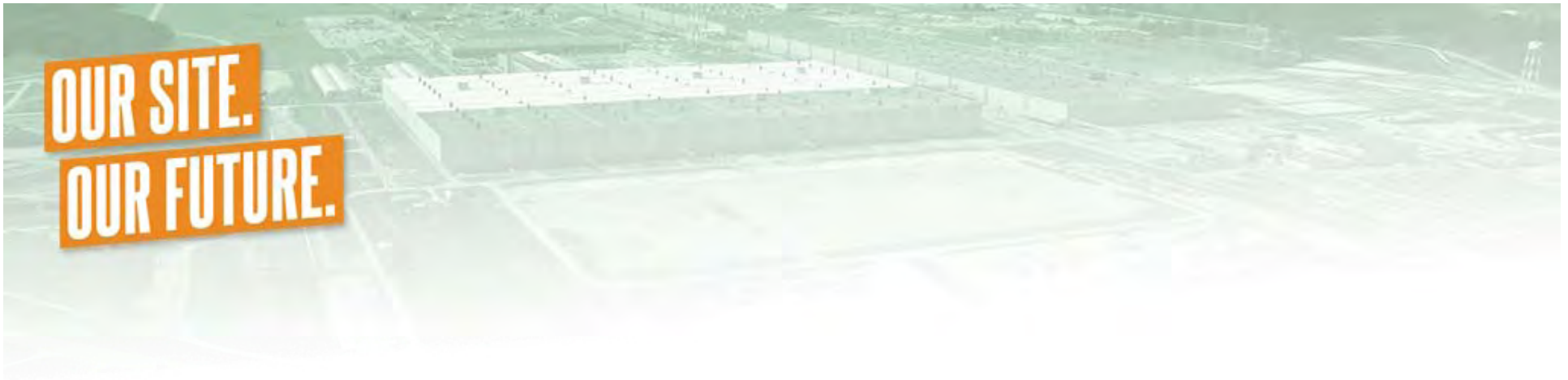
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## Supporting Activities

- Interface with waste management
- Utility alterations and optimization (steam, power, water)
- Maintain services and infrastructure to other site tenants (American Centrifuge Project, DUF<sub>6</sub>)
- Feeder program for recycle and reuse







Danny Nichols

# WASTE MANAGEMENT OVERVIEW



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# Waste Management Program

- Initial Stages of Project
  - Overview of types of waste
  - Packaging? How do we qualify?
  - How will it be shipped?
  - Where will the waste go?
    - Waste will continue to be shipped off-site until a final disposal decision is made with public input.





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# Waste Management Program

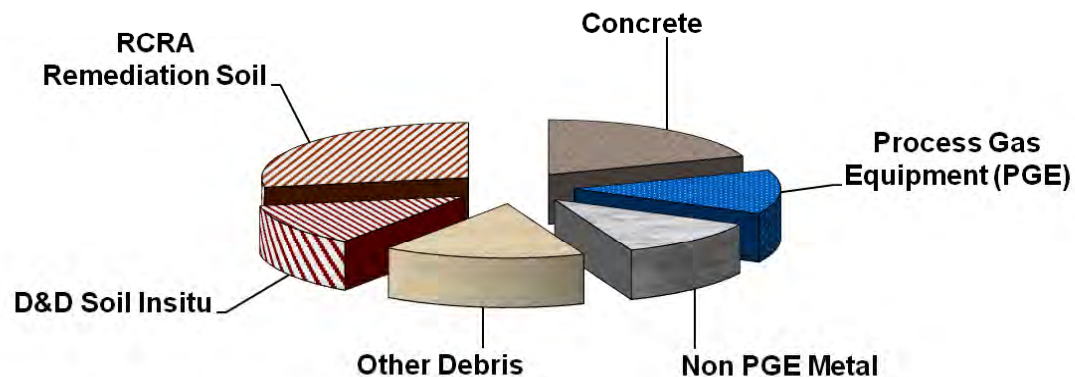
- Overview: Types of Waste
  - Uranium – enriched, natural, depleted
  - Technetium, other radionuclides
  - PCBs
  - Hazardous chemicals
  - Metals – recycle (Switchyard generated 8K Tons)
  - Universal waste (e.g., fluorescent light bulbs)



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# Waste Volume & Soil Estimates from D&D

\* Does not include existing landfills



**About 2.1 million cubic yards**



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# Waste Disposition

- Packaging
  - Bags, supersacks
  - Boxes
  - Intermodals
  - Sea Lands





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# Waste Disposition

- Shipping
  - Rail
  - Truck
  - Rail/Truck



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# Waste Disposal Options



- Waste generated before final disposal decision will be shipped off-site.
- Even if on-site is selected as a disposal option, some wastes will always be shipped off-site.





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# Off-Site Disposal Options

Energy Solutions,  
Clive, UT

Local Landfill – “Clean”  
waste only



DOE Nevada  
National Security  
Site,\* NV

**\*Formerly  
Nevada  
Test  
Site**

Waste Control  
Specialists, Andrews, TX

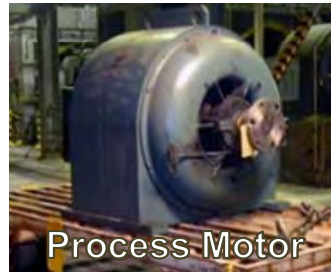




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## Recycle / Reuse

- Potential to recycle about 120,0000 cubic yards of non-PGE metal after D&D
- Radiological contamination limits DOE's ability to recycle most of the waste

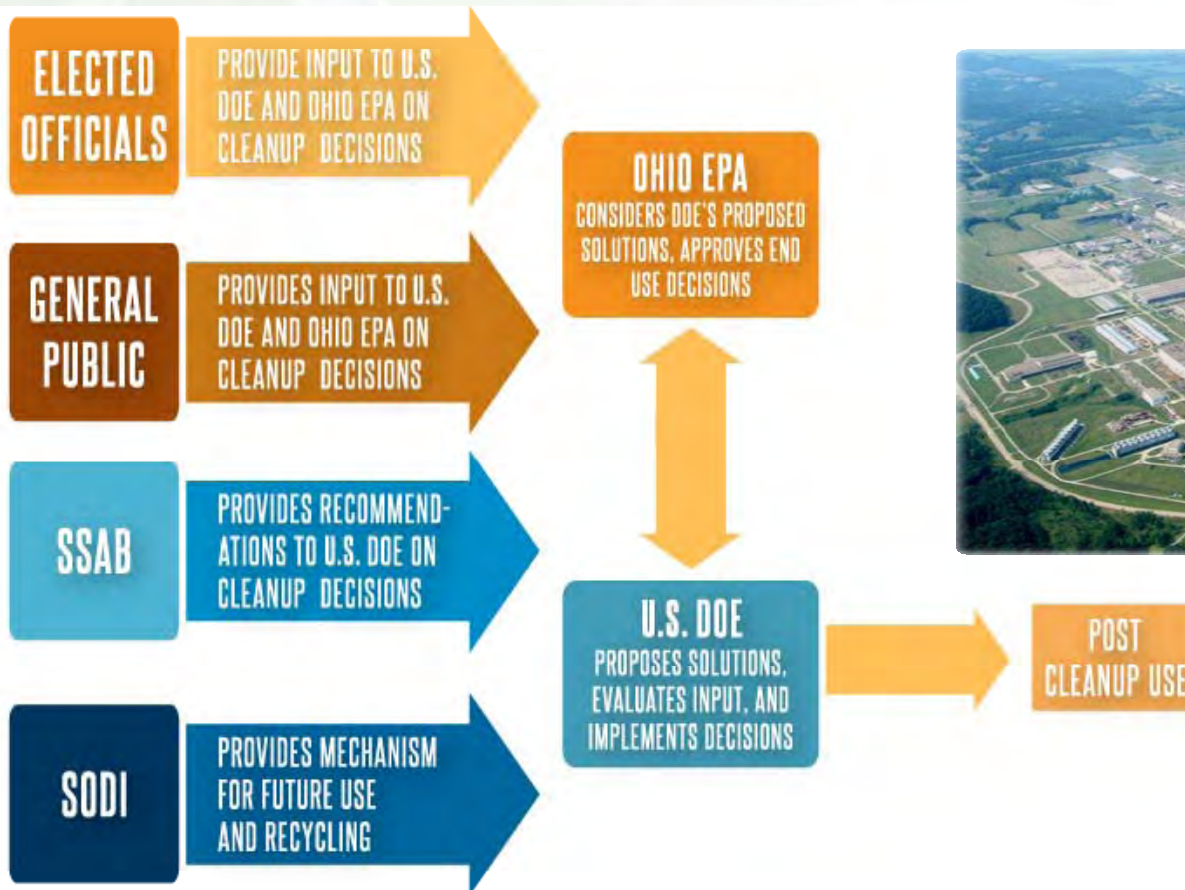


***Recycling as much waste  
as feasible is a DOE  
priority.***



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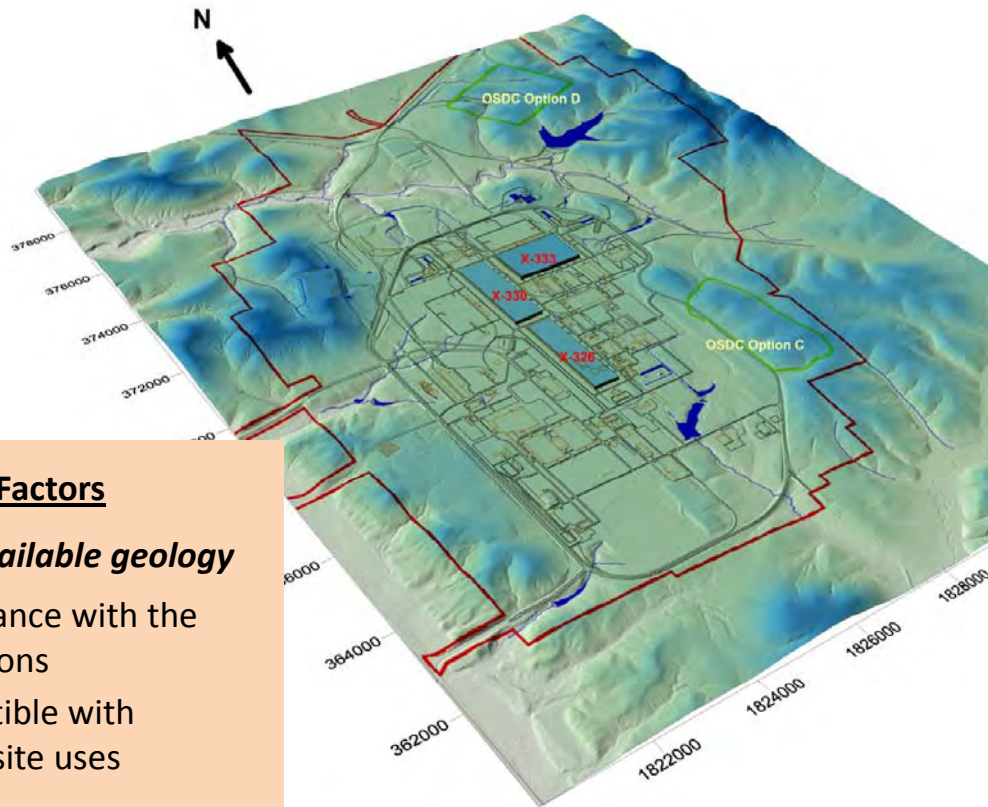
# Participants in Key Decisions





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# On-Site Disposal Option



## Location Factors

- **Best available geology**
- Compliance with the regulations
- Compatible with future site uses
- Cost
- Logistics

## Size/Volume Factors

- **Volume of non-recyclable contaminated debris**
- **Amount of soil to mix with debris for structural stability**
- Desire to consolidate existing landfills
- Waste Acceptance Criteria
- Desired height



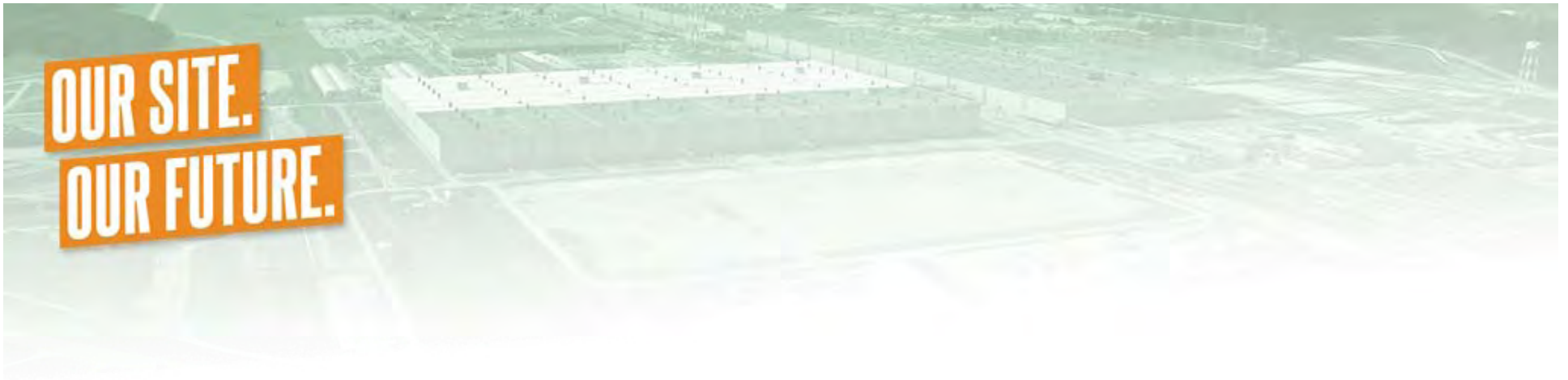


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# Waste Management Conclusion

- Priorities
  - Compliance with all DOE orders and regulations
  - Extensive characterization of materials
  - Strong Quality Assurance program implementation
  - Recycle/reuse to minimize volume of waste for disposal





Jerry Schneider

# COMMUNITY COMMITMENT

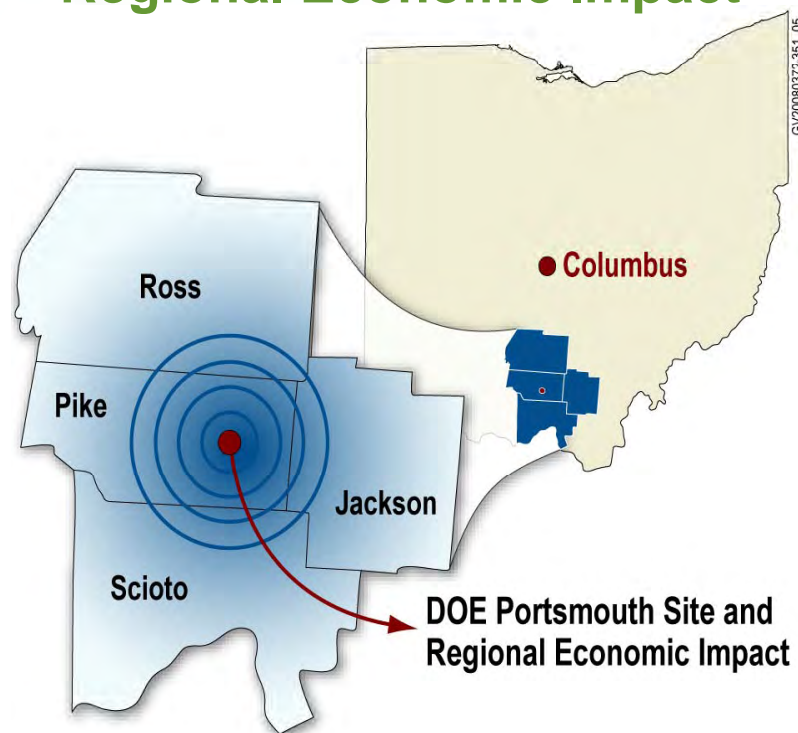


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# Community Commitment Plan

- Contribute to economic stabilization, growth of 4 counties around Site
- **Regional Planning Process** identify, showcase counties' combined strengths, capabilities

## Regional Economic Impact

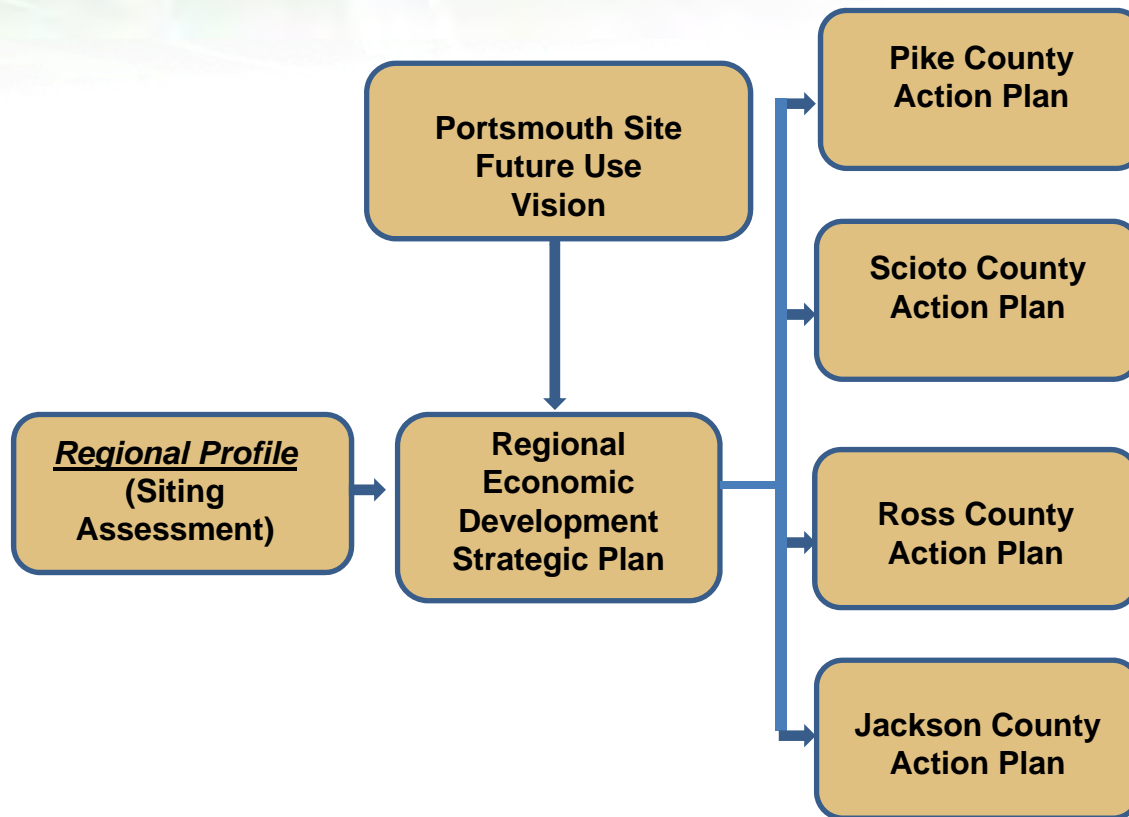




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# Commitment to Economic Development

## REGIONAL PLANNING PROCESS



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## Completed Economic Development Activities

- Kickoff meetings in 4 counties in April 2011 by economic development consultant team
- Initial county meetings Pike, Ross, Jackson, Scioto in May-June
- Initial regional and state meetings in May
- Sites and buildings tours in four counties



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# Future Economic Development Activities

- Future actions
  - Assemble information on DOE GDP Site
  - Present findings to Fluor-B&W CCP Steering Group
- Draft Regional Profile
  - Analysis of economic conditions in 4 counties
  - Perspective of corporate investors
  - Reasonable, obtainable goals
- Coordinate, participate with JobsOhio





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## How Do You Stay Informed?

- Attend quarterly public meetings
- Follow the site remediation website [www.fbportsmouth.com](http://www.fbportsmouth.com)
- Get on mailing list and respond to requests for comments
- Attend SSAB meetings – open to the public
- Provide input during public comment periods





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Please Join Us in the Cafeteria for  
Refreshments, Poster and Video  
Displays, and to talk with site  
Subject Matter Experts

*Thank You For Sharing This Evening With Us*

