



PORTSMOUTH SITE SPECIFIC ADVISORY BOARD

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

Waste Disposition Meeting September 10, 2009 • 4:30pm.

Co-Chairs

Val E. Francis
Richard H. Snyder

Board Members

Shirley Bandy
Gene Brushart
Dr. Edwin G. Charle, Ph.D.
Bobby E. Graff
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Cristy D. Renner
Terri Ann Smith

Deputy Designated

Federal Official
Dave Kozlowski

DOE Portsmouth Site Lead

Joel Bradburne

DOE Federal Coordinator

Greg Simonton

Agenda

1. Review of Agenda
2. Review of August Summary
3. Waste Disposition Project Updates
4. Presentation: Uranium Management Center Material Disposition
5. On-Site Disposal
6. Public Comment Period (15 Minutes)
7. Concerns/Issues

Support Services

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Piketon, OH 45661
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Waste Disposition Committee

Meeting Summary

September 10, 2009 • 4:30 p.m.

The Ohio State University Endeavor Center

1862 Shyville Road, Piketon, OH 45661

Committee Members Present: Shirley Bandy and Larry Parker

Board Member Present: Sharon Manson and Dan Minter

DOE Representatives: Greg Simonton

DOE Employees, Contractors, and Regulators: Cid Voth and Kristi Wiehle, DOE; Sandy Childers, Bill Franz, and Steve Schmucker, LPP; Janie Crowwait and Greg Uetrecht, RSI

Liaisons: Joe Crombie, Ohio Dept of Health; Melody Stewart and Steve Wells, Ohio EPA

Support Staff: Julie Galloway and Brandy Moore, EHI

Larry Parker, Committee Chair opened the Waste Disposition Committee meeting.

1. Review of Agenda

- Agenda approved

2. Review of August Summary

- Summary approved

3. Waste Disposition Project Updates

Franz with LATA Parallax covered the monthly status report.

- Total Waste Shipments for August 2009
- Excess Materials Disposition
- Lube Oil/Pyranol Disposition (USEC scope)
- Small Cylinders Disposition Phase II
- DOE Material Storage Areas 11 and 12 Removal of Equipment
- Repackaging/Disposition of Surplus Uranium Material – American Recovery and Reinvestment Act (ARRA) Project

A copy of this handout is available online at www.ports-ssab.org

4. Presentation: Uranium Management Center Material Disposition

Schmucker with LATA Parallax gave a presentation.

- Source of the uranium material inventory
- Project Activities
- UMC Inventory – 2002 & Current

- Past Disposition
- Future Disposition
- American Recovery and Reinvestment Act (ARRA) of 2009
- UMC Inventory for Disposal at NTS Under ARRA
- ARRA Project Activities

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Question/Comment:	Answer:
Parker Does any of the Depleted Uranium that is shipped go to Energy Solutions in Clive, Utah?	Schmucker No, we follow the DOE order 435; the disposal license at Clive is not suitable for this material.
Bandy In late September when the shipments of waste is in final form, will you be able to get 800 trucks out of there in nine months?	Schmucker Yes, it has been done in the past. This project will double our workforce and give us two shifts.
Parker Have there been any reported accidents in the past shipments?	Schmucker Not that I am aware of. If anything would happen, DOE has a RAD Team of 4-5 members that would be sent out. Voth The trucks are followed on GPS; the trucks have routes that they have to go on. Would like to make sure the Committee is aware there will be transportation incidents due to a truck going off their route and this would be an incident because the trucks are so closely watched.

5. On-Site Disposal

- **Parker** said he would like to have more information on this for next month.

6. Ohio EPA Comments

- **Stewart** discussed having information about the landfills currently on site for the next meeting.

7. Public Comment Period

None

8. Concerns/Issues

- Recycled metals will be an Open Project
- Action Items for the Fall Retreat
 - Discussed the major items
 - On-site Disposal
 - Types of various waste categories and how much is shipped
- Update Sheets
 - Gives an excellent overview of the information
 - Very useful

- Presentations are beneficial

9. Review of Action Items

- LPP will provide a summary of all waste shipped
- Progress report on landfills from LPP
- Ohio EPA will give a report on the landfills

Bandy motioned to adjourn meeting, ***Motion seconded.***

- ***Motion carried***

Meeting adjourned at 5:18 p.m.

The October meeting has been cancelled by the SSAB meeting October 3, 2009, since the committee has been included in a new committee to meet at 4:30 pm on Tuesday, November 10, 2009.



Portsmouth Gaseous Diffusion Plant

September 10, 2009

Monthly Waste Disposition Projects Update to the Site Specific Advisory Board

Total Waste Shipments for August 2009

- Two (2) supergondolas of low-level waste for a total of 356 cubic meters were shipped to Energy Solutions in Utah during the month of August. These were railroad ties from the Excess Materials Disposition Project.
- A total of 3,782 cubic meters of low-level and mixed low-level waste have been shipped to date through August in FY 2009 – exceeding the projected total of 3,109 cubic meters for the entire fiscal year.

Excess Materials Disposition

- Four excess rail cars were disassembled with the resulting frames provided to the Moonville Rail Trail Association for reuse as bridges on the Moonville Rail Trail in Vinton County. This reuse was coordinated with the Southern Ohio Diversification Initiative (see photos below).
- The X-752 concrete pad area on the northwest portion of the site has been cleaned and established as a staging area to receive waste from the American Recovery and Reinvestment Act (Stimulus) projects and other cleanup projects for subsequent transportation to final treatment, storage and disposal facilities.

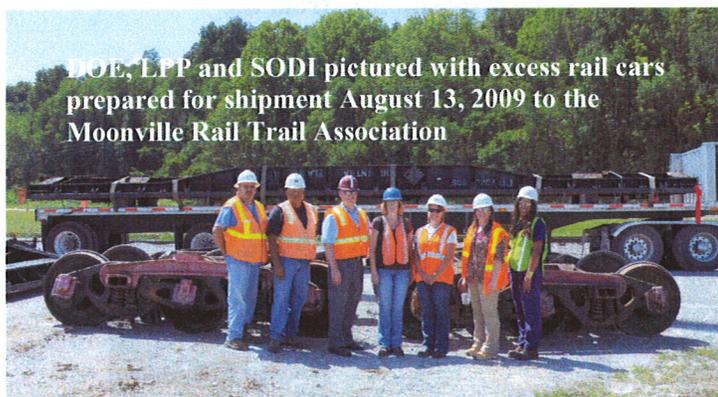
Lube Oil/Pyranol Disposition (USEC scope)

Lube Oil:

- Removal and transfer of all bulk lube oil from the X-333 and X-330 Process Buildings is complete with the exception of two units in X-330 which are maintained for operational/backup activities.
- Removal and transfer from four of seven designated units in the X-326 Building are complete.
- Total lube oil removed for disposition through August 2009 is 175,190 gallons via ten railcars and 20 truck tankers.

Pyranol:

- Removal and transfer of pyranol from the X-333 Building transformers into railcars is complete. USEC has initiated the removal and transfer of pyranol from the X-330 Building transformers into railcars.
- The total pyranol removed for disposition through August 2009 is 118,130 gallons via seven railcars.





Portsmouth Gaseous Diffusion Plant

September 10, 2009

Small Cylinders Disposition Phase II

- Project entails disposal of 713 cylinders: 300 with greater than “heel” quantities of UF₆; 127 cylinders returned from USEC after recovery of uranium and 286 clean empty cylinders recovered from eight waste containers that were stored in the X-326 building.
- DOE Readiness Assessment tentatively scheduled for mid-September 2009 contingent on completion of corrective actions from two heat trace incidents.
- To date, 120 of 127 cylinders have been moved to USEC (94%) for uranium recovery.
- Once stabilized, waste will be shipped to the Nevada Test Site.
- Project expected to be complete by mid-October 2009.

DOE Material Storage Areas 11 and 12

- Ongoing project to dispose of 324 total items of equipment stored in the X-326 Process Building.
- Shipment of 69 items (in 42 containers) has been completed to date for disposal at Nevada Test Site – no shipments in August 2009.
- Custom sized boxes have been ordered with delivery expected September 15, 2009.
- 15 shipments of oversized materials to begin the end of September 2009.
- Project completion has been extended to March 31, 2010.

Repackaging/Disposition of Surplus Uranium Materials – American Recovery and Reinvestment Act (ARRA) Project

- Scope includes repackaging and disposition of about 34% or approximately 1,000 metric tons (in 13 separate lots) of the total inventory of surplus uranium currently in storage in the Uranium Management Center.
- Materials will be disposed at the Nevada Test Site (NTS).
- First shipment to NTS scheduled for the week of September 21, 2009.



Pictured below are two lots of uranium materials to be disposed from the Uranium Management Center.





Uranium Management Center (UMC) Materials Disposition

A presentation for the
Portsmouth Site Specific Advisory Board
Waste Disposition Subcommittee
September 2009

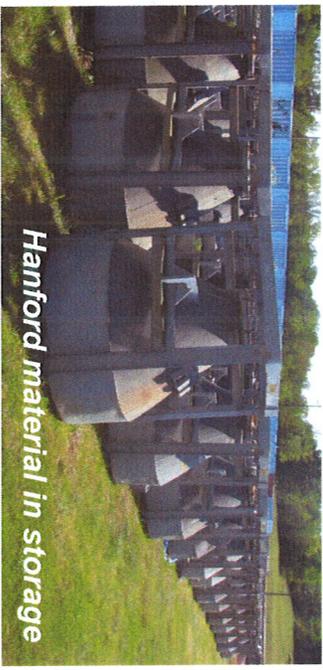




Source of the uranium materials inventory

- The Portsmouth site has stored surplus, uranium materials consolidated from other DOE sites until the materials could be permanently disposed, reused, or sold.
- Approximately 4,457 MTU were received between 1999 and 2002 from DOE's Fernald and Hanford sites and various universities to support closure activities and consolidation.

metric ton



Hanford material in storage

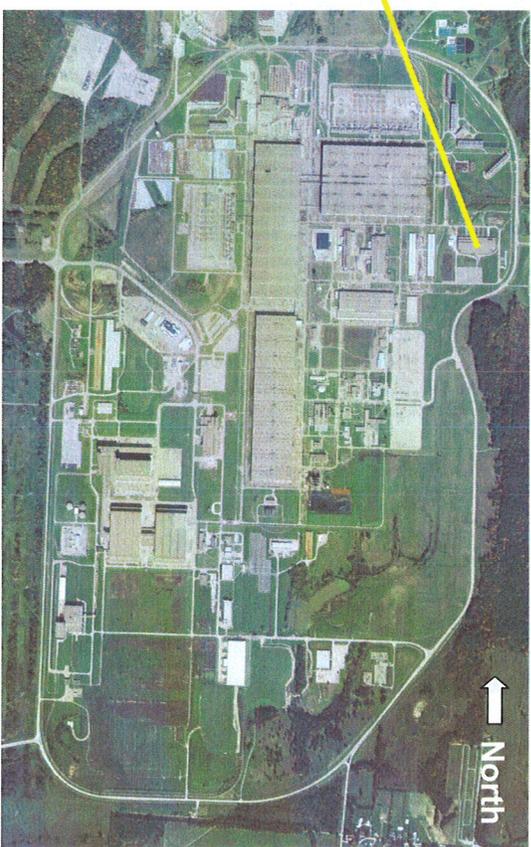
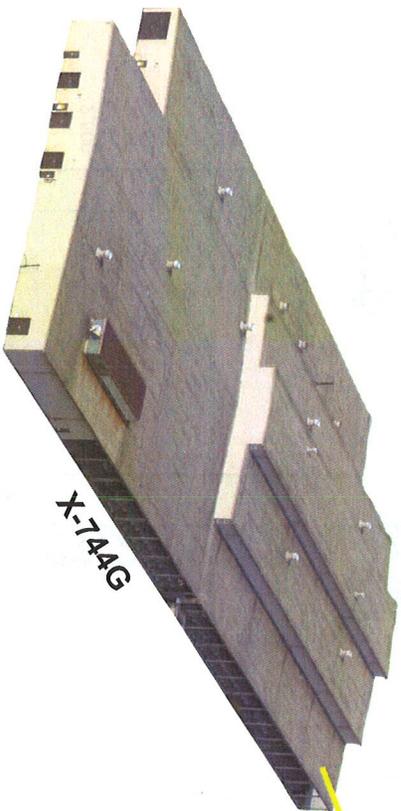


Fernald material in storage



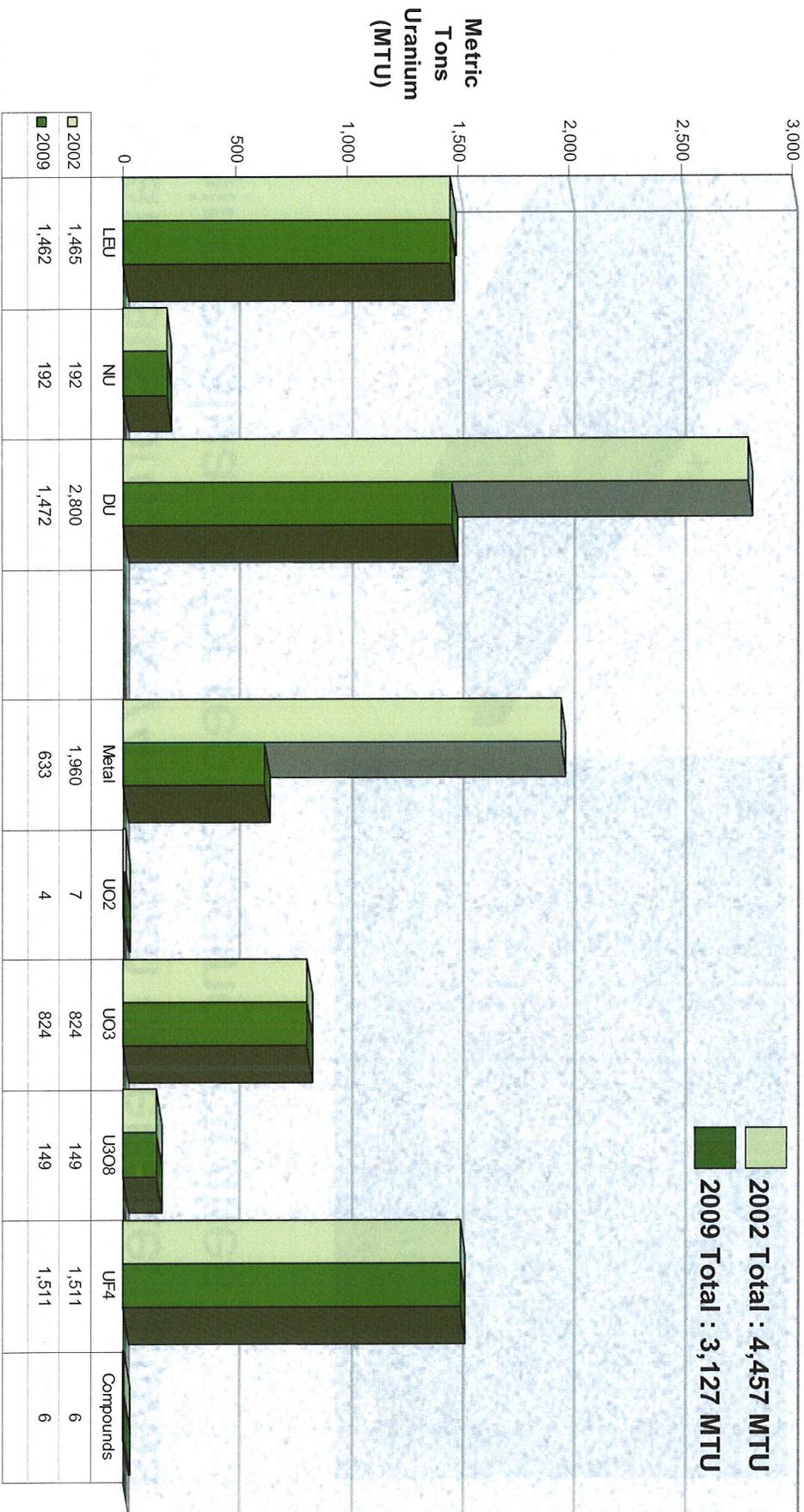
Project Activities

- ❑ Material stored in X-744G with other alternatives being evaluated for repackaging activities





UMC Inventory – 2002 & Current



LEU=Low Enriched Uranium

NU=Natural Uranium

DU=Depleted Uranium

UO₂=Uranium Dioxide

UO₃=Uranium Oxide

U₃O₈=Triuranium Octaoxide

UF₄=Uranium Tetrafluoride



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Past Disposition

- ❑ 2004 : Shipped 3 MTUs of Uranium Dioxide to Pacific Northwest National Laboratory for blend stock
- ❑ 2008 : Shipped 1,327 MTUs Depleted Uranium Metal to Nevada Test Site for disposal





Future Disposition

Table 1 – UMC Lots Identified for Future Disposition

Lot #	Description (%U235)	Metric Tons Uranium (MTUs)	Disposition Path	Time Frame
1	Low Enriched Metal, Hanford in SBWSC*	235	Disposal at Nevada Test Site	FY11 to FY12
4	Depleted UF ₄ , Fernald in TOC*	1,278	Recycle at International Isotopes Inc. (INIS)	No later than FY13
5	Depleted UF ₄ , Fernald in Sealand Containers	194	Recycle at International Isotopes Inc. (INIS)	No later than FY13
11A	Low Enriched Metal, Fernald in SBWSC (1.25%)	346	Disposal at Nevada Test Site	FY11 to FY12
		Total : 1,859		

*TOC = Thorium Over-pack Containers

*SBWSC = Steel Banded Wooden Shipping Containers





American Recovery and Reinvestment Act (ARRA) of 2009

- ARRA disposition of surplus uranium:
 - Verification and certification of Department of Transportation (DOT) authorized packages
 - Repackaging of formerly authorized DOT packages
 - Load and ship packages to Nevada Test Site (NTS) as waste



UMC Inventory for Disposal at NTS Under ARRA

Lot #	Description (% U235)	Metric Tons Uranium (MTUs)
2	Low Enriched Hanford UO ₃ Powder in T-Hoppers (0.81% to 0.95%)	667
3C	Low Enriched Hanford UO ₂ in 7A drums (1.76% to 17.8%)	0.1
9	Normal Compounds, Fernald in drums (0.711%)	2.3
10	Normal Metal, Fernald in TOC* and SBWSC* (0.711%)	184.5
11A (2) – Drums	Low Enriched Metal, Fernald in 7A drums (1.25%)	28.6
11B	Low Enriched Metal, Fernald in drums (0.947%)	26.7
11C	Low Enriched Metal, Fernald in drums (1.0% to 1.22%)	1.4
12	Low Enriched U ₃ O ₈ , Fernald in TOC* (0.85% to 1.00%)	149
13	Low Enriched UF ₄ , Fernald in drums (1.05% to 1.95%)	36.5
14	Low Enriched UO ₃ , Fernald in drums (1.10% to 1.99%)	157.4
15A	Normal Metal, University Material in drums (0.711%)	2.0
15B	Normal Metal, University Material in drums (0.711%)	2.5
15C	UO ₂ fuel rods and pellets in 6M and 7A drums (unirradiated, 2.35%)	1.7
15D	Low Enriched Metal, University Material in drums (0.947%)	2.2
16	UO ₃ & UF ₄ (0.79% to 0.99%)	6.1
Total		1,268

*TOC = Thorium Over-pack Containers

*SBWSC = Steel Banded Wooden Shipping Containers



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ARRA Project Activities

- ❑ Disposal at NTS of approximately 169,000 ft³ of waste in final form
- ❑ Shipments to begin late September 2009
- ❑ Approximately 800 truck shipments total



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U.S. DEPARTMENT OF **ENERGY**

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FOR IMMEDIATE RELEASE
August 20, 2009

Portsmouth Site Donates Excess Rail Cars for Southeast Ohio “Rails to Trails”

PIKETON, OHIO -- Under the Environmental Management program, the U.S. Department of Energy (DOE) is removing excess materials from the 3,777-acre Portsmouth Gaseous Diffusion Plant in Piketon, Ohio. The plant is a former uranium enrichment facility that is now in cold shutdown and preparing for future decontamination and decommissioning.

As part of the excess materials disposition project, DOE’s environmental remediation contractor LATA/Parallax Portsmouth, LLC evaluates potential reuse or recycling. Items that are free of contamination can be released for reuse, rather than being disposed as waste. Items are released to the public through an Asset Transition Agreement for Economic Development between DOE and its designated community reuse organization, the Southern Ohio Diversification Initiative (SODI).

Through a cooperative effort, SODI, LATA/Parallax and DOE’s infrastructure contractor Theta Pro2Serve Management Company (TPMC) arranged on August 13, 2009 to donate four excess flatbed rail cars to the Moonville Rail Trail Association, a non-profit organization that will use the rail cars as bridge spans in its Vinton County, Ohio public rail trail.

Brian Blair, a supervisor with the Ohio Environmental Protection Agency’s Southeast District Office, was instrumental in notifying DOE and SODI of the need for the rail cars by the Moonville Rail Trail Association. The Moonville Rail Trail Association offers 16 miles of scenic trails for walking, biking and horseback riding in some of the most picturesque areas of southeast Ohio from the Zaleski State Forest in Vinton County to Athens County, Ohio.

“We are pleased we could provide these vintage rail cars to a community organization that will be able to use them for such an aesthetic and functional public purpose for years to come,” said Dave Kozlowski, DOE’s Deputy Manager of the Portsmouth/Paducah Project Office.

A 120-ton heavy duty crane was brought on-site to lift the rail cars onto semi-trailers to facilitate transport of the cars to the Moonville organization. By transferring the rail cars for reuse, an estimated \$233,000 transportation and disposal cost avoidance was achieved by eliminating requirements to cut up the rail cars and ship the material as waste for off-site disposal.

-DOE-

Photo Cutlines:

DSC00279(2).jpg

LATA/Parallax workers at the Portsmouth Gaseous Diffusion Plant use a 120-ton crane to hoist an excess rail car onto a flatbed semi-trailer for reuse by the Moonville Rail Trail Association in southeast Ohio.

DSC_0180.jpg

Pictured with the first excess rail car loaded at the Portsmouth Gaseous Diffusion Plant for transport to the Moonville Rail Trail Association in southeast Ohio are, left to right, Jeff Middaugh, Val Tinsley and Miles Smith with LATA/Parallax; Amanda Mayo, TPMC; Jennifer Chandler, executive director of the Southern Ohio Diversification Initiative; and Kristi Wiehle and Dee Perkins, U.S. Department of Energy.

