



May 15, 2014

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Ben Peterson

Vice-Chair
Ralph Young

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Glenda Adkisson
Renie Barger
Judy Clayton
Robert Coleman
Eddie Edmonds
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Dianne O'Brien
Richard Rushing
Jim Tidwell
Ken Wheeler
Carol Young

Rachel Blumenfeld
DOE DDFO

Buz Smith
DOE Federal Coordinator

Board Liaisons

Todd Mullins
Division of Waste Management

Jennifer Tufts
Environmental Protection Agency

Mike Hardin
Fish and Wildlife Resources

Stephanie Brock
Radiation Health Branch

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Agenda for the May Board Meeting

6:00

Call to order, introductions
Review of agenda

DDFO Comments

-- 15 minutes

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 10 minutes

Presentations

Administrative Issues

-- 40 minutes

- DRAFT – Recommendation 14-XX: DOE Funding Priorities for the FY 2016 Budget
- EM SSAB Chairs Letter – Publicize Successes
- EM SSAB Chairs Letter – Funding

Subcommittee Chair Comments

-- 10 minutes

Public Comments

-- 15 minutes

Final Comments

-- 5 minutes

Adjourn



U.S. DEPARTMENT OF
ENERGY

Paducah Gaseous Diffusion Plant

DDFO Presentation

Jennifer Woodard

May 15, 2014

C-410 Feed Plant Removal



Transite panels are removed from the east face of the C-410 Feed Plant



Technicians pile panels for waste packaging



Technicians work around windows and other obstructions

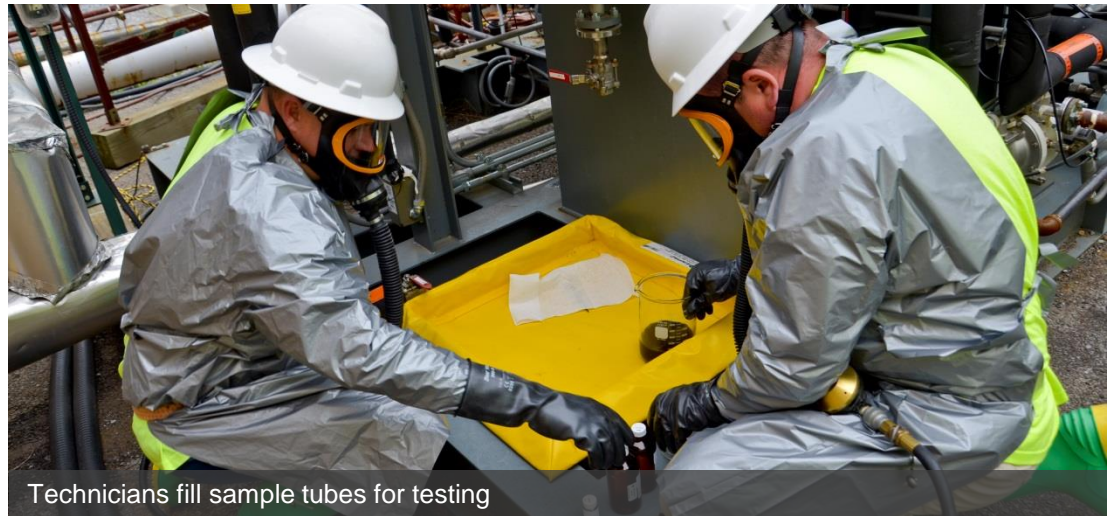
C-400 TCE Removal



TCE is pumped out of a storage tank into containers

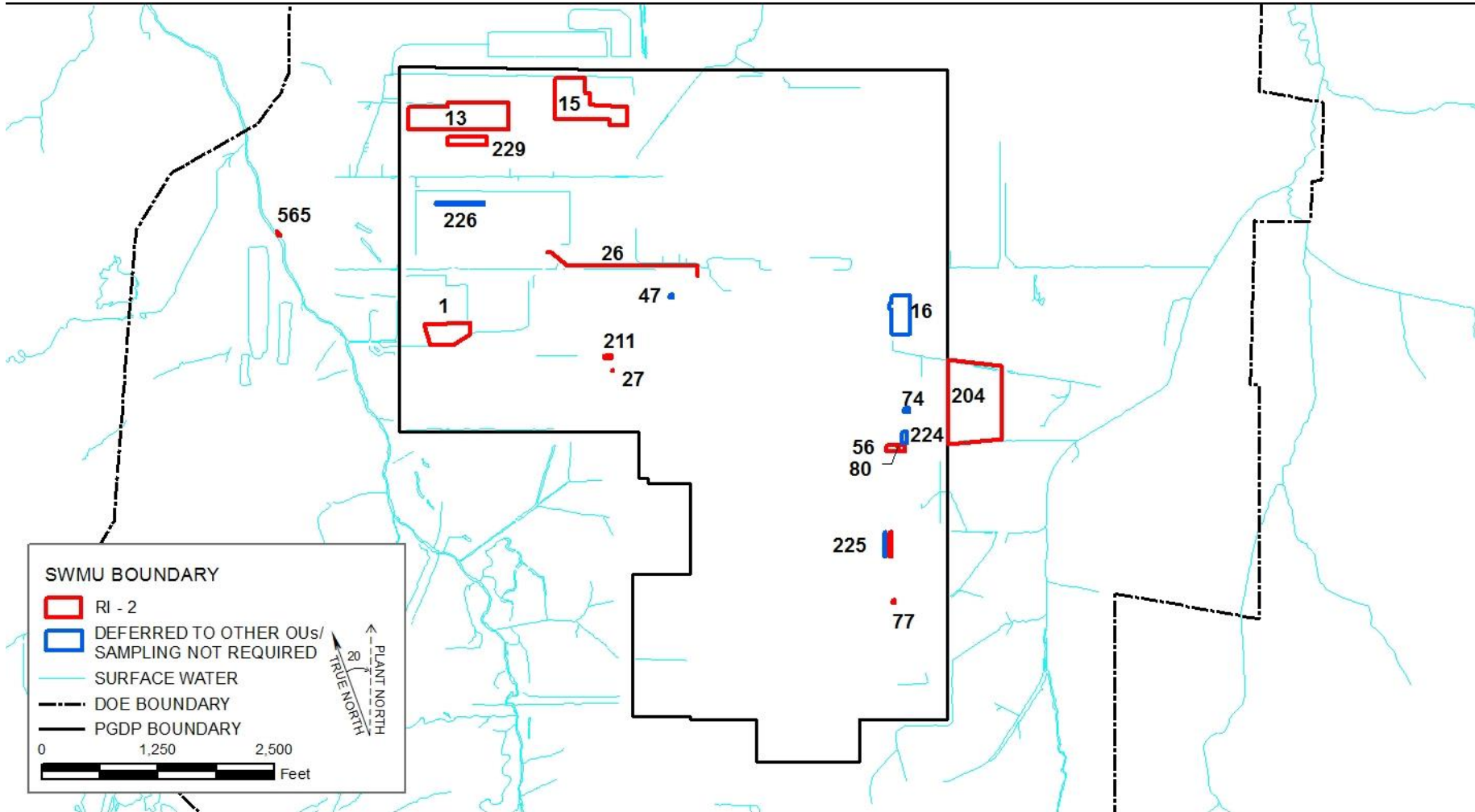


Four metal containers are filled and prepared for transfer to final disposition



Technicians fill sample tubes for testing

Soils Remedial Investigation



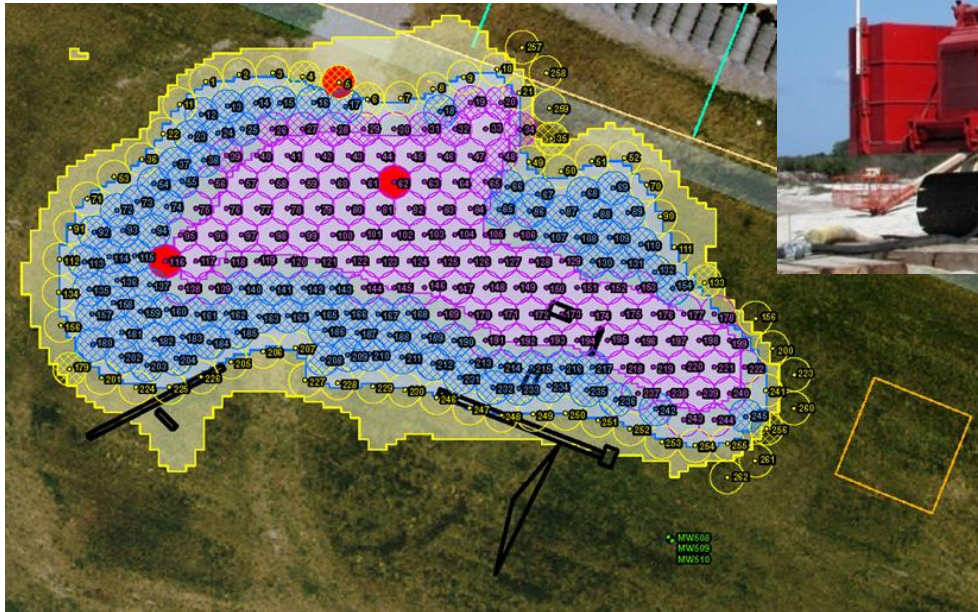
Soils Sitewide Evaluation



Walkdown participants discuss an area near Bayou Creek

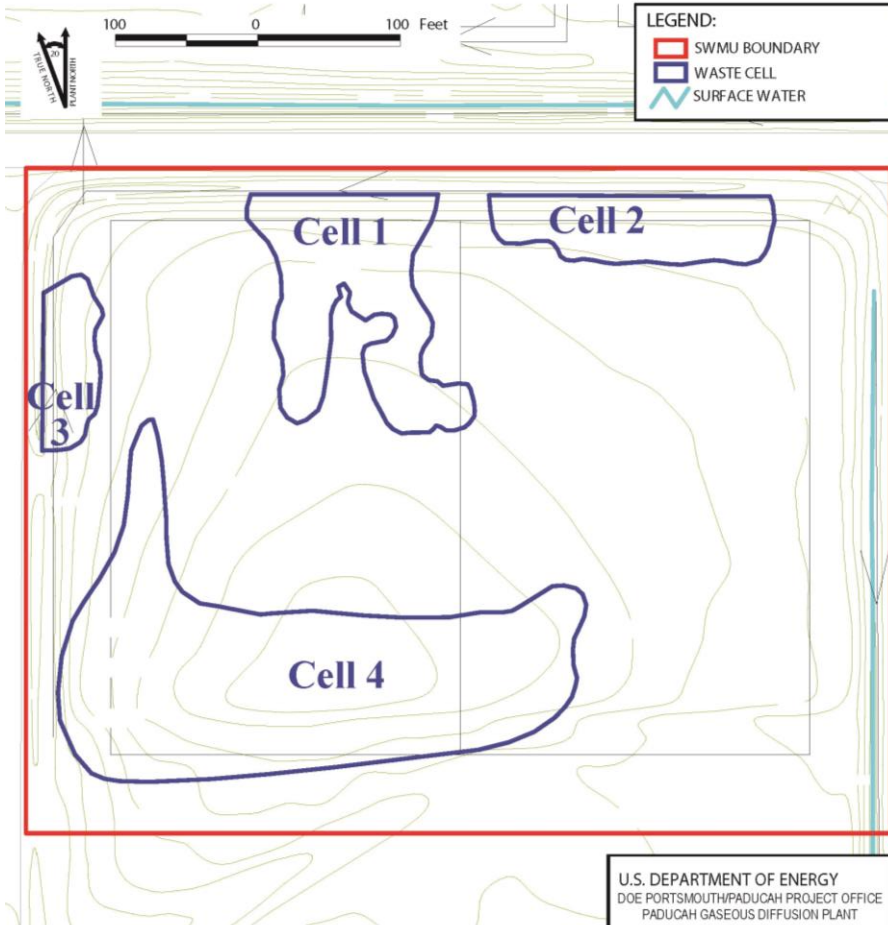
Southwest Plume Cleanup

A crane equipped with an eight foot auger injects iron and steam for deep soil mixing



SWMU 1 Oil Landfarm treatment area where deep soil mixing will be used

SWMU 4 Sampling



Discussion...



Paducah Waste Disposal Alternatives Project

May 15, 2014

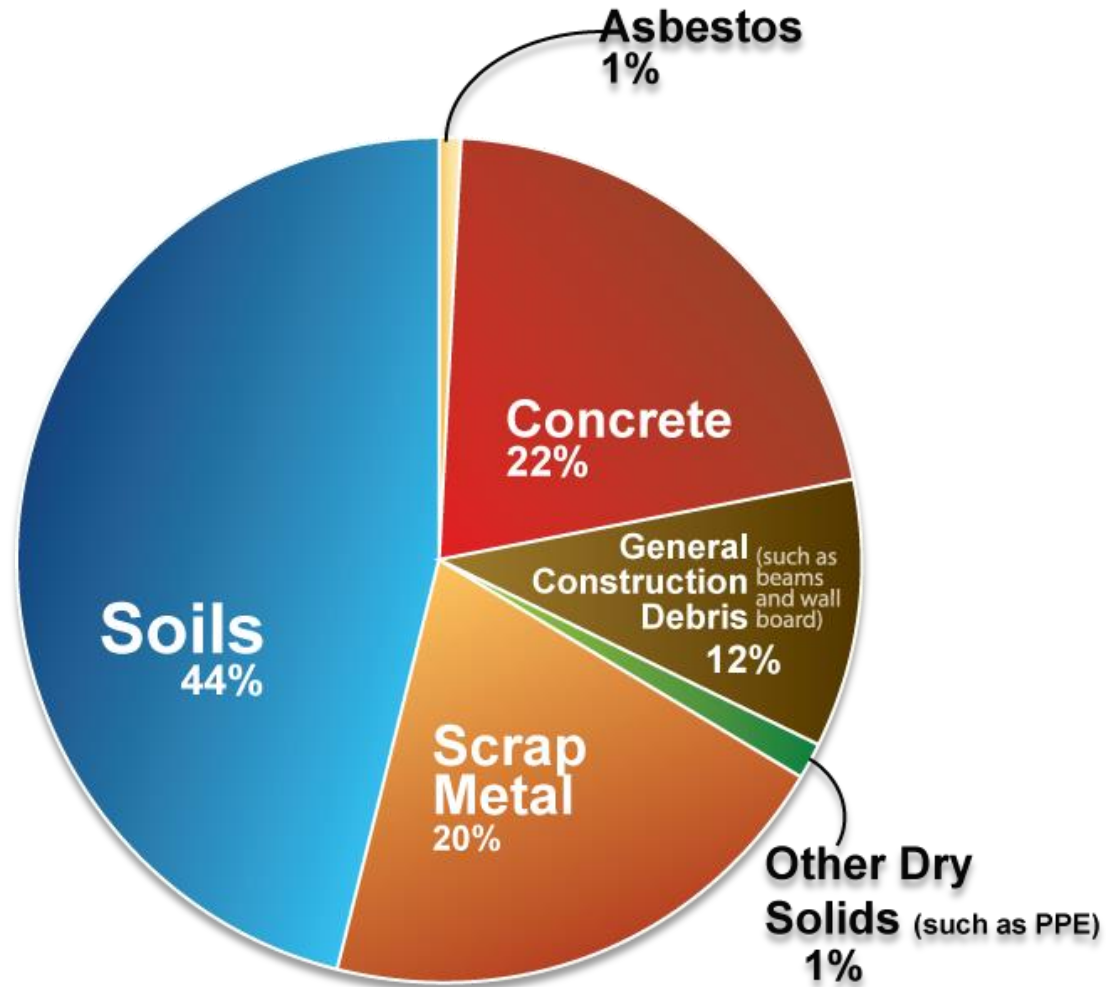
CITIZENS
ADVISORY BOARD

Waste Created at PGDP

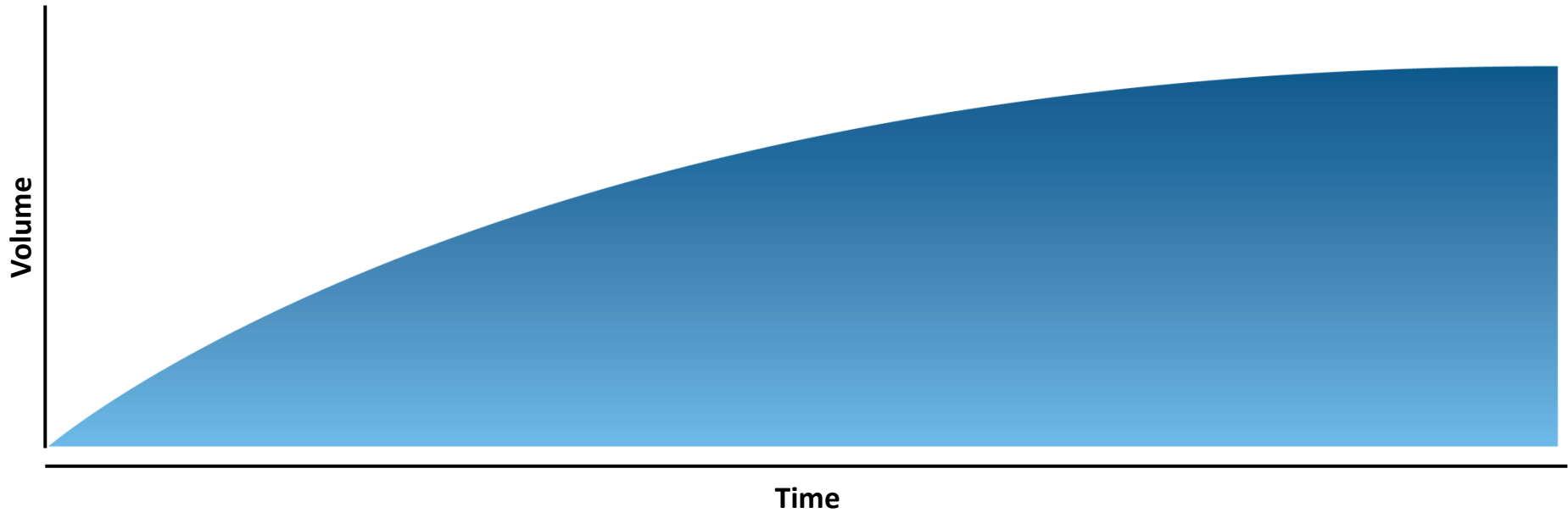
Approximately 3.6 million cubic yards of waste is expected to be generated from the demolition of over 500 buildings and facilities and continued environmental remediation of the Paducah site



Progress of the demolition of C-340 Metals Plant

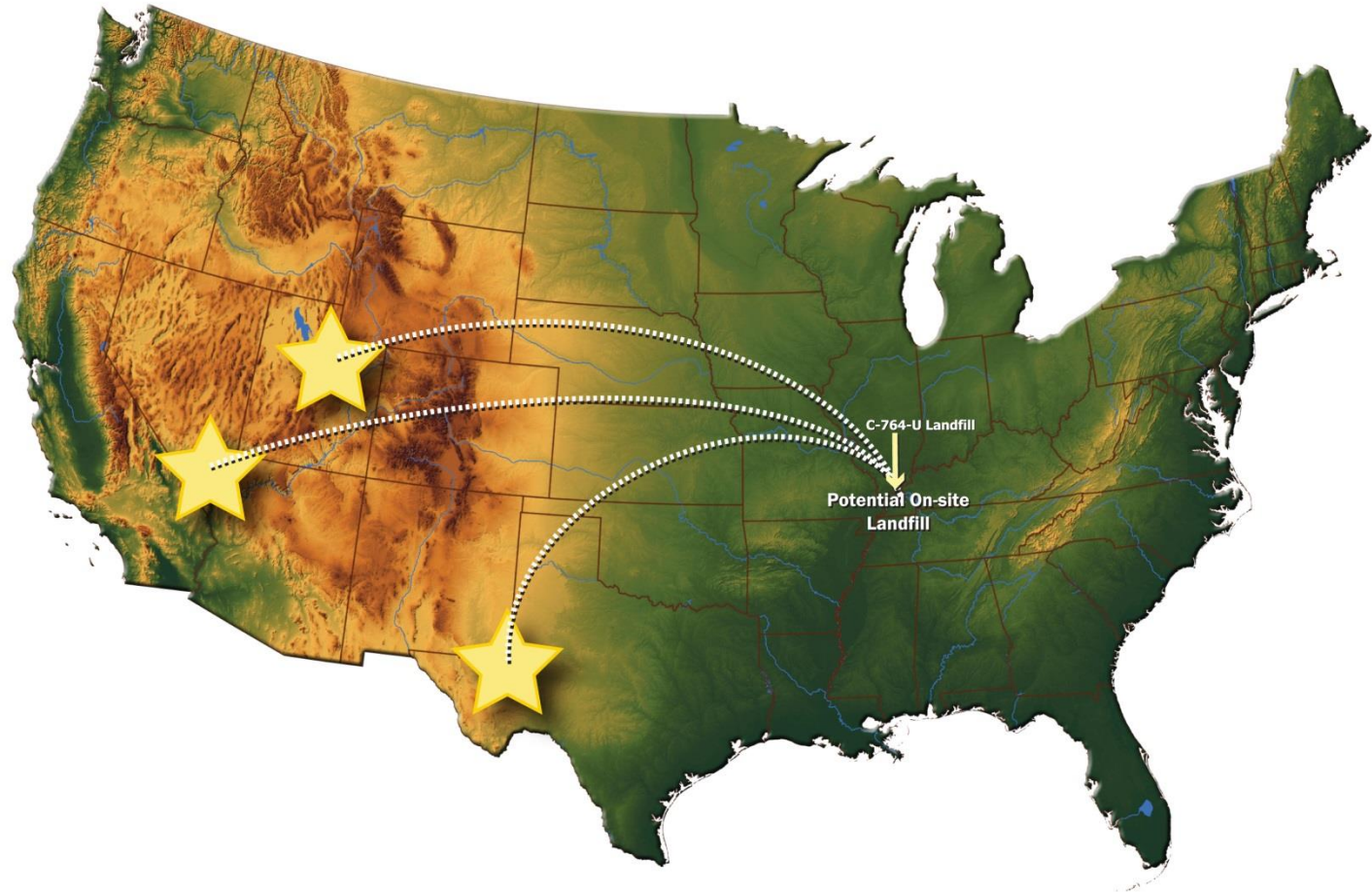


Waste Volume Over Time



Off-site alternative

Make a sitewide programmatic decision to ship waste that does not meet the on-site landfill (C-746-U) disposal criteria to licensed off-site disposal facilities



Paducah wastes currently are disposed of at the on-site C-746-U Landfill and the Utah and Nevada disposal sites.

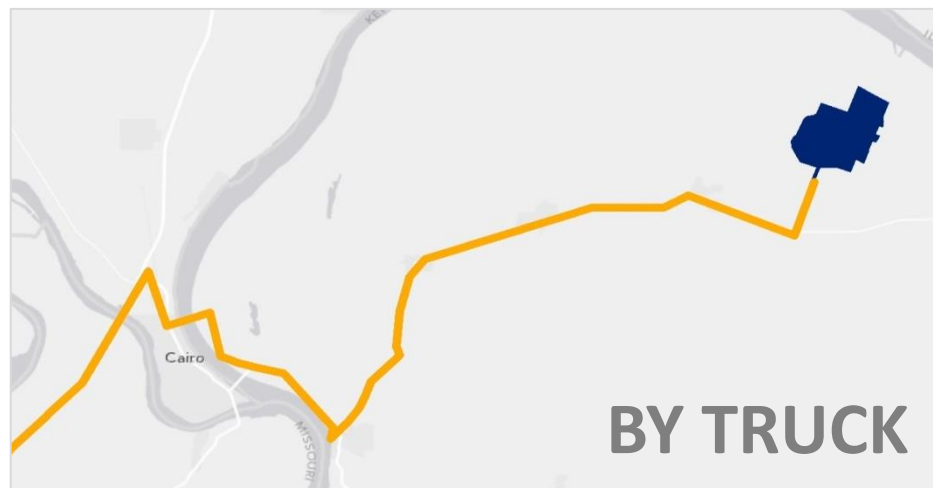
Will off-site facilities accept other waste in the future?

- In three recent notable cases, states sought to control what types of wastes can be brought within their borders for disposal

Is it fair for wastes to be disposed of in locations far from where they are generated?

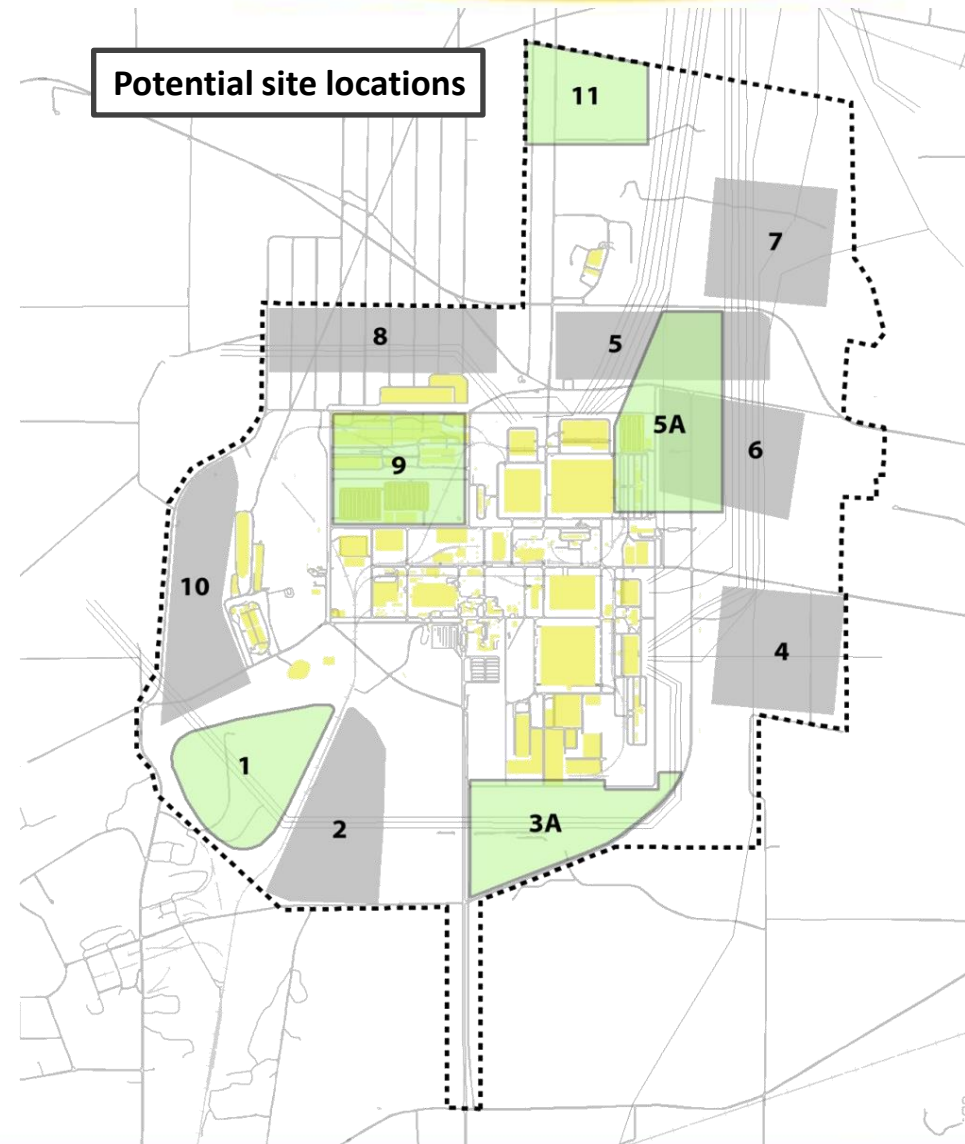
- Issues involved—examples
 - Economic conditions around generating/disposal site
 - Fairness of transporting waste through communities
 - Fairness of turning to less populated states to solve nation's waste disposal needs
- Oak Ridge, TN, residents recommended DOE build an on-site facility for waste disposal
 - Partial justification: unfair to other states that Oak Ridge reaps the economic benefits of waste generation while leaving others to dispose of waste

Risks associated with transporting waste offsite through other communities.



On-site alternative

- Design, build, and operate on-site waste disposal facility (OSWDF) that accepts CERCLA waste
- May continue to dispose of waste that meets the facility disposal criteria in the existing C-746-U Landfill
- Ship waste not meeting OSWDF or C-746-U final waste criteria to licensed off-site disposal facilities



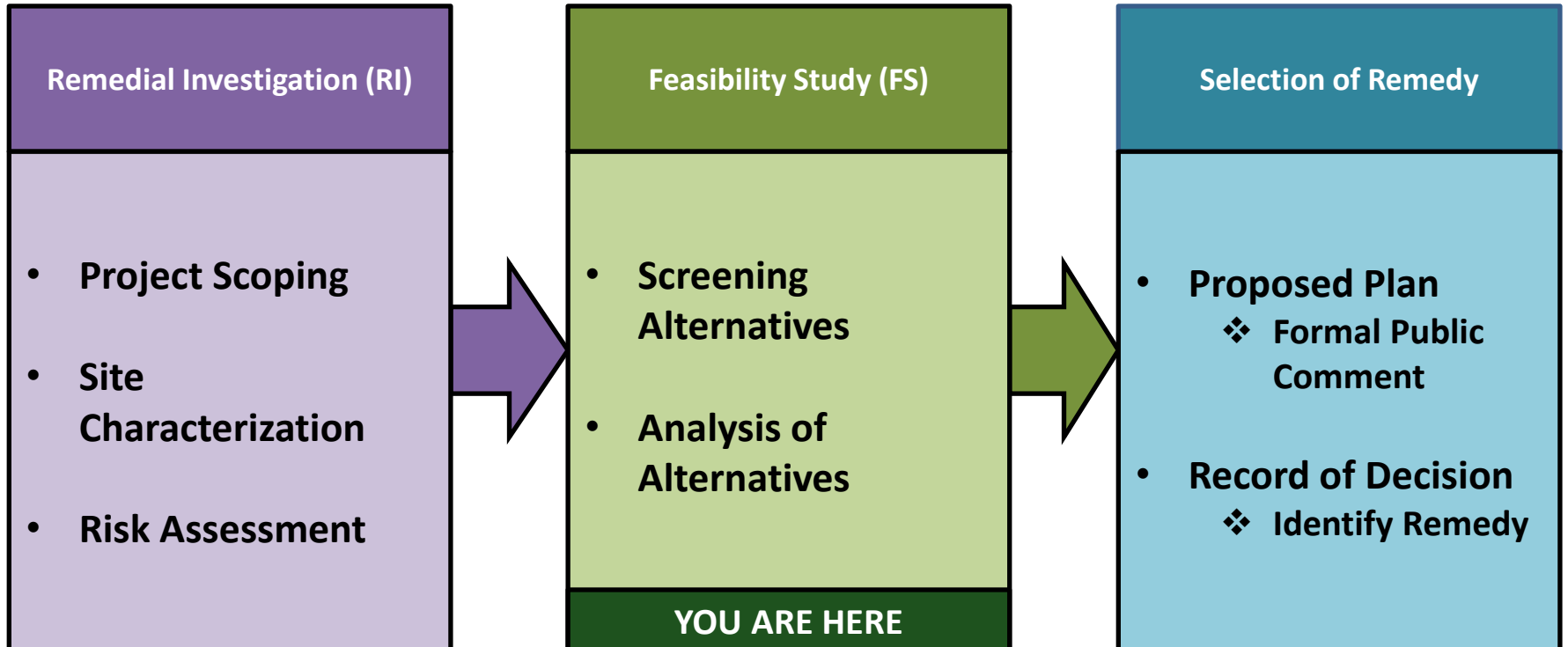


Cleanup of the Fernald site was completed in 2006. The site is now the Fernald Preserve, a wildlife refuge.

Construction and operation of an on-site waste disposal facility has been done at a number of DOE sites, including these:

- Hanford, WA, which remains an active DOE facility
- Oak Ridge, TN, which remains an active DOE facility
- Fernald, OH, near Cincinnati, which is now part of a wildlife refuge
- Weldon Spring, MO, near St. Louis, now part of a recreation area

Continuous Regulatory Oversight



Continuous Public Participation

Threshold Criteria

- (1) Overall protection of human health and the environment
- (2) Comply with federal and state regulations or obtain a waiver(s)

Balancing Criteria

- (3) Long-term effectiveness and permanence
- (4) Reduction of contaminant toxicity, mobility, or volume through treatment
- (5) Short-term effectiveness
- (6) Implementability
- (7) Cost

Modifying Criteria

- (8) State acceptance
- (9) Community acceptance

No Change

- Project by Project decisions
- On-site disposal of waste meeting the existing waste acceptance criteria (C-746-U)
- Off-site disposal of waste not meeting the C-746-U waste acceptance criteria

\$1.3 Billion

(Net Present Value)

On-Site

- Single Programmatic decision
- On-site disposal of waste meeting the C-746-U waste acceptance criteria
- Construct a new on-site disposal facility (OSWDF) with expanded waste acceptance criteria
- Off-site disposal of waste not meeting the C-746-U or OSWDF waste acceptance criteria

\$800 Million

(Net Present Value)

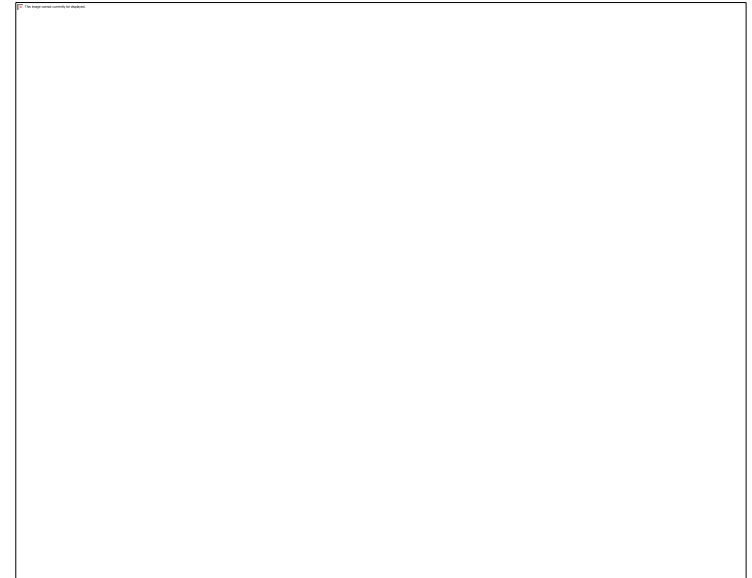
Off-Site

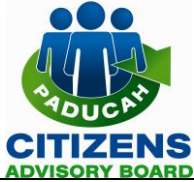
- Single Programmatic decision
- On-site disposal of waste meeting the C-746-U waste acceptance criteria
- Off-site disposal of waste not meeting the C-746-U waste acceptance criteria

\$1.3 Billion

(Net Present Value)

- **Impacts to Future Site Use**
- **Economic Impact**
- **Transportation Risks**
- **Increased Communications**
 - Oak Ridge Tour
 - Off-site specific discussions
 - ❖ Transportation
 - On-site specific discussions
 - ❖ Design
 - ❖ Location alternatives





PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

115 Memorial Drive • Paducah, Kentucky 42001 • (270) 554-3004 • info@pgdpcab.org • www.pgdpcab.org

Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes May 15, 2014

The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky on Thursday, May 15th at 6:00 p.m.

Board members present: Judy Clayton, Ben Peterson, Dianne O'Brien, Ralph Young, Richard Rushing, Robert Coleman, Jonathan Hines, Renie Barger, Eddie Edmonds, David Franklin, Ken Wheeler, Tom Grassham, and Mike Kemp.

Board Members absent: Jim Tidwell, Carol Young, Glenda Adkisson and Kevin Murphy.

Board Liaisons and related regulatory agency employees: none

DOE Deputy Designated Federal Official: Jennifer Woodard, DOE

U.S. Department of Energy (DOE) related employees: Buz Smith, DOE; Joe Walker, Mark Duff, Elizabeth Wyatt, LATA Environmental Services of Kentucky (LATA); Yvette Cantrell, Restoration Services Inc. (RSI); Gaye Brewer, KDWM; Diane Snow, Swift & Staley (SST); Jim Key, United Steel Workers (USW); Mitch Stewart, Pro2Serve; Dave Strayer, LATA-Sharp Remediation Services, LLC (LSRS); Eric Roberts, Jim Ethridge, EHI Consultants (EHI).

Public: Ronnie Stone, Steve Christmas, Gary VanderBoegh

Introductions:

Peterson opened the meeting at 6:00 pm, and asked for introductions and then reviewed the Agenda, which was approved by the Board. He then introduced **Woodard** for a presentation on project status at the site.

Young: And where is that stuff (transite) going for its final resting place?	Woodard: The transite is triple wrapped and goes into the U landfill. The demolition of the actual building (C-410) is going into gondolas and being shipped off site to Energy Solutions.
Young: Any reason it can't go in the U landfill?	Woodard: The contamination levels.
Young: What's the primary contaminate that knocks it (TCE from C-400 project) out of whatever, is it some kind of radioactive thing?	Woodard: It would have to be free released. And then a recycle facility would have to want it.
Young: Was it Tech99 also in some of the plumes?	Woodard: Yes.
Young: Do you have an idea of what that increment cost is to have that shipped to Utah	Woodard: I don't know a unit rate for that. I can follow up with the tipping cost for a rail car.

versus somewhere else?	
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Federal Coordinator Comments: Smith introduced Diane Snow as the new Project Manager for Swift and Staley.

Liaison Comments: None

Administrative Issues:

Peterson introduced *DRAFT Recommendation 14-XX: DOE Funding Priorities for the FY 2016 Budget* for consideration and vote by the Board.

Recommendation 14-02: DOE Funding Priorities for the FY 2016 Budget

May 15, 2014

Background

The Department of Energy received a 2-year notification from the United States Enrichment Corporation (USEC) of their intent to return the facilities at the Paducah Gaseous Diffusion Plant to DOE in August 2013. Consistent with the President's budget request DOE received \$324,524,000 to execute planned de-lease and deactivation activities, as well as meeting ongoing cleanup commitments at the PGDP site. The FY14 Continuing Resolution created a delay in PGDP facility return that could jeopardize meeting the August 2015 turnover date, thereby decreasing the ability to spend the full amount allotted in FY14.

To continue to meet the planned activities, DOE will have to accelerate work at the site through FY15 and into FY16. DOE will need an estimated \$369,773,000 to meet FY16 base operations, enforceable commitments, and other priorities, including those activities associated with returning the plant back to DOE.

The CAB was provided the following generic list of categories (in draft form) for the FY 16 IPL.

1. IMMEDIATE THREATS – No activities at Paducah currently are identified in this category.
2. BASE OPERATIONS
 - Security
 - Surveillance and Maintenance
 - Infrastructure Optimization
 - Waste Operations
 - UF₆ Cylinder Maintenance
 - DUF₆ Conversion Operation and Maintenance
3. ENFORCEABLE COMMITMENTS – Federal Facility Agreement (FFA)
 - C-400
 - Southwest Plume Sources
 - CERCLA Waste Disposal Facility (if selected)
 - Burial Grounds – SWMUs 5 and 6
 - Burial Grounds – SWMU 4
4. OTHER PRIORITIES/PLANNING PACKAGES
 - Deposit Removal
 - Accelerated Deactivation
 - Accelerated Environmental Restoration
 - Accelerated Decontamination and Decommissioning

The CAB requests that all of the categories listed on the IPL provided be fully funded. Items listed under Base Operations must be fully funded in order for the site to continue operations.

Enforceable commitments should be funded to comply with the Federal Facility Agreement milestones. Continued progress toward environmental remediation milestones remains a top priority of the CAB. Now that operation of the PGDP has ceased, DOE and the regulatory agencies involved with the FFA should explore site-wide remediation strategies that take into account operations ceasing at the PGDP. Decontamination & demolition sequencing that could not be part of the existing FFA due to the operation of the PGDP, could now enhance high priority remediation areas and complement adaptive reuse desires of the community.

While there are no Imminent Threats listed at the Paducah site, the CAB is aware that the items listed under Other Priorities/Planning Packages are critical to the safety of future workers and the environment. The CAB does not wish to see these additional items ignored to the point where risk level increases. Elimination of these potential risks and safety hazards is the most cost effective long term strategy.

Recommendation

The CAB recommends:

- **DOE fully fund the anticipated FY16 site request of \$369,773,000 to complete the list of 2016 IPL activities.**
- **DOE maintain an annual target funding level equal to the FY16 total in future budget requests, consistent with OMB flat funding requirements. This will allow the site to better meet enforceable milestones, facilitate the safe turnover of site facilities, allow for accelerated deactivation activities and minimize chances of increased contamination threats at the Paducah site.**

After discussion, the Recommendation was approved by a vote of 13-0.

Next, **Peterson** introduced *EM SSAB Chairs Letter – Funding* for consideration by the Board.

Mr. David Huizenga
Acting Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Huizenga:

Background

The Environmental Management Site Specific Advisory Board (EM SSAB) believes the fiscal year 2015 budget request is insufficient to meet the cleanup obligations facing the EM cleanup sites. We also believe that the Department of Energy (DOE) needs to honor the agreements and established milestones between the federal government, the states, Tribes and affected stakeholders in a more timely fashion.

How Underfunding Increases Cost and Risk

- Funding shortfalls increase the long-term cost of cleanup to the American taxpayers.
- Flat funding increases cleanup costs because it does not consider inflation or escalation of added costs.
- Continuing funding shortfalls result in the downward spiral of additional delays and more costs.
- Continued use of facilities past their design lives increases risk, as has been demonstrated by recent reports of leaking double shell tanks at the Hanford site.
- Loss of institutional knowledge inhibits cleanup efficiency and increases costs.

Cleanup Commitments Must Be Honored

The United States government is obligated to meet existing cleanup commitments and establish new commitments for cleanup in a timely fashion. At the larger sites, much of the low hanging fruit, the most easily completed work, is done. The remaining cleanup at these sites is more complex and will cost more money. This fact cannot be ignored. Some sites, such as Fernald and Rocky Flats, have completed all cleanup activities. Many remaining sites are facing the most difficult, risk laden, and expensive cleanup activities across the DOE EM complex. There are also sites, such as Paducah, whose end state metrics have yet to be established.

We believe these cleanup obligations must be met in real time, not delayed. Every year DOE needs to honor their current commitments by requesting all funding to support cleanup activities and milestones, and request funding for newly established milestones.

The EM SSAB, comprising about 200 people, is composed of eight regional citizens advisory boards from communities in Georgia, Idaho, Kentucky, Nevada, New Mexico, Ohio, Oregon, South Carolina, Tennessee and Washington. We are cumulatively representative of a stakeholder population totaling millions of people who are affected by generator sites, transportation routes and disposal sites.

Recommendation

The EM SSAB requests that:

- DOE meet its cleanup obligations by requesting all annual funding required to support cleanup activities and milestones at each site we represent to complete committed cleanup activities, without delay.
- DOE expedite milestone establishment, and requests funds for those sites that do not have site end state cleanup milestones in place.

The EM SSAB requests that you share this recommendation with the Secretary of Energy.

Steve Hudson, Chair
Hanford Advisory Board

Herbert Bohrer, Chair
Idaho National Laboratory
Site EM Citizens Advisory
Board

Kathleen Bienenstein, Chair
Nevada SSAB

Carlos Valdez, Chair
Northern New Mexico
Citizens' Advisory Board

David Hemelright, Chair
Oak Ridge SSAB

Ben Peterson, Chair
Paducah Citizens
Advisory Board

William E. Henderson II, Chair
Portsmouth SSAB

Marolyn J. Parson, Chair
Savannah River Site
Citizens Advisory Board

Wheeler requested that the Board be able to review the latest triennial analysis of the D&D fund. After some discussion, the Recommendation was approved by a vote of 13-0.

Next, **Peterson** introduced *EM SSAB Chairs Letter – EM Publicize Successes* for consideration by the Board.

Mr. David Huizenga
Acting Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Huizenga:

Background

The Environmental Management Site Specific Advisory Board (EM SSAB) Chairs note the examples below that illustrate some of the positive benefits resulting from EM remediation efforts such as:

- Fernald, Ohio, where an operational uranium enrichment plant has been deconstructed and the area reconstituted as parkland;
- Oak Ridge, Tennessee, where the East Tennessee Technology Park now occupies the area previously dominated by the K-25 Gaseous Diffusion Plant;
- Rocky Flats, Colorado, where a nuclear weapons production facility has been replaced by flourishing rangeland and now serves as a wildlife refuge; and
- Hanford in Washington state, where the B Reactor Preservation Project has been completed and is under consideration for national historic preservation.

In every case of EM site remediation, the environmental recovery constitutes a powerful example of how the joint efforts of the Department of Energy (DOE) and community leaders have resulted in a return to the local community and to society of areas or facilities previously exposed to and/or contaminated by nuclear activities.

Recommendation

With full recognition of the presence and value of formal public relations and outreach programs within each DOE facility, and building upon these capabilities, the EM SSAB Chairs recommend that DOE:

- Sponsor an independent examination of the remediation efforts of DOE EM, with the intent of producing video clips and/or lengthier documentaries suitable for public viewing through a variety of platforms and for academic/scholastic purposes.
- Engage the various EM sites in developing and producing such materials (and referencing those that already exist), so that local resources (e.g. local television organizations and academic

science programs) may make use of these materials to address local issues and specific concerns.

Such communication tools would help DOE EM to further capitalize on the presentation of past and emerging EM sites to inform the public about cleanup activities at former nuclear sites to maintain and improve support for environmental cleanup.

Steve Hudson, Chair
Hanford Advisory Board

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Idaho National Laboratory
Site EM Citizens Advisory
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Citizens Advisory Board

After some discussion, the Recommendation was passed by a vote of 13-0.

Subcommittee Chair Comments:

Peterson said that a WDA presentation would immediately follow the Board meeting.

Public Comments: none

Final Comments:

O'Brien asked is we were still buying uranium from Russia. **Hines** suggested going to www.whitehouse.gov and you might be able to get an answer there, or ask a Congressional representative. **O'Brien** then asked is there any way to get a model of a CERCLA cell showing the effect of an earthquake. **Roberts** said that we could take that up with the WDA meeting immediately following the Board meeting.

Adjournment:

Peterson adjourned the meeting at 6:52 pm.

Approved by **Ben Peterson, Chairman**



Ben Peterson