



Portsmouth EM Site Specific  
Advisory Board

**Co-Chairs**

Val E. Francis  
Richard H. Snyder

**Subcommittee Members**

L. Gene Brushart  
Lindy A. Coleman  
Daniel J. Minter  
R. Daniel Moore  
Larry A. Parker (Chair)  
Terri Ann Smith

**DOE Deputy Designated  
Federal Officer**

Joel Bradburne

**DOE Federal Coordinator**

Greg Simonton

**Decontamination & Decommissioning (D&D)  
Subcommittee  
July 6, 2010 @ 4:30 p.m.  
Agenda**

- Review May Summary
- Waste Disposal Options – Public Outreach
- Review of Action Items

Adjourn



**Support Services**

EHI Consultants, Inc.  
1862 Shyville Road  
Suite 115  
Piketon, OH 45661  
Phone 740-289-5249  
Fax 740-289-1578  
[www.ports-ssab.org](http://www.ports-ssab.org)  
[info@ports-ssab.org](mailto:info@ports-ssab.org)



## Decontamination and Decommissioning (D&D)

Meeting Summary

July 6, 2010 • 4:30 p.m.

The Ohio State University Endeavor Center

1862 Shyville Road, Piketon, OH 45661

Room # 160

**Subcommittee Members Present:** Gene Brushart, Lindy Coleman, Daniel Moore, and Larry Parker

**SSAB Members Absent:** Dan Minter and Terri Ann Smith

**Board Members Present:** Martha Cosby, Ervin Craft Val Francis, William Henderson, Brian Huber, Sharon Manson, and Roger Scaggs

**U.S. Department of Energy (DOE) Representatives:** Greg Simonton

**DOE Employees and Contractors:** Dr. Vince Adams, Rich Bonczek Cid Voth, and Kristi Wiehle, DOE; Jim Morgan, Fluor; Stephanie Howe and Scott Miller, Ohio University Voinovich Group; Yvette Cantrell, Janie Croswait, Lesley Cusick, and Rick Greene, Restoration Services, Inc. (RSI)

**Liaisons:** Michael Rubadue, Ohio Dept of Health; Maria Galanti and Melody Stewart, Ohio Environmental Protection Agency (Ohio EPA)

**Support Staff:** Julie Galloway, Brandy Moore, and Eric Roberts, EHI

**Larry Parker**, Subcommittee Chair, opened the Decontamination and Decommissioning meeting and introduced the new PORTS EM SSAB members, Martha Cosby, Ervin Craft, Brian Huber, and Roger Scaggs.

### 1. Review of May Summary:

- **Brushart** motioned to accept the May Summary, **Motion seconded.**
  - **Motion carried, Summary approved**

### 2. Waste Disposition Overview:

- **Cantrell** provided a presentation entitled *Engaging the Public* on the following information:
  - Goal of Tonight's Meeting
  - Presentation Overview
  - Examples of Current Outreach Methods

- Examples of Current Outreach Tools
- Public Input Challenges
- Example of Public Input Challenges
- Public Input Challenges
- Waste Disposition Evaluation
- Public Input Challenges

A copy of this handout is available online at:

<http://www.ports-ssab.org/Capturing%20Public%20Input.pdf>

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Brushart</b> stated he feels it would be beneficial for the local government officials to be more involved with the SSAB.	<b>Cantrell</b> stated a good way to approach this would be in a recommendation. We have handled this in Paducah by trying to find a common area of interest for the community to get involved.
<b>Parker</b> asked how the Board could get more of the community educated to submit resolutions showing their support.	<b>Cantrell</b> stated that the community could email comments personally to Board members. The SSAB could host workshops in conjunction with DOE. Ask for comments during the workshops and record the communities' decisions.
<b>Snyder</b> asked from the experience at Oak Ridge, what type of reaction do you think the community will on being more involved Portsmouth Site.	<b>Cantrell</b> stated that as in any community you typically see the same people at workshops and meetings. During the workshops ask for comments and record the input from a number of people. Use this information to put together different opinions.

- **Parker** asked for further discussion based on the information just provided.
- **Manson** motioned for the subcommittee to create a recommendation to get the local government officials more involved with the SSAB, **Motion seconded.**
  - **Motion carried, Summary approved**
- **Parker** stated that Manson and Brushart would work on creating a recommendation via email with the subcommittee to review and discuss changes.

### 3. Final Comments from the Board:

- **Parker** asked for final comments from the Board.
- **Roberts** introduced Dr. Vince Adams, Senior Executive Director of the Portsmouth Site with DOE.
- **Adams** stated he was glad to be at the Portsmouth Site. In 2000, he acted as Site Manager at the Portsmouth Site. He has 20 years experience with the Oak Ridge Site as Director for the D&D project. Only a few DOE sites have a Senior Executive Director. This step shows how important the Portsmouth Site is to Assistant Secretary Inez Triay. If anyone has any concerns or issues to address, please contact him at anytime.

<b>Question/Comment:</b>	<b>Answer:</b>
<b>Francis</b> stated waste volume is a big issue on site.	<b>Galanti</b> stated the subcommittee should ask the following questions on waste acceptance criteria. "What are we going to accept, what are the risks, and do you want everything to go into the cell?"  <b>Cantrell</b> stated the biggest decision the Board needs to decide is to have a waste cell or not to have a waste cell.

#### **4. Action Items:**

1. DOE will provide the USEC Plant History video.
2. DOE will provide the Communication Relations Plan.
3. EHI/Subcommittee members will develop a Stakeholder Involvement Recommendation.
4. EHI will coordinate a date to tour the Pike County Landfill.
5. DOE will provide a copy of the request for 1300-acres transfer letter from SODI.
6. EHI will add Ohio EPA to the distribution list on the final copy of the subcommittee summaries.

**Brushart** motioned to adjourn the meeting, **Motion seconded.**

- **Motion carried, Meeting adjourned**

**Next Meeting Tuesday, August 10, 2010, at 4:30 p.m.**

# Engaging the Public

Yvette Cantrell, RSI  
Communications and Public Affairs  
July 6, 2010

# Goal of Tonight's Meeting

---

- To provide a foundation for a potential recommendation that will assist DOE in developing a public outreach strategy for the Waste Disposition Evaluation Project

# Presentation Overview

---

- Review examples of current DOE outreach methods
- Discuss the challenges of gathering input from the public
- Focus on outreach efforts for the Waste Disposition Evaluation Project
- Generate ideas for future outreach efforts for the Waste Disposition Evaluation Project

# Examples of Current Outreach Methods

---

- Media
  - Newspaper
  - Radio
- Public meetings
  - Presentation style
  - Information sessions
- Mailing lists
- Speakers bureaus

# Examples of Current Outreach Tools

---

- Presentations
- Fact Sheets
- Videos
- Tours
- Posters
- Technical Reports

# Public Input Challenges

---

- Reaching a **majority** of the stakeholders
- Identifying public **priorities**
- **Balancing** stakeholder input
- Communicating a **sufficient** amount of information
- Providing a suitable level of **education**

# Example of Public Input Challenges

---

New TV



# Example of Public Input Challenges

---

50" HDTV  
Widescreen 16:9 Format  
1366 X 768 Resolution  
Universal Remote  
Detachable Speakers



# Example of Public Input Challenges

---

- Green TV
- Energy Star Rating
- Uses 30% Less Energy



# Example of Public Input Challenges

---

\$1,000.00



# Example of Public Input Challenges

---

These TV's are built at a new  
Piketon  
plant that employees 800  
people



# Example of Public Input Challenges

---

- How many of you would consider buying this TV?
- How many of you would not buy this TV?
- How many of you would buy this TV?



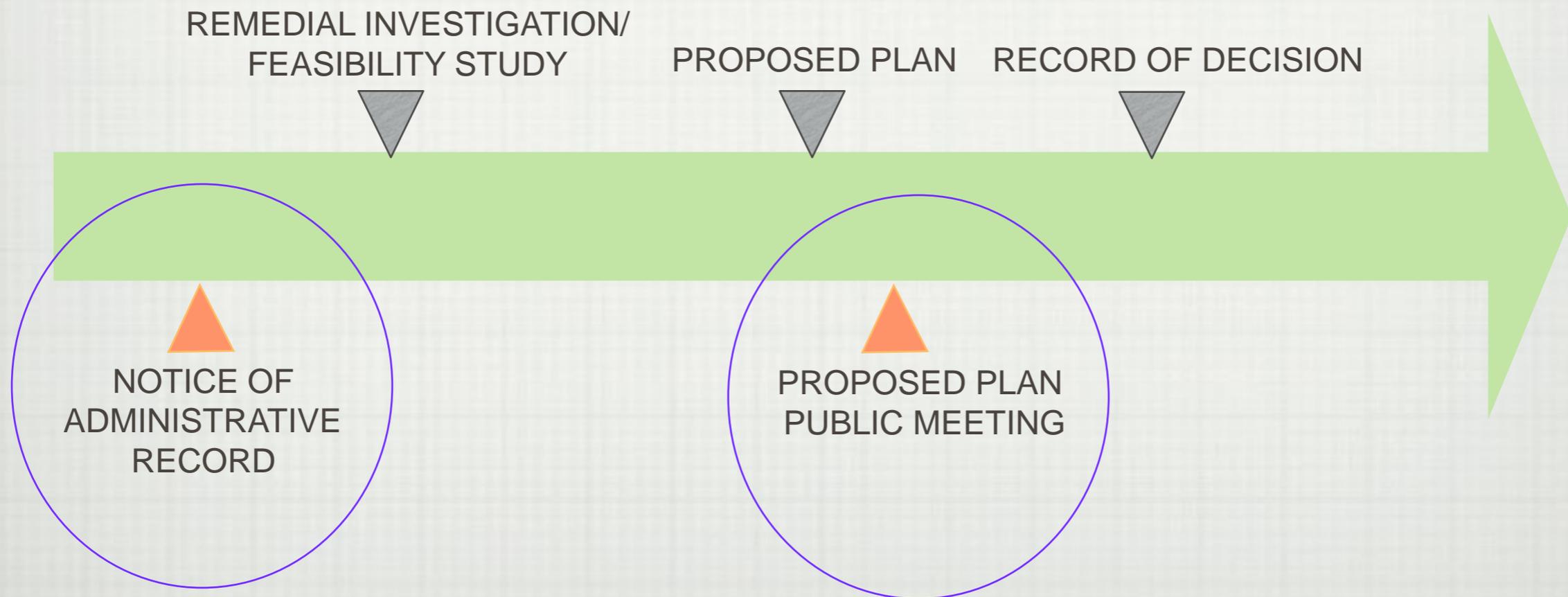
# Public Input Challenges

---

- Reaching a **majority** of the stakeholders
- **Balancing** stakeholder priorities
- Communicating a **sufficient** amount of information
- Providing a suitable level of **education**

# Waste Disposition Evaluation

## Public Involvement Regulatory Requirements



# Waste Disposition Evaluation

---

- Initial Efforts
  - Public poster session (May 2009)
    - Introduced the future project
  - SSAB meetings
    - Updated project schedule
    - Subcommittee project kickoff
  - Public poster session (June 2010)
    - Updated project schedule

# Public Input Challenges

---

- Reaching a **majority** of the stakeholders
- **Balancing** stakeholder priorities
- Communicating a **sufficient** amount of information
- Providing a suitable level of **education**

## ANSWERS TO QUESTIONS FROM SSAB BOARD MEMBERS

July 2010

**1. *What qualifications are required of truck drivers transporting waste from the site, particularly ARRA debris? (Action Item #51)***

All drivers require CDL Class A or B, depending on the type of unit being driven, with a HazMat endorsement for hauling hazardous materials. Drivers for non-hazardous, released materials do not require the endorsement. Additionally, approved carriers of hazardous materials must be listed on the DOE Office of Packaging and Transportation (EM-45) MCEP Motor Carrier Safety Performance Report – Carrier Eligibility Status Validation. Shipments of classified material must use two cleared drivers with no planned stopovers.

**2. *What is the capacity of the Pike Sanitation Landfill? (Action Item #53)***

Based on a report from Pike Sanitation, there is approximately 20 million cubic yards of remaining airspace.

**3. *How many trucks destined for Pike Sanitation are leaving the site per day? (Action Item #53)***

At the peak of the ARRA effort, LPP averaged about 21 roll-off trucks per day over a six day work week. The number has now dropped to approximately 10 roll-off trucks per day as the current projects near completion.

**4. *How much material has the site sent to Pike Sanitation Landfill? What is estimated to be sent when the ARRA projects are completed? (Action Item #55)***

Approximately 6,900 cubic yards of industrial waste has been sent to Pike Sanitation to date. Total additional waste from ARRA projects is expected to be less than 1,000 cubic yards. Only industrial waste surveyed and free released with approval by DOE goes to Pike Sanitation.

**5. *What is the land area of Energy Solutions, Utah disposal facility? (site footprint and disposal cell footprint) (Action Item #54)***

Site footprint is approximately 1 square mile. Entire area is permitted for waste disposal. Open disposal cell contains three waste areas (LLM, Class A LLW, LLW) and an area for future cell development. The open disposal cell is approximately 50 % of the site footprint or 0.5 sq. mile.



# Portsmouth Gaseous Diffusion Plant

July 2010

## Background on Public Notification of Depleted Uranium Hexafluoride Cylinders Transferred from East Tennessee Technology Park to Piketon, Ohio Facility

### Background:

- The U.S. Department of Energy (DOE) initiated a Programmatic Environmental Impact Statement (PEIS) in 1994 for the long-term management and use of depleted uranium hexafluoride (DUF<sub>6</sub>) produced during uranium enrichment operations at the gaseous diffusion plants in Oak Ridge, TN, Paducah, KY and Portsmouth, OH. The PEIS was issued in August 1999 and announced in the Federal Register (64 FR 43358).
- Public Law 105-204, signed in July 1998 while the DUF<sub>6</sub> PEIS was being prepared, directed the Secretary of Energy to submit to Congress a plan for construction of plants at Paducah, KY and Portsmouth, OH to convert the DUF<sub>6</sub> inventory.
- DOE awarded a contract in August 2002 to Uranium Disposition Services, LLC for construction and operation of the two mandated facilities in Kentucky and Ohio.
- An amendment to the Record of Decision for the Final PEIS was prepared and announced in the September 2003 Federal Register (Vol. 68, No. 176, 53603), providing DOE's plans to transfer DUF<sub>6</sub> cylinders from the East Tennessee Technology Park (ETTP) in Oak Ridge, TN to its storage facilities at the DOE enrichment facility at Portsmouth, OH.
- A Final EIS (FEIS) for *Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio, Site* (DOE/EIS-0360) was issued on June 18, 2004. The FEIS included information on the transportation of cylinders currently stored at the ETTP to Portsmouth.

### Determination for Transfer of Cylinders to Portsmouth:

- Portsmouth was chosen for storage of the ETTP cylinders based on the availability of storage capacity and the desire to balance cylinder inventory (the Paducah Site stored more than 36,000 DUF<sub>6</sub> cylinders while the Portsmouth Site stored 16,000 cylinders). All known DUF<sub>6</sub> cylinders were to be removed from ETTP by 2009, in accordance with applicable regulatory requirements.
- Training of more than 500 emergency response personnel along the travel route was conducted by DOE and state emergency management agency staff.
- Cylinder transfers from ETTP to Portsmouth began March 17, 2004 and approximately 5,000 cylinders were transferred when the project was completed ahead of schedule in 2007. There were no safety incidents.
- The DUF<sub>6</sub> cylinders from ETTP will be processed through the DUF<sub>6</sub> conversion plant at Portsmouth.

### Public Notifications:

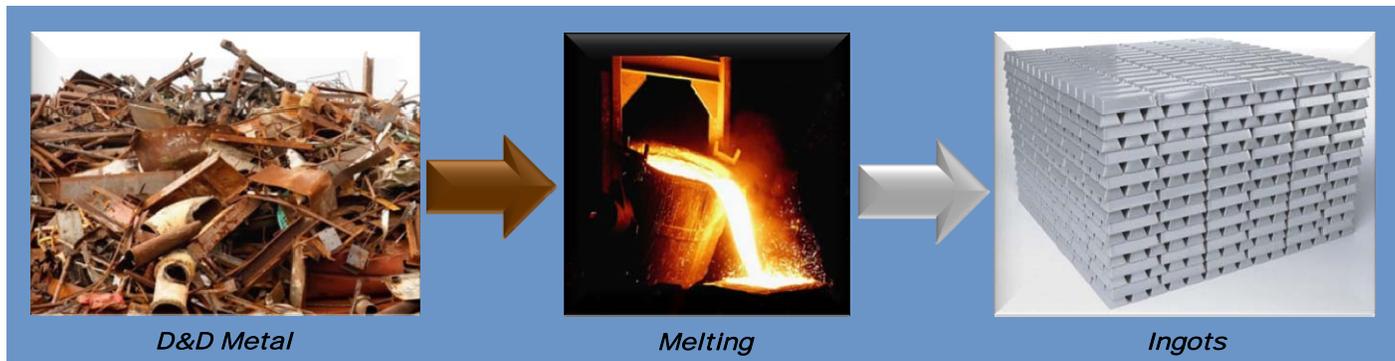
- Information on the PEIS public scoping meetings, meeting transcripts, fact sheets, and other materials are available online: <http://web.ead.anl.gov/uranium/eis/>. The Portsmouth scoping meeting was held November 28, 2001.
- DOE provided information on the cylinder transfer project during numerous public meetings, including specific public meetings on the DUF<sub>6</sub> Conversion Facility Project on February 20, 1996, November 12, 1996, November 28, 2001, and January 7, 2004. Meetings were advertised in local newspapers and through postcard mailings. A public hearing was conducted January 7, 2004 during the public comment period on the DUF<sub>6</sub> Conversion Facility Draft EIS. Information on the cylinder transfer project was provided during the May 25, 2004 and December 2, 2004 DOE public update meetings on the Environmental Management program. Completion of the project was discussed at later meetings. This information is available in the DOE Environmental Information Center, 1862 Shyville Road, Room 207, in Piketon, OH.



# Portsmouth Gaseous Diffusion Plant



## Portsmouth D&D and Asset Recovery



### Portsmouth D&D

Demolition of the Portsmouth Gaseous Diffusion Plant will produce an estimated 2.2 million cubic yards of waste. Of this waste, as much as 700,000–900,000 cubic yards (470,000–600,000 tons) is metal that may require size reduction and/or treatment to address contamination present in the metal. Asset Recovery is a method where the metal can potentially be recovered instead of being lost to traditional land disposal while preserving its value, developing opportunities for beneficial reuse, and potentially providing many technical, socioeconomic, and environmental benefits.

### Vision

Evaluate Asset Recovery as a framework to maximize the potential for beneficial reuse of metals expected to be generated as part of Portsmouth D&D efforts.

### CERCLA Decision Process

The CERCLA Site-Wide Waste Disposition Evaluation Project includes the evaluation of an alternative to implement actions for size reduction and treatment of metals, including thermal treatment (melting), to remove or reduce contamination associated with the metal that will be generated from the Portsmouth D&D project. This alternative will be:

- Evaluated in accordance with CERCLA and the recently issued Director’s Final Findings and Orders (DFFOs) for the Portsmouth D&D Project,
- Subject to Ohio EPA review and approval, and
- Subject to public review and comment.

If the CERCLA Site-Wide Waste Disposition Evaluation Project selects an alternative that includes

size reduction and treatment of metals from the Portsmouth D&D project, future cleanup decisions will include the evaluation of alternatives for size reduction and treatment of metals generated as part of individual cleanup actions. Future actions would be:

- Evaluated in accordance with CERCLA and the DFFOs,
- Compliant with storage/staging requirements, duration, and final disposition date for those metals,
- Subject to Ohio EPA review and concurrence, and
- Subject to public review and comment.

Efforts will be ongoing to identify and pursue beneficial uses for any metals generated, size reduced, treated, and staged as a result of CERCLA D&D cleanup work.

### Benefits

**Technical Benefits:** The Site-Wide Waste Disposition Evaluation will take into account many of the benefits of size reduction and treatment for metals. Some of those benefits include reducing waste volume, and contaminant mobility and toxicity:

- Melting can reduce D&D waste volumes by as much as 30%–40%,
- Melting can reduce toxicity by removing more than 95% of uranium contamination, and
- Melting can reduce mobility and potential releases and exposure by encapsulating any remaining contaminants within metal ingots.

If the preserved metal ingots must be land disposed, the risk to human health would be greatly reduced compared to disposing untreated D&D metal.



# Portsmouth Gaseous Diffusion Plant

**ASSET  
RECOVERY**  
*Preserving Our Future*

Reducing costs and complexities associated with classification issues:

- Size reduction and treatment activities for D&D metals can result in declassification and reduced security costs that otherwise would be required for the metals,
- Melting certain metal components could remove classified attributes that otherwise would result in the need to comply with extensive security requirements, and
- If the classified material was land disposed but not melted, security requirements could remain in place indefinitely which could result in more limited and costly disposal options.

**Socioeconomic Benefits:** Size reduction and treatment activities for D&D metals could create approximately 400 additional local jobs:

- Approximately 200 positions for construction of a melting/casting facility,
- Approximately 200 positions for operating the resulting melting/casting facility.

Size reduction, treatment, and storage of resulting metal ingots could preserve options for manufacturing and reuse of the recovered metals within the nuclear industry (not for public use). Reuse of the metal could result in additional jobs in southern Ohio, such as manufacturing raw material and fabricating products for controlled reuse.

Reducing the volume of D&D disposal wastes would reduce the amount of capacity (size) needed in a potential on-site land disposal cell and could result in availability of more acreage at the Portsmouth Site for commercial development following completion of D&D.

Size reduction and treatment facilities might serve as anchor tenants for other industrial development beyond the DOE and could lead to other opportunities for job growth and economic development in southern Ohio.

Size reduction and melting could help mitigate state equity and environmental justice concerns related to the potential disposal of Portsmouth waste in states such as Nevada and Utah. Reducing the volume of metals and/or finding beneficial reuse options would

reduce the amount of waste potentially shipped to other states for disposal.

If beneficial reuse opportunities are identified for the size-reduced and treated metals, the metal's value would be preserved, saving American taxpayers hundreds of millions of dollars that would be spent on buying new metal.

## Environmental Benefits:

- Eliminating the need to mine and process ore to make new metal can reduce greenhouse gas emissions by 1.3 million metric tons of CO<sub>2</sub>, and save 17 trillion BTUs of energy.
- Avoiding land disposal would reduce land impacts by consuming less usable land for disposal and using less borrow soil for the disposal process.
- Eliminating off-site disposal could reduce off-site waste transportation by up to 120 million railcar miles, or up to 700 million truck miles and an additional 0.2 million metric tons of CO<sub>2</sub>.
- The combination of size-reduction and treatment, along with the potential for reuse, directly supports the President's Executive Order 13514 on sustainability which requires:
  - Redirect 50% of solid waste by 2015
  - Reduce greenhouse gas emissions
  - Increase energy efficiency
  - Promote sustainability of local economies

## Next Steps

Size reduction and treatment must be evaluated and included in planning stages now to be preserved as a viable option. This includes regulatory documents, performance baselines, D&D contract scopes, and out-year funding requests. Comments and feedback on the concept of metals size reduction and treatment, and potential metals reuse, are needed to support its incorporation into future planning documents as appropriate.

## Key Project Contact

Greg Simonton, U.S. Department of Energy,  
e-mail: [greg.simonton@lex.doe.gov](mailto:greg.simonton@lex.doe.gov)  
(740) 897-3737