



PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

•OSU Endeavor Center• 1862 Shyville Road • Piketon, Ohio 45661 • (740) 289-5249 •

Proposed Agenda for the November 6, 2014 Board Meeting

Chair

William E. Henderson II

6 p.m.

Call to Order, Introductions

Review of Agenda

Approval of September Minutes

Vice Chair

Val E. Francis

DDFO Comments

--15 minutes

Board Members

Shirley A. Bandy

Federal Coordinator Comments

--10 minutes

Lisa Bennett

Liaison Comments

-- 5 minutes

Robert Berry

Maddeline C. Caudill

Presentation – Historical Preservation

--30 minutes

Carlton L. Cave

Marc Hill, FBP & Jeff Pinkerton, FBP

Al Don Cisco

Presentation- Public Comment Period Schedule

--20 minutes

Martha A. Cosby

Dennis Carr, FBP

Ervin S. Craft

Adrian C. Harrison

Administrative Issues

--20 minutes

Carl R. Hartley

Brian F. Huber

○ **Recommendation 15-01**

- Public Comments on Recommendation
- Board Comments on Recommendation

Ryan H. Knight

Sharon E. Manson

○ **Recommendation 15-02**

- Public Comments on Recommendation
- Board Comments on Recommendation

Daniel J. Minter

Irma C. Payne

Cristy D. Renner

○ **Letter of Support**

- Public Comments on letter
- Board Comments on letter

Deputy Designated

Federal Official

Joel Bradburne

DOE Federal Coordinator

Greg Simonton

Subcommittee Updates

--5 minutes

Public Comments

--15 minutes

Final Comments from the Board

--15 minutes

Adjourn

Support Services

EHI Consultants, Inc.

1862 Shyville Road

Piketon, OH 45661

Phone 740.289.5249

Fax 740.289.1578



PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

MINUTES OF THE THURSDAY, NOVEMBER 6, 2014, SSAB MEETING • 6:00 P.M.

Location: The Ohio State University Endeavor Center, Room 160, Piketon, Ohio

Site Specific Advisory Board (SSAB) Members Present: Chair Will Henderson; Vice Chair Val Francis; Shirley Bandy, Bob Berry, Carlton Cave, Al Don Cisco, Martha Cosby, Adrian Harrison, Carl Hartley, Brian Huber, Sharon Manson, Dan Minter, Charlene Payne

SSAB Members Absent: Lisa Bennett, Carol Caudill, Ervin Craft, Ryan Knight, Cristy Renner

U.S. Department of Energy (DOE) and Contractors: Vince Adams, Joel Bradburne, Greg Simonton, Jud Lilly, Eric Woods, DOE; Rick Greene, Joe Moore, Restoration Services, Inc. (RSI); Cindy Lewis, EHI Consultants (EHI); Deneen Revel, Dennis Carr, Jim Thompson, Jeff Pinkerton, Mark Hill, Jeff Wagner, Marc Jewett Fluor-B&W Portsmouth (FBP)

Liaisons: Maria Galanti, Ohio Environmental Protection Agency (EPA)

Facilitator: Eric Roberts, EHI

Public: Geoffrey Sea, Neighbors for an Ohio Valley Alternative (NOVA); Ken Grumski, Betsy Madru, Waste Control Specialists (WCS); Greg Monosturi, Randy Britt, Akima; Sharon Christoff, Kim Conley, YMCA; Matt Lucas, News Watchman; Gary Cooper, Pike County Chamber of Commerce

Approved by Will Henderson, Board Chair

Will Henderson

Call to Order:

Henderson: I would like to call the meeting to order.

Roberts: I would like to welcome everyone, and I will be facilitating the meeting. There will be a public comment period after the presentations. The board should stay within its defined scope and follow the meeting ground rules adopted.

November Agenda:

Roberts: Are there any modifications or proposed changes to the November agenda?

- **Henderson:** Can we move Recommendation 15.02 up in the agenda? We have a full night, a lot of public is here for this recommendation, and I don't want them to have to wait.
- **Roberts:** Let us see a show of hands if you approve this change.
- **Cosby:** I make a motion to approve the November agenda with the suggested change.
- **Cave:** I second the motion
 - **Motion carried, agenda approved**

September Minutes:

Roberts: Are there any modifications or proposed changes to the September minutes?

- **Cosby:** I make a motion to approve the September minutes
- **Mason:** I second the motion
 - **Motion carried, minutes approved**

Recommendation 15-02:

Public Comment on the recommendation:

Sea: Excellent recommendation. NOVA supports it. I would offer what I hope is taken as a friendly amendment. Under the community support section different options are elaborated, you can recognize that this site is unique among DOE sites in the country. The site is surrounded by important ancient earthworks that have an important role to play in the future economy as well as cultural value of this community. There is currently a proposal to add a whole set of them to the world heritage listing. Earthworks should be to include, but unless it is specified here, that usually is not done, so I would suggest that it be mentioned and included in this recommendation.

Cooper: I watched the construction of the original plant and as president of the chamber and other organizations that I have served on, we have always supported this site in any way we could. Now my continued interest is that the site be conserved and maintained for the betterment of the people of Pike County. At the conclusion of this usage, it is a site that can be continued to be used for industrial

development, education, or whatever would benefit the residents of Pike County who have served and given sacrifice through the years. Thank you.

Board comment on the recommendation:

Question/Comment:	Answer:
Bandy: I sent the recommendation to the chamber board of directors they could not be here tonight but they are in support of Recommendation 15.02.	
Huber: I consider tourism an important part of economic development. I do not know if it is worthy of including in this recommendation, but it should be considered.	
Manson: Since I am involved in tourism, of course, I would like to see it included. It is important to this area and it would not bother me to see that added.	Roberts: We could handle this a couple of different ways.
Henderson: We could table the vote and come back to it if Sharon and Shirley want to step out and write something to add to the recommendation then we can come back to it and vote?	Roberts: Sharon, Shirley would you like to do that? If it is ok with the board, they could step out and write something up and then we will come back to change and vote on the recommendation later in the meeting.

DDFO comments provided by Joel Bradburne, Deputy Designated Federal Official:

- Plant Updates
 - X-326 Activity Progress
 - Waste Certification Program Receives Great Review
 - USEC Legacy Waste Shipped Offsite
- Portsmouth DUF6 Conversion Plant Status Update
 - Cumulative MT DUF6 Processed at Portsmouth
 - Increases in plant availability
 - DUF6 Conversion Project: Planned Improvement
- 2011 ASER Summary Released
- Groundwater Remediation Update
- Regulatory Process
- Community Outreach
 - Jackson County SODI Grant
 - FBP Community Outreach
 - FY2014 Mutual Aid
 - Employees raise \$2,600 for ALS
 - Employees raise \$4,800 for Breast Cancer Research
 - North Access Sewer Project
- Upcoming Site Events

A copy of the DDFO presentation is available on the SSAB web site
(www.ports-ssab.energy.gov)

Recommendation 15-02:

Question/Comment:	Answer:
Roberts: Sharon and Shirley are back with the changes to the recommendation.	
Roberts: Any comments on this change? Does someone want to call for a vote?	

Bandy: I would like to make a motion to approve Recommendation 15-02 with the changes we just made.

Caudill: I second the motion to approve.

Motion carried (12 approved, 0 opposed, 0 abstained, 0 recused)

Liaison comments provided by Maria Galanti:

Galanti: Since this will be a long night, I will stay later after the meeting, in case anyone has questions.

Federal Project Coordinator comments provided by Greg Simonton, Federal Project Coordinator:

Simonton: The west side sewer project is now live. A couple of things to finish up on the north side. The Science Alliance was about a month ago. It was a three-day event like last year, 1100 students and educators. DOE is continually trying to improve it and make it interactive for the kids.

Presentation Historical Preservation provided by Marc Hill & Jeff Pinkerton, FBP:

Hill and Pinkerton gave a site legacy update to some surrounding schools and discussed their efforts.

Presentation Public Comment Period Schedule provided by Dennis Carr, FBP:

- Key Stakeholder Update
- Five Cleanup Decisions to be made at PORTS
- Site Background
- Completed Regulatory Decisions
- Proposed Plan Issued for Public Comment
- DOE Prefers a Combination of Off-and On-Site Disposal Because it is Safe, More Cost Effective and Has the Least Transportation Risk
- Public Comments on Plans will be Accepted from November 12 to January 10
- Public Comments on Plans
- Future Regulatory Decisions

**Administrative Issues
 Recommendation 15-01:**

Question/Comment:	Answer:
Francis: This is a very good recommendation.	
Huber: DOE has received more than 2.4 million of the proceeds from SODI and there has been \$600,000 in grants. What happened to the rest of the money? Is there a certain amount of money set aside?	Minter: In projects like the sewer, jobs created looking for metals, industrial park, etc.

Public Comment on the recommendation: None

Cosby: I would like to make a motion to approve Recommendation 15-01.

Francis: I second the motion to approve.

Motion carried (10 approved, 0 opposed, 0 abstained, 1 recused)

Letter of support:

Question/Comment:	Answer:
Bandy: Does a letter carry more weight than a recommendation?	Henderson: Over the last three months, there has been a lot of discussion back and forth with others and myself.
Francis: I think in the past we have been late, sometimes we play catch-up. I think this letter needs to be sent to our senators also. It is important.	Bandy: Should we cc them? This is much needed. Henderson: The senators do receive our recommendations and letters already.

The board unanimously approves sending the letter.

Subcommittee Updates:

Budget and Funding Subcommittee Update by Bob Berry:

Berry: The Budget and Funding Subcommittee met on September 9. The purpose of the meeting was to have an election of leadership and a discussion on the work plan. The subcommittee also met on October 14. The purpose of the meeting was to update the subcommittee on the continuing resolution, presented by Joel Bradburne, DOE and Dennis Carr, FBP.

D&D/Remediation Subcommittee Update by Martha Cosby and Dan Minter:

Cosby: The D&D/Remediation Subcommittee met on September 9. The purpose of the meeting was to have an election of leadership and work plan discussion.

Minter: The subcommittee also met on October 14. The purpose of the meeting was to present the D&D sequence presented by Frank Miller, FBP. We also had an update

on the transportation incident by Jeff Wagner, FBP. We then had a discussion on the recommendation and voted to write it.

Executive Subcommittee Update by Will Henderson:

Henderson: The Executive Subcommittee met on September 25. The purpose of the meeting was to give the subcommittee an update on the SSAB National Chairs meeting. The subcommittee also met on October 30. The purpose of the meeting was to discuss the public comment period schedule.

Future Use Subcommittee Update by Brian Huber:

Huber: The Site Optimization and Future Land Use Subcommittee met on September 9. The purpose of the meeting was to have election of leadership and work plan discussion. The subcommittee also met on October 14. The purpose of the meeting was to have a discussion on the OU/DOE/Community collaboration.

Historical Legacy & Community Engagement Subcommittee Update by Eric Roberts:

Roberts: The Community Engagement Subcommittee met on September 9. The purpose of the meeting was the election of leadership and work plan discussion. The subcommittee also met on October 14. The purpose of this meeting was to have a discussion on FY15 Community Outreach activities presented by Jeff Wagner, FBP.

Public Comment:

Madru: *We are representing* Waste Control Specialists, we own and operate a low-level waste federal facility in Texas. We are here today to explain that we can now take large quantities of depleted uranium. We would love to be a resource to you. I will leave contact information.

Sea: Great news from Texas, I can say on behalf of the community we would love to send our waste to west Texas, so let's talk more. The cost would be less than sending it to Nevada. It may be cheaper to send almost all of our waste to Texas. Mark said he is the officer in charge of compliances in the National Historical Preservation Act (HPA). What Mark is doing in terms of going around talking to schools, setting up displays and tagging items from the site, that is all great stuff, but it has nothing to do with the National Historical Preservation Act. Tom King came here in 2009. He met with DOE and toured the site, and told DOE that they were not implementing HPA at this site and since that time, they have not corrected any of the items that Tom pointed out. DOE is required to meet with consulting parties and the consulting parties need to tell DOE what needs to be done to preserve and enhance the heritage of this site. In addition, DOE is completely out of compliance and has done nothing to remedy that situation.

Final Comments from the board:

Cisco: The plant is science it is a good thing Mark Hill is making an effort to speak to these students. Some of these students could be family members of plant workers, so education others on the plant is great.

Henderson adjourned the meeting.

Next Meeting: January 8, 2015

Action Items:

1. EHI will send out Recommendation 15.01, 15.02, and the letter of support.

PREPARING THE FUTURE

PORTS D&D PROJECT

DEPUTY DESIGNATED FEDERAL OFFICIAL PRESENTATION

**Joel Bradburne, Site Lead
U.S. Department of Energy**

**Portsmouth Site Specific Advisory Board
November 6, 2014**



- ▶ Plant Updates
- ▶ Regulatory Decision Making Progress
- ▶ Community Outreach
- ▶ Planning for the Future
- ▶ Upcoming Events





X-326 Activity Progress PGE First Cooler Shipment Departs Plantsite

Plant Updates





Waste Certification Program Receives Great Review

Plant Updates





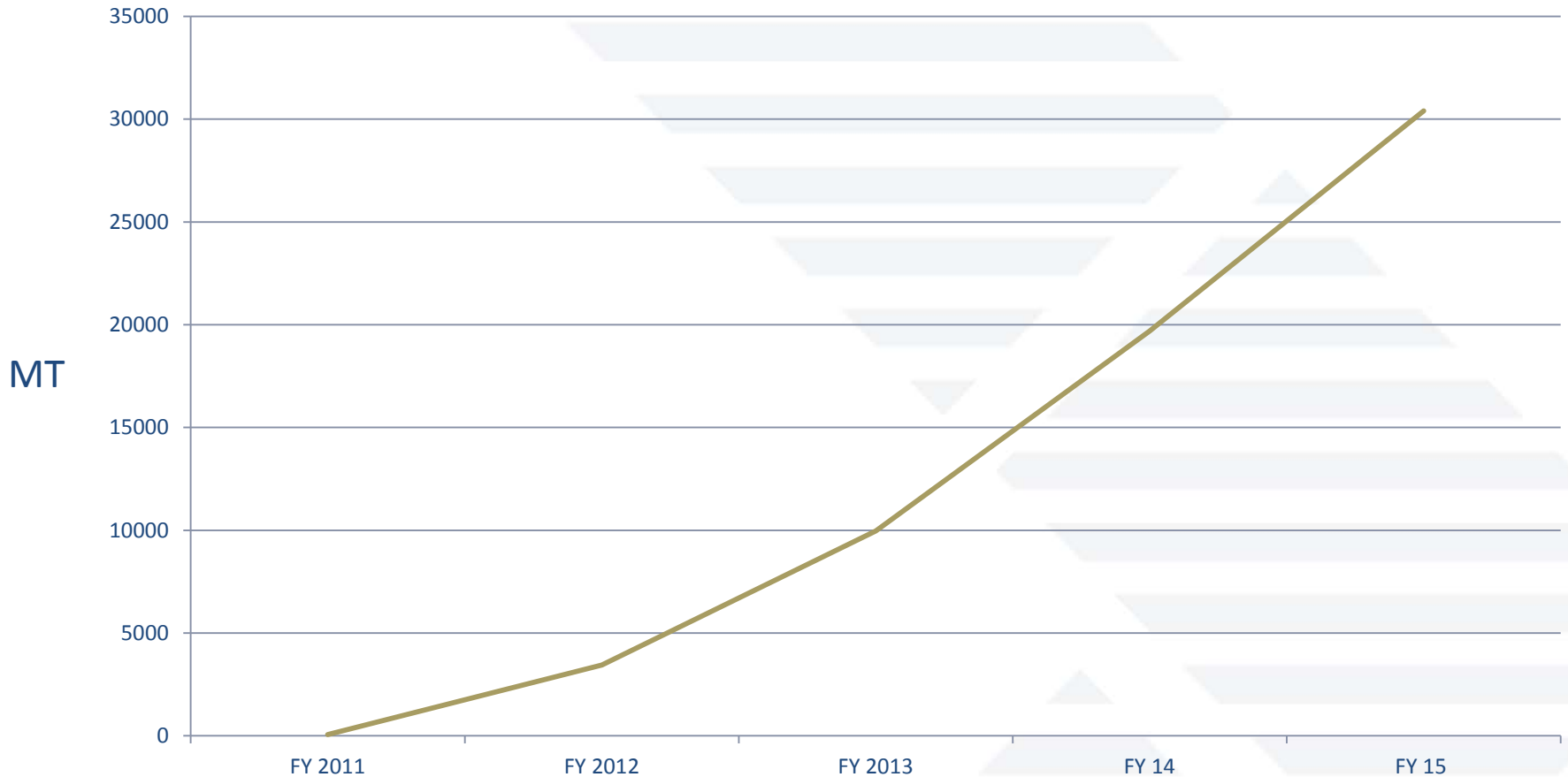
USEC Legacy Waste Shipped Offsite



Portsmouth DUF6 Conversion Plant Status Update as of September 30, 2014

Cumulative MT DUF6 Processed at Portsmouth

Through FY 14, processed ~8% of initial Portsmouth inventory



Transitioning from startup to sustained facility availability and predictable production output

Increases in plant availability:

Ports

FY12

26%

FY13

58%

FY14

80%



DUF₆ Conversion Project: Planned Improvement

Equipment replacement or process improvements to increase output

- Replacement Hydrogen Generation Technology
- Improve Autoclave and Conversion Unit Heating Control
- Streamline Cylinder Modification process and Cylinder Movement
- Optimize Oxide transfer process
- Reduce oxide flow restrictions (e.g., valve, blower and piping changes)





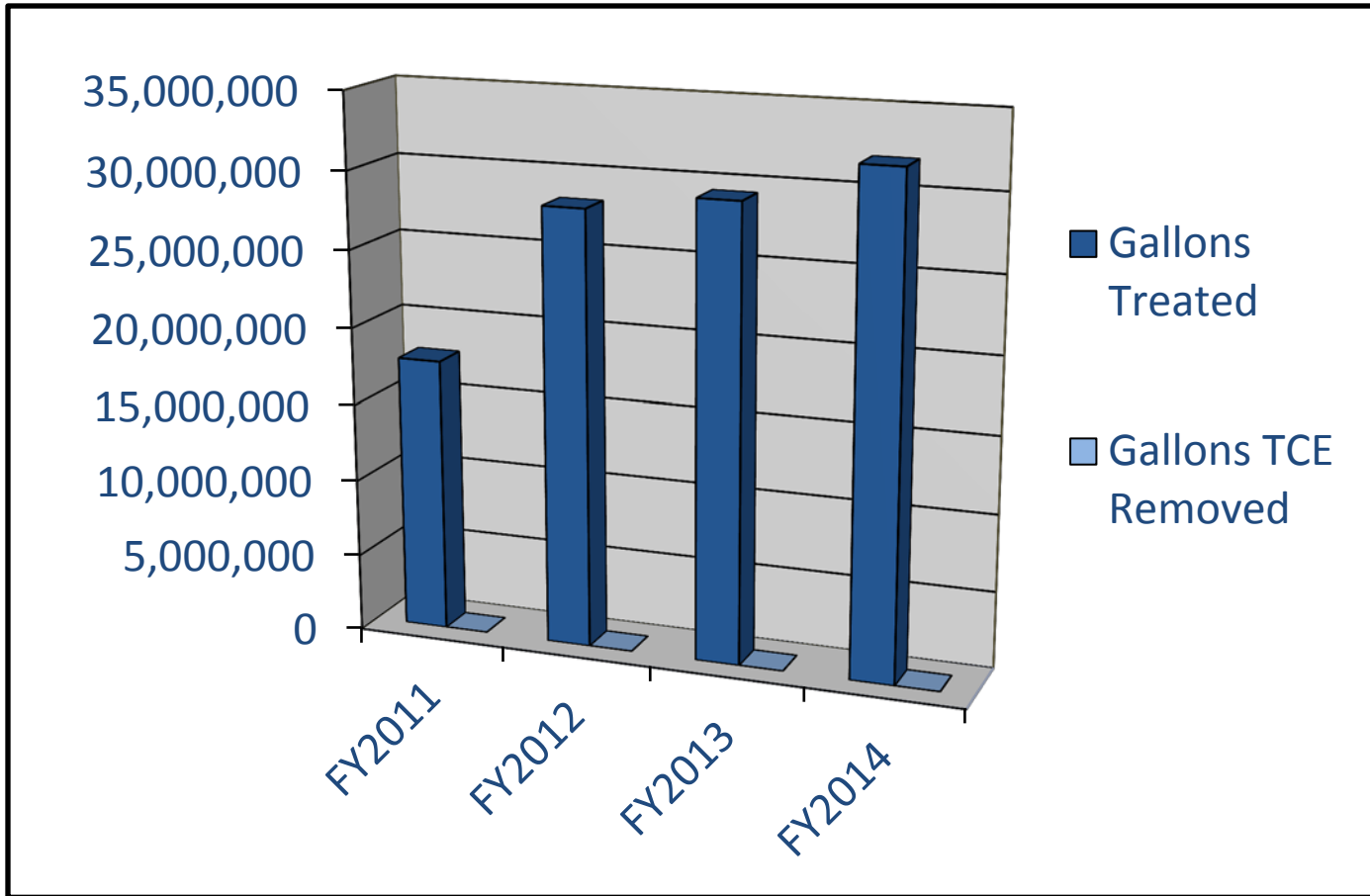
2011 ASER Summary Released




The 2011 ASER Student Summary was prepared by students from P.J. Fitch's Science class at Eastern High School



Groundwater Remediation Update



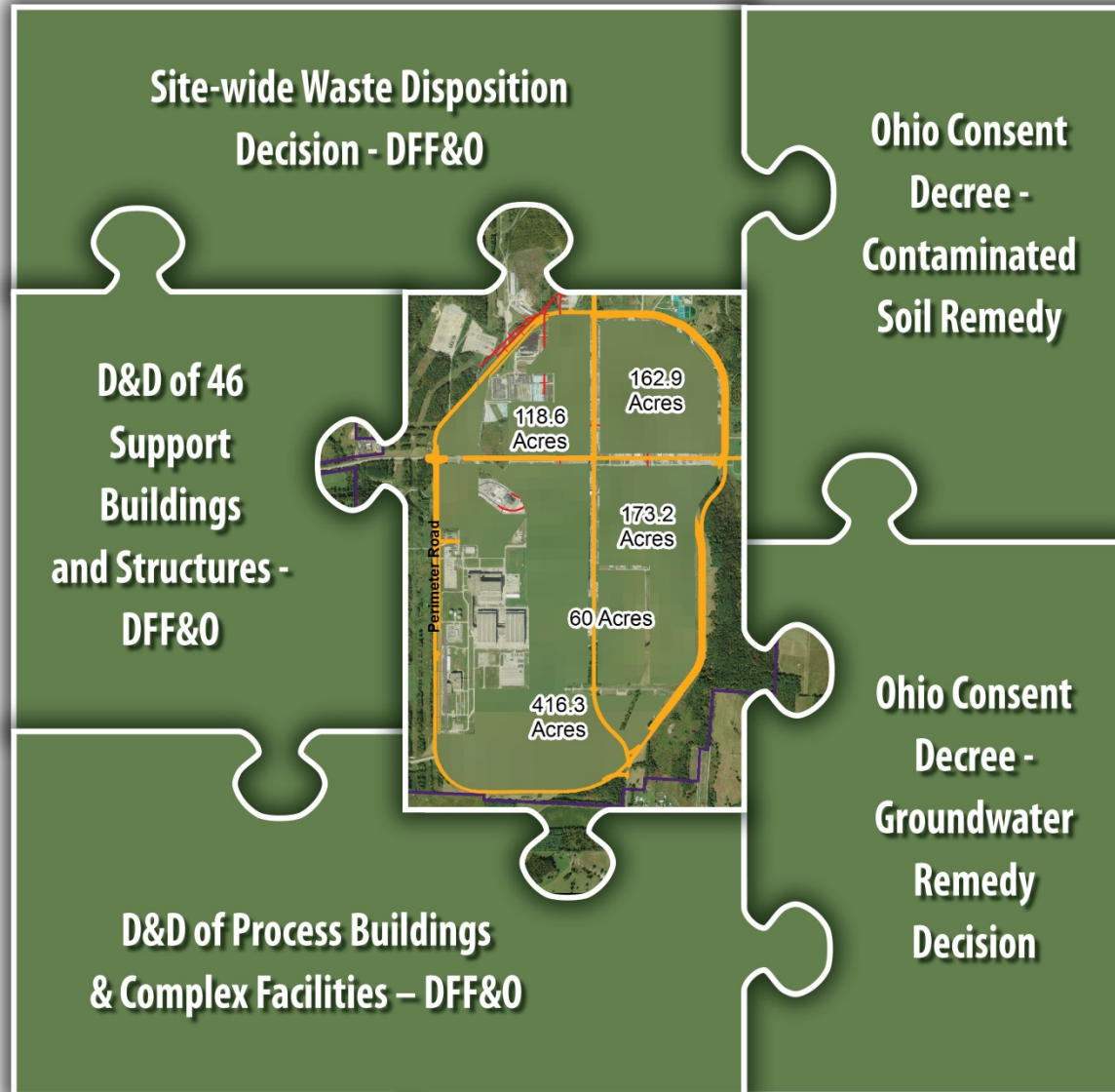
Regulatory Process



Process Building D&D	Evaluation of Alternatives, Informational Meetings and Workshops	Proposed Plan	Public Comment Period	Record of Decision	Work Begins
Waste Disposition	Evaluation of Alternatives, Informational Meetings and Workshops	Proposed Plan	Public Comment Period	Record of Decision	Work Begins
Soil and Groundwater Decision	Implement Ongoing Corrective Measures (already in place from previous decisions)			Evaluation of Alternatives	



Regulatory Process





Community Outreach

\$130,396 Raised for United Way





Jackson County SODI Grant James A. Rhodes Airport Groundbreaking Sept 17

Community Outreach



FBP Community Outreach



Fluor-B&W Portsmouth recently presented Mako Finished Products of Scioto County with a \$30,000 grant.



FY2014 Mutual Aid

Community Outreach



Mutual Aid Request FY2014	
Vehicle Accidents	5
Structure Fires	7
Other Fires	2
HazMat Issues	1
Medical	3
Total	18



Employees raise \$2,600 for ALS

Community Outreach





Employees raise over \$4,800 for Breast Cancer Research



“PINK OUT DAY”





North Access Sewer Project

Planning for the Future



Upcoming Site Events



**Public Comment Period for both
Proposed Plans**

November 12, 2014 to January 10, 2015



**Public Meeting
Monday, November 17
Waverly High School**



**SSAB Full Board Meeting
Thursday, January 8**



*For a full list of SSAB activities, check out the website at
<http://www.ports-ssab.energy.gov>*

FUTURE USE POTENTIAL AT THE PORTSMOUTH GASEOUS DIFFUSION PLANT

Presented by the U.S. Department of Energy



BACKGROUND



Key Facts

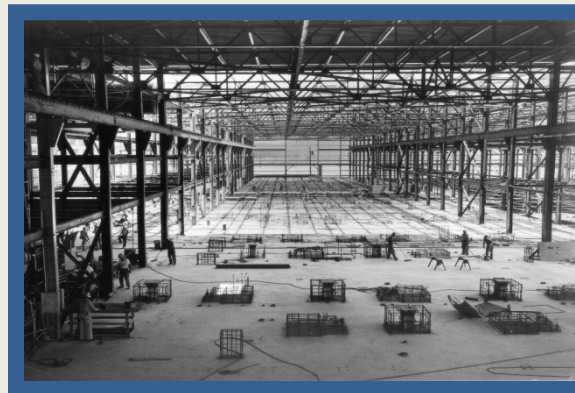
- ✓ The buildings contain 10 million square feet of space.
- ✓ It took 17 million man hours for construction.
- ✓ If all building materials were hauled in a single freight train, it would require 100,000 freight cars extending 814 miles
 - That is the distance from Piketon to Orlando, Florida.
- ✓ There are 600 miles of process piping and 1,000 miles of copper tubing in the process buildings.
- ✓ In 1956, the amount of electricity utilized at the Portsmouth site was the equivalent of New York City's consumption.



Uranium was enriched at the Portsmouth Gaseous Diffusion Plant for national security applications and the nuclear fuel industry from 1954-2001.

Timeline

- 1952** – Plant construction begins
- 1954** – Enrichment operations begin
- 1956** – Plant construction complete
- 2001** – Enrichment operations cease
- 2010** – D&D contract awarded
- 2011** – D&D begins



The site is a Cold War relic that is nearing the end of its lifecycle, and now local residents are analyzing future use scenarios for the reservation.

INFRASTRUCTURE

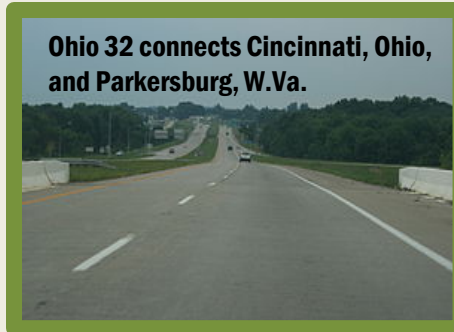


The Portsmouth Gaseous Diffusion Plant has ready access to a variety of transportation options that support shipping and receiving needs.

✓ Roads

○ Regional

- Plant rests at intersection of two major four-lane divided highways
 - U.S. 23 is national north-south highway
 - Ohio 32 is substantial corridor from Cincinnati to Parkersburg, W.Va.



○ On site

- Substantial network of roads connecting all portions of plant site



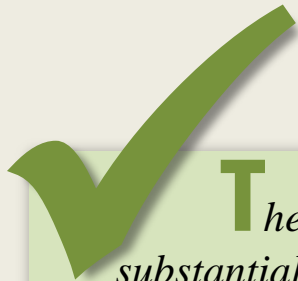
✓ Barge

- Close proximity to Ohio River
- Barge-to-rail transfer facility available

✓ Rail

- Twelve miles of rail line on site
 - Connects to Norfolk Southern Heartland Corridor main line

INFRASTRUCTURE



The Portsmouth site has substantial on-site excess infrastructure capacity available for immediate development opportunities.

- ✓ **Power**
 - 1,000 MW on-site installed interchange capacity
 - Connection to national grid
- ✓ **Natural Gas**
 - Connected to main transmission line to Pike Natural Gas
 - 8-inch line
 - Estimated 15,000 scfm available at site boundary
- ✓ **Waste Water Treatment**
 - On-site facility built in 1982
 - NPDES-permitted discharge to Scioto River
 - Design capacity 1.2 million gallons per day
 - Current usage 250,000 gallons per day

- ✓ **Water**
 - Raw water
 - Two well fields
 - Designed for ~40 million gallons per day
 - Site usage less than 2 million gallons per day
 - Potable water
 - On-site system designed for 5 million gallons per day



NATIONAL GRID



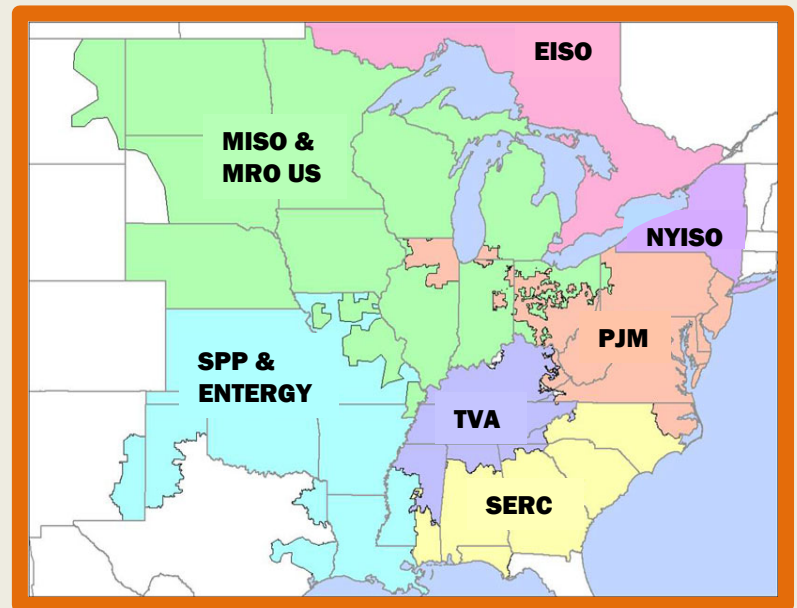
Portsmouth's extraordinary access to the U.S. electrical grid makes it a strategic location for either electricity generation or power usage.

Eastern Interconnection



The electric supply from Florida through Canada and from Oklahoma to Maine is carried by the Eastern Interconnection.

- ✓ Access to Eastern Interconnection exists on site
- 5 independent access points
- Potential for 10 access points
- No right-of-way acquisition for transmission lines
 - Reduces or eliminates associated cost
 - Eliminates potential for public criticism from new construction
 - On-site connection to AEP 765kv high voltage backbone is available

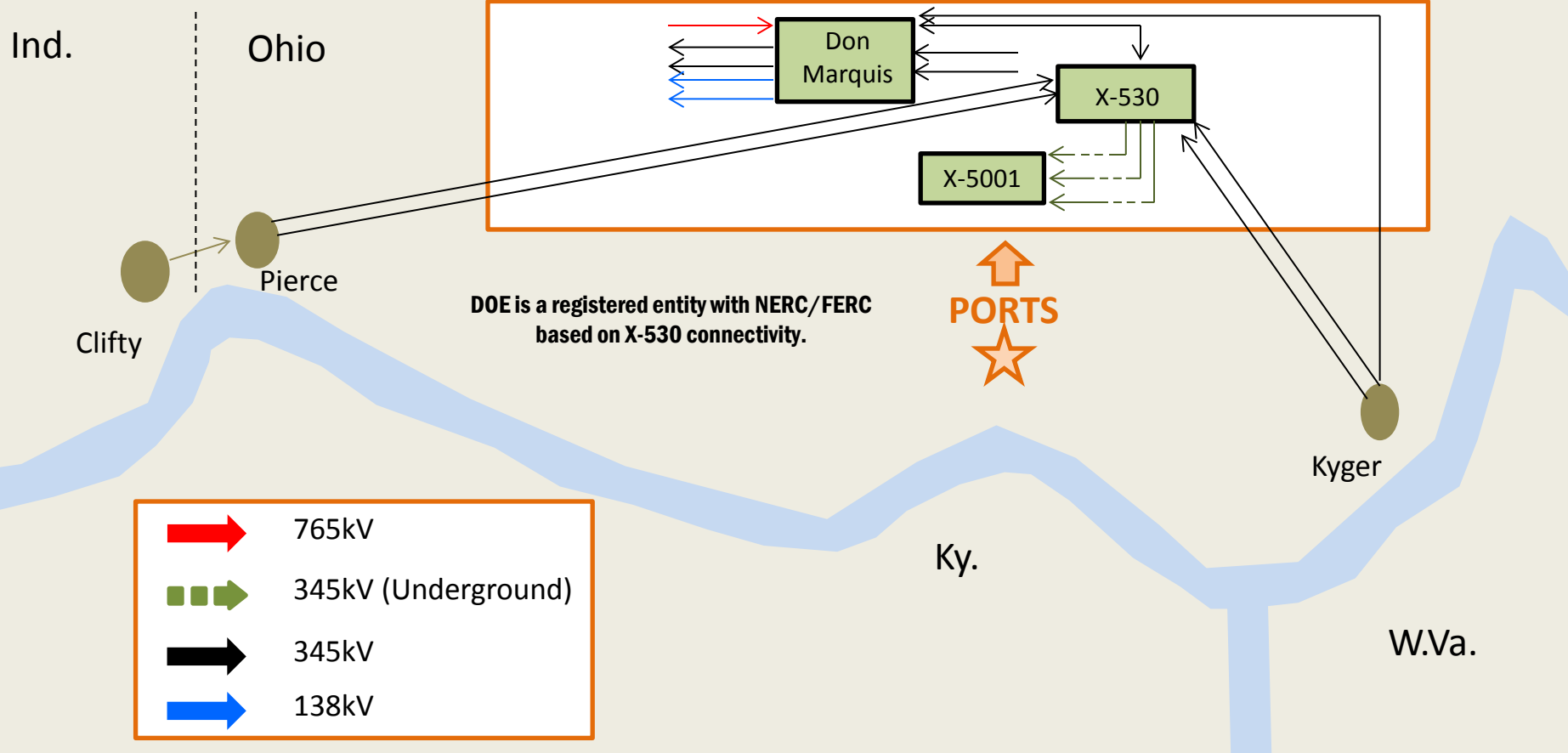


- ✓ The Portsmouth site is electrically connected to two balancing authority areas and to two Reliability Coordination areas (PJM and MISO).

NATIONAL GRID



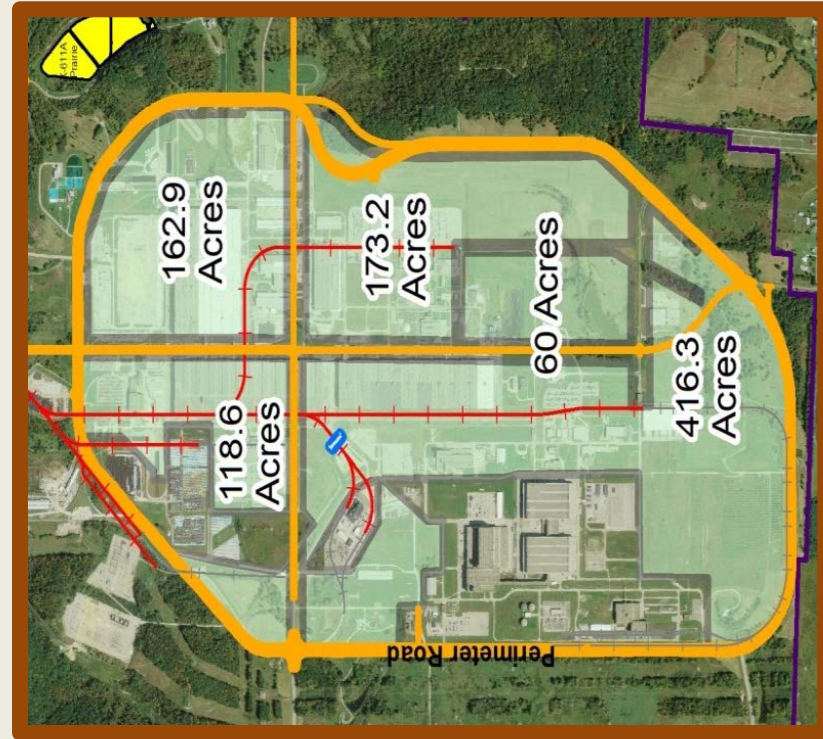
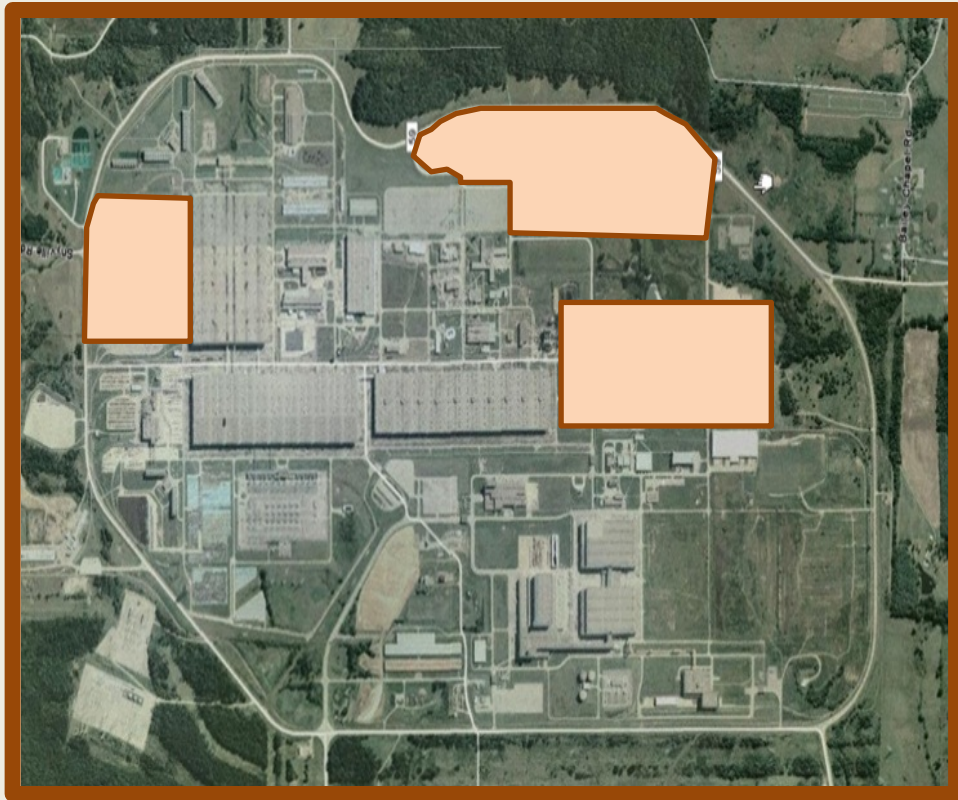
The Portsmouth site has extraordinary access to the U.S. electrical grid and eliminates the need for right-of-way acquisition to connect.



LAND AVAILABILITY



The DOE is undertaking significant analysis and working through the regulatory process with a goal of maximizing the amount of land that could be made available for reindustrialization.



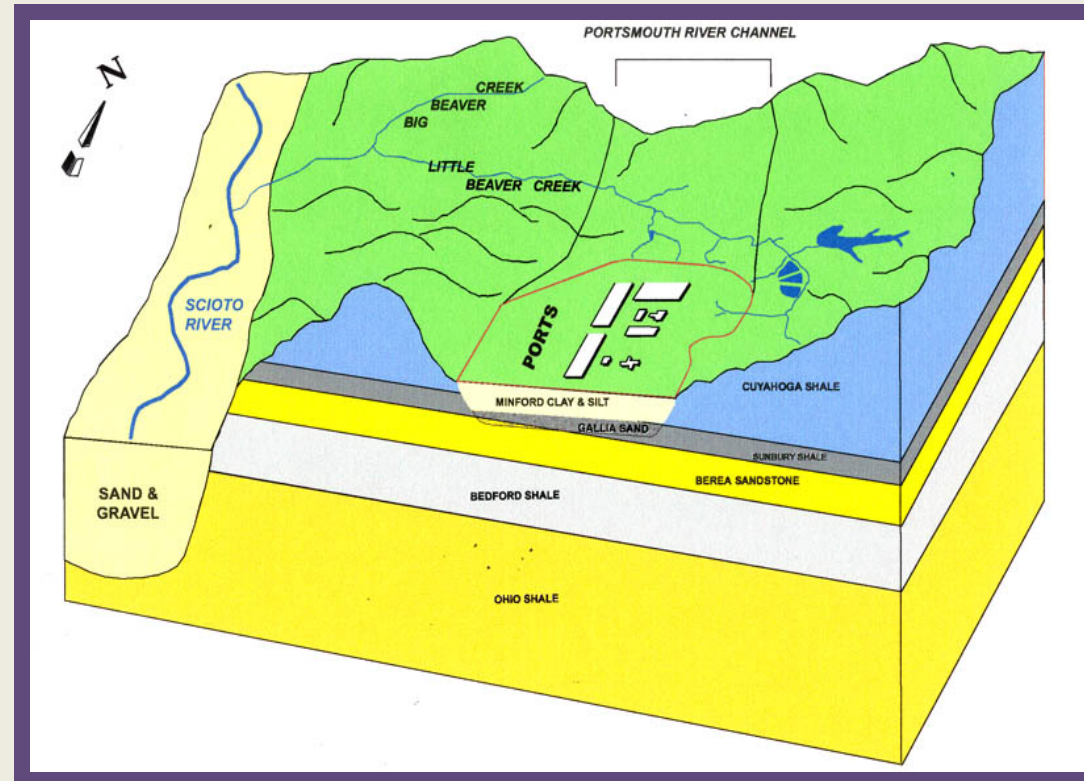
GEOLOGY



The geology at the Portsmouth Gaseous Diffusion Plant is stable, contains no major fault and is attractive for development.

Attributes

- ✓ Based on previous regulatory activities, the site is well characterized
- ✓ Availability of existing data reduces siting costs
- ✓ No major faults at the site
- ✓ No historical earthquakes
- ✓ Maximum earthquake likely to occur would produce ground motion equal to .15 gravity, and a recurrence of 1,000 years



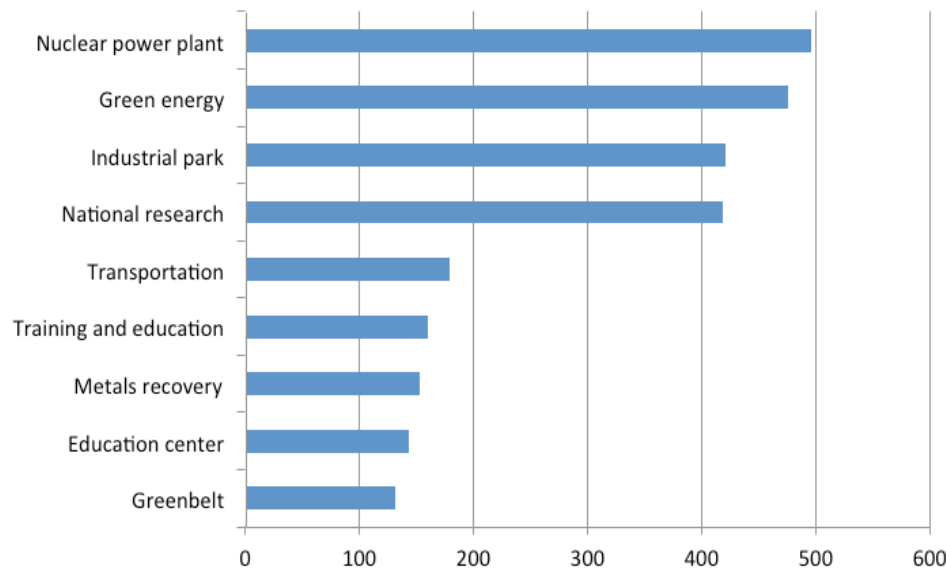
Bedrock at the site is composed of sedimentary rock, primarily shale and sandstone, located 35 feet below the surface. The Ohio shale is 300 to 400 feet thick at the site.

COMMUNITY VISION



The impacted community has chosen a nuclear power plant as its top preference for reindustrialization, as documented by Ohio University.

With a community that has familiarity with nuclear operations, Pike County and the surrounding communities are supportive of nuclear development initiatives.



PORTSFuture survey results for top reuse choices

Ohio University's Voinovich School of Leadership and Public Affairs performed an exhaustive survey (PORTSFuture) that pulsed citizens on preferred future uses at the site. The survey's findings determined:



- ✓ A nuclear power plant is the top choice for site reuse
- ✓ 82 percent of respondents said jobs and the economy are the region's top issue
- ✓ Nearly 90 percent of respondents said the future of the Portsmouth Gaseous Diffusion Plant is vital to the area's future success

DEVELOPMENT STAKEHOLDERS



The Portsmouth Gaseous Diffusion Plant is vital to the economic stability and growth of south central Ohio. Therefore, as part of its community outreach, the Department interacts with a wide range of stakeholders.

✓ Elected officials and community groups on the local, state, and federal levels have shown support for various projects at the Portsmouth site.



- All four local county commissions
- Portsmouth Site Specific Advisory Board
- Southern Ohio Diversification Initiative
- Ohio Valley Regional Development Commission
- Local trade unions
- Ohio Governor
- Sen. Sherrod Brown
- Sen. Rob Portman
- Various congressional representatives
- Others



OPERATIONAL READINESS



The Portsmouth work force has familiarity with the rigorous culture of nuclear safety and standards set forth by DOE, the NRC and OSHA.

- ✓ The Portsmouth Site has an established Emergency Management Program
 - Dedicated Emergency Operations Center
 - Designated Joint Public Information Center
 - Established procedures and training program
 - NRC-required biennial exercise
 - On-site security personnel
 - Guard force

- ✓ Other attributes related to nuclear readiness include:
 - Nuclear-trained worked force
 - Active on-site DOE and NRC nuclear operations
 - On-site, nuclear-trained fire protection personnel
 - On-site, nuclear-trained EMS personnel
 - Mutual Aid agreements in place with local first responders



Emergency exercises are routinely conducted as part of the Portsmouth site's Emergency Management Program.

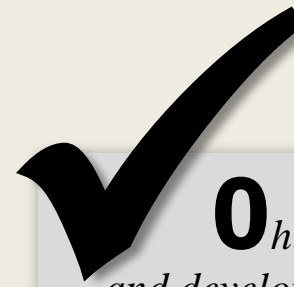


RESEARCH & DEVELOPMENT



- ✓ Research and development resources in Ohio include:
 - Battelle
 - Chemical Abstract Services
 - Advanced Material Composite Center
 - Edison Center — Nuclear Fabrication Consortium, et al.
 - World class research universities
- ✓ D&D activities could complement future initiatives:

Research institutions, like Ohio State University (right), are part of the state's resources that are valuable assets in fields related to advanced technologies.



Ohio's substantial research and development network is a valuable tool for deploying startup projects related to advanced technologies.



SUMMARY



The Portsmouth Gaseous Diffusion Plant is one of the most attractive sites in the United States for deployment of new technology.

Strategic Advantages



- ✓ Ideal geologic and seismic conditions
- ✓ Strategic location
 - Research & Development Facilities
 - Access to multiple modes of transportation
- ✓ Community support for site development
- ✓ Political support for site development
- ✓ Resources that can ease property transfer
- ✓ Potential for built-in customer base



Financial Advantages

- ✓ Ready access to national power grid
- ✓ Ready access to existing infrastructure and utility systems
- ✓ Existing on-site fire, security and emergency services
- ✓ Highly-trained work force in highly-regulated environment

NOTE: The DOE Office of Environmental Management's mission at Portsmouth is the environmental cleanup of the site and economic development does not fall within the scope of that mission.

PREPARING THE FUTURE

PORTS

D & D PROJECT

2014 Science Alliance Update

Greg Simonton
US Department of Energy

Portsmouth Site Specific Advisory Board
November 6, 2014





More than 1,100 students, educators Attend Fifth Annual Science Alliance





PREPARING THE FUTURE
PORTS
D&D PROJECT





PREPARING THE FUTURE

PORTS

D&D PROJECT

