



**DRAFT AGENDA**  
**ADMINISTRATIVE COMMITTEE MEETING**  
**Stoller-Navarro, 7710 W. Cheyenne, Conference Room 130**  
**November 9, 2005 5-7 p.m.**

- |       |  |   |
|-------|--|---|
| I.    | Chair's Opening Remarks<br>Approval of Agenda<br><br>Review of Ground Rules  | Charley Phillips (5 min)  |
| II.   | Election of Officers   | All (5 min)   |
| III.  | Interim CAB Support  | Kelly Snyder (5 min)  |
| IV.   | Retreat Planning Discussion <ul style="list-style-type: none"><li>• Date/Location/Topics</li></ul>   | All (30 min)  |
| V.    | Update: Nye Co. Stakeholder Groups   | John Pawlak (5 min)   |
| BREAK |  |   |
| VI.   | Committee Updates <ul style="list-style-type: none"><li>• Diversification</li><li>• Transportation/Waste Committee<ul style="list-style-type: none"><li>• 9/19/05 Letter regarding CAB Comments to Disposition of Classified Drums</li><li>• Letter regarding Comments to the Draft Permit for Issuance to DOE to allow operation of The Mixed Waste Disposal Unit</li></ul></li><li>• UGTA Committee</li></ul>  | (30 min)<br><br>Jack Ramsey<br>John Pawlak<br><br><br>Kathleen Peterson                           |
| VII.  | Other CAB Business <ul style="list-style-type: none"><li>• CAB Travel</li><li>• Video Conferencing</li><li>• September 21-23, 2005, SSAB Chairs Meeting Trip Reports<ul style="list-style-type: none"><li>o SSAB Chairs' Letter- transmitted signature approval 10/24/05</li></ul></li><li>• November State of Nevada Closed in Place Corrective Actions<ul style="list-style-type: none"><li>o The DOE or DoD will not be submitting any CADDs, CADD/Closure Reports, or SAFER Work Plans, proposing Closure-in-place to the NDEP before November 9, 2005</li></ul></li></ul> | All (30 min)<br><br>Kelly Snyder<br>Kelly Snyder<br>Charley Phillips/<br>Dave Hermann/John Pawlak |
| VIII. | Meeting Evaluation   |   |

Notification for  
Closed in Place Corrective Actions  
November 9, 2005  
Nevada

The Department of Energy or The Department of Defense will not be submitting any final Corrective Action Decision Documents (CADDs), CADD/Closure Reports, or Streamlined Approach for Environmental Restoration (SAFER) Work Plans, proposing closure-in-place to the Nevada Division of Environmental Protection (NDEP), before November 9, 2005.



**Department of Energy**

Washington, DC 20585

**AUG 23 2005**

Mr. Charles Phillips, Chair  
Community Advisory Board for Nevada Test Site Programs  
2721 Losee Road, Ste. D  
North Las Vegas, NV 89030

Dear Mr. Phillips:

Thank you for your July 29, 2005, letter including comments on the "Preliminary Draft of the Low Level Waste, Mixed Low Level Waste National Disposition Strategy - Phase I." I appreciate the time and effort that you and your Community Advisory Board have provided.

My office is reviewing and resolving the comments we have received. Once this process is completed and the document is revised, we will provide you with the detailed response to your specific comments. We hope to complete the Phase I final draft by the end of the calendar year. We will then proceed to Phase II, which will consider the Low Level Waste (LLW)/Mixed Low Level Waste (MLLW) streams from the remaining DOE sites.

If you have any questions, please contact Ms. Melissa A. Nielson, Director of Internal/External Coordination at (202) 586-0356. Thank you again for your contributions to this important document.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine Gelles", written over a faint circular stamp.

Christine Gelles  
Director  
Office of Commercial Disposition Options  
Office of Environmental Management

cc:  
Frank Marcinowski, EM-10



# Community Advisory Board for Nevada Test Site Programs

September 19, 2005

**Charles Phillips, CAB Chair**  
**Marian Lawrence, CAB Vice-Chair**

Kaye Allisen-Medlin, Chair  
*Budget Committee*

Pauline Esteves

Robert Gatliff

David Hermann

Steve Hopkins

Bill King

Genne Nelson

Richard Nocilla

John Pawlak, Chair

*Transportation /Waste Committee*

Kathleen Peterson, Chair

*UGTA Committee*

Jackson Ramsey

Engelbrecht von Tiesenhausen

**Ex Officio Members**

Steve Mellington

*U.S. Department of Energy,  
Nevada Site Office*

Tiffany Lantow

*Defense Threat Reduction Agency*

Tim Murphy, Chief

*Bureau of Federal Facilities,  
State of Nevada Division of  
Environmental Protection*

Frank Tussing

*Nevada Alliance for Defense,  
Energy, and Business*

Susan Moore

*Nye County*

**Administrative Support Staff**

Kay Planamento

Mr. Stephen A. Mellington  
Acting Assistant Manager for Environmental Management  
U.S. Department of Energy – Nevada Site Office  
PO Box 98518  
Las Vegas, NV 89193-8518

RE: CAB COMMENTS TO DISPOSITION OF CLASSIFIED DRUMS

Dear Mr.Mellington:

Thank you for the opportunity to review and comment on proposed options for disposition of classified drums. Joni Norton, Acting TRU Waste Task Manager, met with us for an in-depth discussion of each of the proposed seven alternatives that are being considered. Subsequent to that meeting, members of the CAB's Transportation/Waste Committee have carefully reviewed the details and met to formalize recommendations.

Although it is readily apparent that Alternative #1 (On-Site Characterization with No Sanitization) offers a solution with minimal complications and funding, we strongly encourage consideration of Alternative # 5 (Off-Site Melting at a Commercial Facility). Alternative #5 provides a unique opportunity for recycling materials that would otherwise require permanent burial / disposal. This alternative also provides viable processing options that have been previously used.

In short, it appears that either alternative is feasible and effectively addresses the need for classified materials disposition; however, we encourage consideration of Alternative 5 as an innovative option.

Sincerely,

Charles A. Phillips, Chair  
Community Advisory Board  
for Nevada Test Site Programs

cc: Richard Betteridge, NNSA/NSO  
Frank DiSanza, NNSA/NSO  
Joni Norton, NNSA/NSO  
Kelly Snyder, NNSA/NSO  
Carla Sanda, Stoller-Navarro JV  
CAB Members



# Community Advisory Board for Nevada Test Site Programs

October 27, 2005

**Charles Phillips, CAB Chair**  
**Marian Lawrence, CAB Vice-Chair**

Kaye Allisen-Medlin, Chair  
*Budget Committee*  
Pauline Esteves  
Robert Gatliff  
David Hermann  
Steve Hopkins  
Genne Nelson  
Richard Nocilla  
John Pawlak, Chair  
*Transportation /Waste Committee*  
Kathleen Peterson, Chair  
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Jackson Ramsey  
Engelbrecht von Tiesenhausen

**Ex Officio Members**

Steve Mellington  
*U.S. Department of Energy,  
Nevada Site Office*  
Tiffany Lantow  
*Defense Threat Reduction Agency*  
Tim Murphy, Chief  
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State of Nevada Division of  
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Frank Tussing  
*Nevada Alliance for Defense,  
Energy, and Business*  
Susan Moore  
*Nye County*

**Administrative Support Staff**

Kay Planamento

Nevada Division of Environmental Protection  
Bureau of Waste Management  
ATTN: Jeff Denison  
901 S. Stewart Street, Suite 4001  
Carson City, NV 89701-5249

RE: COMMENTS TO THE DRAFT PERMIT FOR ISSUANCE TO  
THE U.S. DEPARTMENT OF ENERGY (DOE) TO ALLOW  
OPERATION OF THE MIXED WASTE DISPOSAL UNIT  
(MWDU)

Dear Mr. Denison:

The DOE NSO plays a key role in supporting cleanup not only at the Nevada Test Site, but also at Department of Energy sites throughout the nation by providing essential radioactive waste management and disposal capabilities. Although the CAB realizes the importance of this role, on behalf of Nevada's stakeholders we continually insist that these activities be conducted with an accountable, safe, and environmentally responsible approach. Therefore, the Community Advisory Board (CAB) for Nevada Test Site Programs has been carefully tracking the efforts of the U.S. Department of Energy's Nevada Site Office to continue ongoing hazardous waste management activities at the Mixed Waste Disposal Unit (MWDU) in Area 5 of the Nevada Test Site.

The CAB understands that the Nevada Division of Environmental Protection is now seeking public comment to allow the MWDU to continue operation under interim status to facilitate closure of this unit within the next five years. CAB members have visited the MWDU facility, received briefings on its operations, and carefully studied the implications of ongoing activities leading to unit closure. As a result, we have learned the following:

- The MWDU sits atop a 775' thick zone of sand, soil, and rock deposits above any groundwater. This factor, combined with an extremely arid climate (<5" precipitation per year) establishes a high potential for evaporation of any moisture that may occur.

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Mr. Jeff Denison  
October 27, 2005

- All hazardous waste streams identified will meet the RCRA requirements of Land Disposal Restriction Treatment Standards.
- All wastes will either be containerized or encapsulated.
- For nearly 20 years the facility has been carefully monitored. Monitoring activities will be ongoing through the remaining phases of operation, and will continue after all waste is disposed and the final closure cover is in place.
- This track record, combined with detailed modeling, shows that the MWDU will continue to be a viable disposal option for both on- and off-site generated wastes and will provide an adequate buffer zone to guard against contaminant movement from the MWDU to surrounding environments.

In summation, after nearly two years of careful study and consideration, the CAB supports ongoing waste disposal operations at the MWDU under interim status to facilitate closure of this unit within the next five years or when it reaches its waste disposal capacity of 20,000 cubic meters.

Sincerely,



Charles A. Phillips, Chair  
Community Advisory Board  
for Nevada Test Site Programs

cc: Christine Gelles, DOE Washington DC  
Frank Marcinowski, DOE Washington DC  
Stephen A. Mellington, ERD, NNSA/NSO, Las Vegas, NV  
R. Betteridge, ERD, NNSA/NSO, Las Vegas, NV  
F. DiSanza, WMD, NNSA/NSO, Las Vegas, NV  
M. Giblin, WMD, NNSA/NSO, Las Vegas, NV  
K. Snyder, ERD, NNSA/NSO, Las Vegas, NV  
CAB Members



**Department of Energy**  
National Nuclear Security Administration  
Nevada Site Office  
P.O. Box 98518  
Las Vegas, NV 89193-8518

October 27, 2005

Charles Phillips, Chair  
Community Advisory Board  
for Nevada Test Site Programs  
2721 Losee Road, Suite D  
North Las Vegas, NV 89030

**DISPOSITION OF CLASSIFIED DRUMS**

Reference: Community Advisory Board (CAB) letter, dtd 9/19/2005, subject as above

Thank you for your in-depth review and feedback on the cost benefit analysis conducted to determine alternatives for disposition of classified drums currently located at the Nevada Test Site.

As you know from your review, the cost analysis provided seven alternatives for consideration. Before making a decision, we carefully reviewed and examined each of the alternatives, along with the feedback you provided. As a result, we concur with your recommendations and have opted to pursue Alternative #1: On-Site Characterization with No Sanitization. Due to the complexities surrounding transuranic waste disposition, disposal at the Waste Isolation Pilot Plant is not only the most cost effective, but also the most feasible. Shipment of this waste is scheduled to occur before the end of this calendar year.

Like the CAB, we were also interested in the potential for recycling activities, which were a part of Alternative #5. As a result, the Nevada Site Office performed extensive investigation on these drums through characterization methods that have allowed us to understand what paths for disposition are the most feasible. Using additional, more up-to-date information than was available for the cost benefit analysis, it became apparent that the option for transuranic material recycling is not a viable alternative. However, during characterization it was discovered that not all of the drums are transuranic. In fact, some of the drums are low-level/mixed low level. For these waste streams recycling may be an option. This option is currently being investigated.

Thank you for your willingness to review the cost analysis and provide us with your recommendations. Stakeholder feedback is an integral part of the way we do business, and we appreciate the ongoing opportunity to work with you.

*Richard D. Ballentine*  
for Stephen A. Mellington  
Assistant Manager  
for Environmental Management

TD:1469.KS

Charles Phillips

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October 27, 2006

cc:

Timothy Murphy, NDEP, Las Vegas, NV

R. D. Betteridge, AD/AMEM, NNSA/NSO, Las Vegas, NV

K. K. Snyder, TD, NNSA/NSO, Las Vegas, NV

E. F. Di Sanza, WMD, NNSA/NSO, Las Vegas, NV

J. F. Norton, WMD, NNSA/NSO, Las Vegas, NV

## Article from Capitol Reports' "News Link"

### **Duratek Receives Certification and Makes First Shipment to the Nevada Test Site**

COLUMBIA, MD (09/13/05) -- Duratek, Inc. (NASDAQ:[DRTK](#)) today announced its Bear Creek (TN) processing facility has been certified as the first commercial facility in the U.S. to ship low-level radioactive waste to the Nevada Test Site (NTS) and made its first shipment to NTS on September 8, 2005.

NTS disposes of low-level radioactive waste generated by the Department of Energy (DOE) and DOE-funded facilities, and can receive and dispose of waste that is not accepted at other commercial and government-operated disposal facilities.

Robert Prince, President and CEO said, "This certification further expands the Company's capabilities as a full-service manager of low-level radioactive waste and expands our Commercial Processing Group's base business. DOE customers now have the means to certify and ship many of their difficult waste streams for disposal at NTS through Duratek."

To earn this first-of-its-kind certification, Duratek went through a rigorous audit administered by NTS under their radioactive waste acceptance program. The Duratek program includes an on-site Waste Certification Officer qualified to perform the waste type, waste form, and package inspections needed to certify waste as acceptable for disposal at NTS. Duratek will be able to process, package, and transport the material to disposal.

[Duratek](#) provides safe, secure radioactive materials disposition and nuclear facility operations for commercial and government customers.

Certain statements contained in this press release may constitute "forward-looking statements" within the meaning of Section 21E(i)(1) of the Securities Exchange Act of 1934. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Duratek's actual results to be materially different from any future results expressed or implied by these statements. Such factors include the following: the Company's ability to manage its commercial waste processing operations, the timing and award of contracts by the U.S. Department of Energy for the cleanup of waste sites administered by it; the acceptance and implementation of the Company's waste treatment technologies in the government and commercial sectors; and other large technical support services projects; the Company's ability to successfully add revenues from new contracts; and the timing of completing existing contracts. All forward-looking statements are also expressly qualified in their entirety by the cautionary statements included in the Company's SEC filings, including its quarterly reports on Form 10-Q and its annual report on Form 10-K.

**Environmental Management Site Specific Advisory Board Chairs Meeting  
Draft Meeting Summary  
September 22 – 23, 2005  
Idaho Falls, Idaho**

The Environmental Management (EM) Site Specific Advisory Board (SSAB) met September 22-23, 2005 at the Ameritel Hotel in Idaho Falls, Idaho. The Idaho National Laboratory Site EM Citizens Advisory Board (CAB) hosted the meeting. Meeting participants included Chairs, Vice Chairs, Co-Chairs, other SSAB members, Department of Energy (DOE) Headquarters (HQ) and field staff, site coordinators, SSAB administrators, and support staff. The meeting was facilitated by Wendy Green Lowe, facilitator for the Idaho CAB. A large majority of the meeting attendees also participated in a tour of the Idaho site on September 21, 2005.

Participants

- Fernald CAB: Lisa Crawford, Pam Dunn
- Hanford Advisory Board: Shelly Cimon, Susan Leckband, Todd Martin
- Idaho National Laboratory Site EM CAB: John Bolliger, Georgia Dixon, David Kipping
- Nevada Test Site Community Advisory Board: David Hermann, John Pawlak, Charles Phillips
- Northern New Mexico CAB: James Brannon, J.D. Campbell, Grace Perez
- Oak Ridge SSAB: Norman Mulvenon, Kerry Trammell
- Paducah CAB: Shirley Lanier, Rhonda McCorry, John Russell
- Rocky Flats CAB: Gerald DePoorter, Phil Tomlinson
- Savannah River Site CAB: Bill Lawless, Jean Sulc
- DOE-HQ: Doug Frost, Christine Gelles, Frank Marcinowski, Melissa Nielson, Jay Vivari
- Federal Officials/Coordinators/Staff: Gary Stegner, Erik Olds, Joe Voice, Kelly Snyder, Christine Houston, Lorrie Bonds-Lopez, David Adler, Spencer Gross, Gerri Flemming, Shannonn Brennan, Rick Provencher
- Support Staff: Carla Sanda, Menice Manzanares, Jeannie Brandstetter, Ken Korkia, Dawn Haygood, Peggy Hinman, Wendy Lowe, Lori McNamara

**Thursday, September 22, 2005**

**Round Robin 1: Top Waste Disposition Issues for Each SSAB**

Each board was given an opportunity to highlight current waste disposition issues facing the boards and sites.

Fernald

Final Disposition of Silos 1 and 2 waste.

- This waste is being stored at WCS, but final disposition is not yet assured.

Hanford

Plutonium

- There are concerns by the board about continued storage of plutonium which may take funding away from clean up

#### Mixed waste

- There is great uncertainty over use of Hanford for waste disposal from other sites

#### High level waste

- Hanford has not planned for storage of high level waste pending availability of a repository

### Idaho

#### Yucca Mountain

- There is concern about the schedule and waste acceptance criteria for a repository
- The CAB is interested in whether DOE has contingency plans; long term interim storage is available for high level waste
- There is concern about capacity of Yucca Mountain and whether a second repository will be needed

#### Buried Waste

- Some of the buried waste retrieved may not be accepted at the Waste Isolation Pilot Plant (WIPP)

#### Special Nuclear Materials (SNM)

- SNM is being moved out of Idaho
- Proposals are being made for projects that could bring significant amounts of SNM to the site; one proposal involves consolidation of plutonium 238 production and fabrication of radioisotope power systems at Idaho

### Nevada Test Site (NTS)

#### Transuranic (TRU) waste

- 'Small quantity' TRU waste sites such as NTS have a need for characterization and a schedule for disposal despite the small volume of waste

#### Funding

- NTS has a small level of funding relative to the other sites, but it is critical that its level of funding be maintained

#### Use of NTS by other sites

- There are many issues involved with availability of NTS as a disposal site for other DOE sites

### Northern New Mexico

#### Expansion of Area G

- The disposal area is expanding by another 30 acres
- The CAB feels there is insufficient data to support disposal in unlined pits, trenches, and shafts

- The closure plans for the current site remain uncertain.

#### TRU waste to WIPP

- Characterization issues have impeded progress
- There is question whether pre-1970 TRU waste will stay buried or will go to WIPP

#### Future of Material Disposal Areas (MDA)

- There is a large volume of waste in MDAs without disposition paths
- Further waste is expected to be generated from decontamination and decommissioning (D&D)
- Instead of using new technologies, DOE continues to bury waste instead of rendering it inert

#### Oak Ridge

##### Orphan waste

- There is a volume of orphan waste that has no disposition path

##### TRU waste

- Oak Ridge has a high volume of remote handled waste
- The SSAB hopes to learn more about the status of a permit for TRU waste

##### Long term waste disposal capacity

- There are several sites available, and private industry is playing a stronger role
- Continued availability is a concern

#### Paducah

##### Future Use of the On-Site Landfill

- Paducah has a subtitle D facility on site, but there are technical issues that may limit expansion
- Mixed low level waste goes to Envirocare in Utah

##### Excavation of Burial Grounds

- If the burial grounds are excavated, additional volumes of waste will need to be dealt with

##### D&D of Paducah

- There has not been planning for waste to be generated from D&D; about 1.3 million cubic yards of waste are expected to be generated
- The new landfill, even if available, will not be large enough

#### Rocky Flats

Rocky Flats has been remediated and there are no waste disposition issues

#### Savannah River

### High Level Waste

- There are concerns about tank volume capacity
- DOE is pursuing a waste determination for the waste, and this may be a delay
- The vitrified high level waste is to go to Yucca Mountain; the release criteria proposed by EPA is being considered by the CAB

### TRU waste

- Savannah River Site (SRS) has drums with high activity. It is not clear if this can be shipped to WIPP as is, if it can be shipped after repackaging, or whether it can be shipped at all
- SRS also has non drummed TRU and a new shipment container must be approved

### Mixed waste

- SRS is tied to NTS in its plans to send mixed low level waste there

### Question and Answers

SRS asked Idaho and Hanford to explain their issues with lack of storage for high level waste. Hanford explained that it did not have enough capacity. Idaho explained that it had storage for fuel but not for treated high level waste. Idaho also explained that the Navy is responsible for its fuel

Oak Ridge commented that the waste volumes at issue were uncertain and questioned whether the group could rely upon available data.

SRS asked about the slow down of building the vitrification facility. An article in the paper indicated that new tanks may be needed. Hanford clarified that its board has not considered new tanks. The board is focused on the vitrification plant.

Fernald asked about a document called a business strategy. Oak Ridge received a copy, and it was distributed to each board. Some board members in attendance had not received the document.

### **Waste Disposition Strategies – Low Level and Mixed Low Level Waste**

Christine Gelles provided a presentation on waste disposition strategies for low level waste (LLW) and mixed low level waste (MLLW). Her presentation included an update on the status of the LLW/MLLW program. She noted that record volumes of LLW/MLLW were disposed in Fiscal Year (FY) 2005, including most of the ‘legacy’ waste and large volumes of ‘orphan’ waste. She reviewed other activities that took place in FY 2005 to address waste disposition. SRS asked about the strategy to use rail transportation and expressed a concern about the quality of the rail system. Gelles replied that transportation is a concern and that EM monitors shipments and has a response team if needed. She agreed that sometimes the problem is with the rail system and not the shipper. SRS commented that the funding for NRC to support a waste determination at SRS is a concern. Gelles noted that the waste determination is a priority for DOE HQ, and that they will address this issue if needed. Hanford asked how legacy waste is defined. Gelles replied that there is not a consistent definition of legacy waste.

In some instances, it is defined as waste that is in storage but has not been disposed. Legacy waste is also defined as waste in existence before a new contractor comes on board. She commented that it generally refers to as waste in storage that is ready for disposal. Oak Ridge commented that the TSCA incinerator is a valid facility, even though it may need to be upgraded. SRS stated that the 'gold metrics' used to report on waste disposition are not consistent across the DOE sites. The metrics also do not indicate if the funding is addressing a higher or lower risk activity. SRS commented that risk reduction should be a key factor in establishing a national strategy for waste disposition. NNM asked how the new data call for waste information from the DOE sites would be reviewed to assure it is complete and credible. Gelles replied that the data call focuses on clean up waste streams based on current cleanup plans of the sites. DOE is trying to build tools that will help them manage their wastes and that will also help with management of future waste volumes. SRS asked if the experts at the DOE sites were involved in the DOE HQ planning. Gelles replied that the experts in the fields were being used. The team working on the project includes members from the sites. Hanford asked what the schedule was for completion of the disposition maps. Gelles indicated that her office has an internal schedule that it tracks. Success in meeting the schedule will depend on the quality of the data received. She is planning to have the disposition strategies laid out by March 2006. Each strategy will be supported by a disposition map and data. SRS commented that the term 'cost efficiency' is misleading. Costs alone do not indicate if risk reduction has been achieved. Effectiveness is also a key. Oak Ridge noted that there are several companies coming to the site to process waste. NTS asked if the briefing could be available electronically. Melissa Nielson will post the briefing on the chairs web site. NNM noted that the CAB chairs had commented three years ago that the waste disposition maps needed to be updated, and it is good to see that this is being done. NNM also asked how the CABs would be involved in commenting on the strategies. Gelles replied that DOE was developing tools that could be responsive to public input. RFP asked if there was a chance that a workshop would be held. Gelles replied that once the tools were developed, it would be up to DOE upper management to decide. Paducah asked whether there was interest in scrap nickel being converted for re-use. Frank Marcinowski replied that DOE has received several letters from Congress expressing interest in re-use of the scrap nickel with the idea of putting any money received back into cleanup at Paducah. The Request for Proposal for cleanup at Paducah includes a request for contractors to make suggestions about how to deal with the nickel. SRS asked if DOE HQ has funding for its disposition strategy program. Gelles replied that there was funding and that the work was being done in large part by the federal employees. Resources have been available for support as needed. Fernald asked if its waste issues would be tracked once the Fernald site is transferred to the office of Legacy Management. Gelles replied that EM would be available as a resource to LM. EM will be responsible to track the silos to disposal. Gelles also demonstrated the web based approach being developed for the waste disposition maps.

### **Waste Disposition Strategies – TRU and High Level Waste**

Frank Marcinowski provided a presentation on disposition strategies for TRU and high level waste. SRS asked how DOE defines the issue of gridlock. Marcinowski replied that gridlock means lack of needed resources as well as absence of a path forward.

Hanford asked how TRU waste buried before 1970 is defined. Marcinowski replied that these issues have to be addressed on a site by site basis. Oak Ridge asked about plans for the permit modification for WIPP to allow WIPP to accept remote handled TRU. Marcinowski provided an update on the permit modification process. Rocky Flats commented that TRU waste generated pre-1970 is the same as that generated after that date and that it should be handled the same. Rocky Flats noted that there is a public perception that the waste is not distinguishable based on the date of generation. NNM commented that it appears there is no policy on pre-1970 TRU waste. Marcinowski noted that there are questions for each site to address in terms of how much to dig up and when. In Idaho, waste is being retrieved under a compliance agreement. SRS commented that an interaction between DOE, EPA, the state and the public is needed to decide how to disposition buried TRU. Idaho expressed concern that retrieved waste could not go to WIPP and asked if there was doubt over this. Marcinowski replied that not everything that is retrieved will need to go to WIPP if it is not TRU. Rocky Flats asked what 11(e)(2) waste is comprised of. Marcinowski replied that this waste is comprised of by-products from uranium processing. Marcinowski addressed concerns previously raised by NTS about classified waste and stated that this waste would be shipped out by the end of the year. NTS asked about drums that had not been assayed. Marcinowski replied that these may be the drums that had security issues and that the work would be completed. RFP asked if WIPP had the capacity for all the buried waste if it were dug up. RFP also asked about the types of transportation incidents encountered last year. Marcinowski provided additional details. NNM noted that a workshop on TRU had been held by the SSABs in February 2003. Marcinowski asked for the recommendations generated from the workshop. Gelles commented that realistic projections of waste to be retrieved are needed once plans are established by each site. This will generate better estimates of wastes involved in disposition planning. SRS commented that it has helped to move the SRS program along as a result of SRS agreeing to take waste from Mound. For every shipment received, 4 shipments of waste must leave SRS. SRS is interested in the same approach for waste currently in storage in Columbus, Ohio. Marcinowski did note that the waste from Columbus is remote handled and that it may not be a good fit for SRS. Idaho asked whether DOE had contingency plans if Yucca Mountain's opening is delayed. Marcinowski replied that DOE was looking at contingencies as far as delays. DOE assumes that Yucca Mountain will be available at some point in time. Delays will involve additional cost, and plans to put the high level waste in storage pending availability are still being followed. Gelles clarified that EM is not the office responsible for determining if an alternative to Yucca Mountain is needed. That is the responsibility of the Office of Civilian Radioactive Waste Management (RW). SRS asked if there is an integration of activities between EM and RW. Marcinowski replied that EM is working closely with RW on the license application to make sure that EM's needs are included. Idaho commented that the Idaho site has an empty facility that had been used to store special nuclear material and asked whether there were plans to use this facility for other site's waste, such as Hanford's plutonium. Marcinowski replied that there was some discussion being initiated about these concepts. SRS commented that it was difficult to get information from DOE on plans for plutonium due to security issues. Marcinowski stated that when a strategy was developed it would not be a classified document. NNM asked if a workshop on these

issues would benefit DOE. Marcinowski replied that a workshop could be focused on a specific waste type. The topic of waste disposition is a very broad category and may be difficult to handle. Hanford suggested that pre-1970 buried waste should be addressed programmatically across the complex. Marcinowski replied that he thinks this is underway. GAO is beginning to study pre-1970 TRU waste and this report may lead to action.

### **Communications Protocol**

Melissa Nielson described the communications protocol proposed for communications between EM and the SSABs. NNM recommended that communications go to the support staff for the CAB and the DDFOs. Nielson expressed reluctant to send documents to support staff out of concerns about directing the contractors. Doug Frost suggested that each SSAB designate one person in addition to the chair and the DDFO. Paducah commented that the administrator should receive communications. It was determined that each board will submit their contact information to Nielson to be used for communications.

Next the communications from SSABs to EM was discussed. Nielson requested that any communications from SSABs to DOE-HQ include her office on distribution.

Hanford asked how integration with other groups involved in DOE issues would be accomplished. Frost responded that he would like to involve more SSAB members in meetings with other groups. Frost will also bring various groups together to meet. He would like to work with the SSABs to figure out how to involve them. As a first step, the SSABs will be informed of an upcoming meeting of the intergovernmental groups in November. Hanford asked to be provided a list of all upcoming meetings. In response to a question from Paducah, Nielson explained the mission and make-up of the Environmental Management Advisory Board (EMAB). Oak Ridge commented that the EMAB had not been active in the last two years and that it was good to see that it was being revitalized. Fernald commented that the EMAB needs to be energized and that there would be benefit to interaction between EMAB and the SSABs. Jay Vivari demonstrated how to find the EM SSAB web site.

### **Waste Disposition Issues Discussion**

The participants identified waste disposition issues, possible solutions and how SSABs could help.

The issues are:

- pre-1970 TRU waste;
- Yucca Mountain;
- WIPP capacity/RH permit modification;
- SNM consolidation;
- tanks; and
- wastes with unknown paths.

Solutions identified by the group are:

- a comprehensive national strategy for pre-1970 TRU;

- DOE HQ commitment to make disposition decisions;
- technology development; and
- Board support for the RH permit.

An overarching concern is that adequate funding be assured to conduct waste disposition.

Ways that the SSABs can assist on these issues and solutions were identified:

- take a leadership role in public involvement;
- coordinate efforts with other national stakeholder groups;
- help identify a policy for pre-1970's TRU waste;
- share technology information;
- share lessons learned on waste disposition problems and solutions.

The group discussed what it should say to DOE. There is an opportunity to provide input by means of a response to two letters from DOE to the SSABs regarding waste disposition. Concerns were raised that the input not be too specific. Participants from Hanford, SRS and NNM will draft a proposed letter for the group to consider.

**Friday, September 23, 2005**

### **Top Issues of Each SSAB**

#### SRS

Plutonium Storage/Disposition

- This is a major issue
- The other top issues of high level waste and TRU waste are similar to the issues presented as waste disposition issues

#### RFP

Confidence in the Cleanup that has been completed

- The RFP board still has concerns about confidence in the cleanup
- It is important to present information on cleanup that is understandable to the general public
- RFP CAB has worked with a local company on a communications project to try to improve its communications

Future public participation

- It is not known how a Local Stakeholder Organization will be organized and whether it will include representation from the general public and opportunities for public participation

Loss of site expertise

- The CAB is concerned about loss of personnel who understand the site when regulatory closure activities are still scheduled

#### Paducah

The extended procurement process

- Paducah has experience significant delays in the selection of a new cleanup contractor
- There are concerns this will impact the pace of cleanup

Groundwater remediation

- There is uncertainty about the extent of groundwater remediation that will be undertaken beyond source removal

D&D of the site as it relates to reindustrialization

- DOE is studying whether contaminated property should be purchased and made available for reindustrialization

### Oak Ridge

Site Cleanup

- Cleanup is going fairly well at the site. D&D of the East Tennessee Technology Park is an issue. Fissile material extraction may be a problem. Building K 25 also contains asbestos and other possible contaminants
- The buildings will be disposed in the on-site CERCLA waste facility
- Another concern is management of the CERCLA waste facility. The SSAB is concerned about how waste will be placed in the facility
- The SSAB is also involved in historical preservation issues

Stewardship

- There is concern about how long term stewardship will be conducted at sites that have on-going missions

Additional scope for EM at Y-12 and ORNL

- Congress did not favor the idea of transferring all activities outside of EM. Additional work by EM at the site is anticipated, but the extent is not certain.
- Another issue is the approach to verifying that cleanup has been completed so as to allow other activities at the site

### NNM

Protection of groundwater

- There is concern that the recently signed consent order between NMED and the site will be protective of groundwater
- Many wells have been installed on the site over the past 7 years. There are questions about the reliability and representativeness of samples taken from wells that are not flushed before samples are taken
- The Board has asked EPA to assist in evaluating this question

Funds available for cleanup under the consent order.

- Cleanup is expected to cost more than current planning budgets
- It is unrealistic to plan a completion date of 2015

Long term waste management strategy.

- The board hosted a forum on Area G, and one of the concerns of the public was the future of the pre-1970's TRU waste and whether it will be retrieved. NNM provided each chair with a CD that captures the proceeding of the forum
- Capacity for disposal of D&D waste is also a concern

## NTS

Groundwater monitoring

- Extensive underground nuclear tests were conducted at NTS, and monitoring over 1300 square miles may be needed
- The CAB is involved in studying the plumes and the hydrogeologic properties of the site
- The CAB requested an independent peer review of DOE's plans, which DOE agreed to do
- DOE has challenged the CAB to provide recommendation on well siting, and the CAB recommended certain areas of concern for monitoring
- The CAB is preparing a comprehensive white paper, based upon three years of briefings and studies
- The CAB also provides status reports to interested stakeholders
- The CAB has a good working relationship with DOE

Funding

- The budget is small and any reduction would affect cleanup

Stakeholder involvement

- There will be a continuing need for stakeholder involvement as sites transfer from EM

## Idaho

Tank closure

- The program is moving along but there are concerns about treatment of remaining liquid waste, whether the waste can go to WIPP, and how the soils will be cleaned up
- These problems should be solvable, but the CAB will be watching

Details of cleanup under a plan being formulated by the new cleanup contractor

- The CAB wants to make sure that what is left behind will be safe
- The CAB will focus on details related to buried waste and the plans for a facility for packaging and storing spent nuclear fuel

Long term plans for cleanup.

- The current contractor is focused on what it can complete by 2012
- Further cleanup activities will be needed after that time

## Hanford

Cleanup of the central plateau area of the site

- This is the area where many hazardous operations took place
- The CAB has been trying to understand the issues
- One question is the risk assessments and NEPA documents used to make decisions on cleanup. The data may be insufficient, and errors in the data have been identified
- There are also inconsistencies between NEPA analyses, such as conflicts over groundwater flow and different assumptions about factors related to risk
- Delays in NEPA documents have also hampered the process
- The CAB is concerned about the impacts on waste treatment due to budget issues.
- DOE must address security issues due to a new threat basis that has been established, and cleanup workers are being laid off so security officers can be hired
- The tank waste is a major challenge. Costs are increasing on life cycle construction by about 100%, while funding is being reduced by about 10%. There are also challenges because the plant was built as it was being designed. This has required a lot of rework. The plant may not meet all the treatment standards needed for the waste
- All the contracts on the central plateau will be completed by the end of next year, and the CAB hopes that DOE is working on a plan to replace these contractors
- The board is concerned that real cleanup will stall at the site

## Fernald

Natural Resource Damages

- Fernald's top issue is settlement of a natural resource damages claim
- A court date is set on a law suit in 2006

Transition of the site from EM to Legacy Management (LM) in April 2006

- There are concerns about data, institutional knowledge, and transition of the CAB to a local stakeholder organization (LSO)
- There is fear that the public participation process will be lost. The CAB is working through these issues and will have more to report at the next meeting

## **Group Review of Draft Letter regarding Waste Disposition Issues**

The group reviewed a letter drafted to send to EM-1 and made some changes. They discussed the concerns of the NTS CAB that a high level waste repository is outside of that CAB's charter. The letter was revised and the chairs agreed to provide the letter to their respective CABs and seek their approval to sign the letter.

## **Long Term Stewardship**

David Kipping, Chair of the Idaho CAB, provided a presentation on long term stewardship at the Idaho site. He related that the CAB had been involved with the issue for several years and had early input to the development of the plans for long term

stewardship at Idaho. Mark Shaw, DOE-ID, provided a presentation on the INL Site's Long Term Stewardship Program. Oak Ridge asked how Idaho was funding its activities. Shaw replied that many of the activities are related to requirements in Records of Decision (RODs). Kipping commented that it is funded by EM until cleanup is completed. Then the program will become the responsibility of the Office of Nuclear Energy (NE). Oak Ridge commented that it was a good idea to have a program in place before cleanup is completed.

### **Next Chairs Meeting**

Oak Ridge volunteered to host the next chairs meeting in April 2006. One topic of interest will be the national disposition strategy for LLW/MLLW if the document is available by then. The meeting may be extended to address this topic. Shelly Cimon, J.D. Campbell, Ken Korkia, Jerry DePoorter, Doug Frost, Melissa Nielson, Norman Mulvenon, and Paducah volunteered to assist on formulating the agenda for the meeting. One or two Oak Ridge support staff members will also help. NNM volunteered to host the chairs meeting in the fall of 2006.

### **Public Comment**

Jay Vivari commented that he will retire next week and stated it has been an honor and a privilege to work with the boards.

### **DOE Organizational Update**

Melissa Nielson noted that the top management at EM were now in place. The DOE funding for FY 2006 will be covered under a continuing resolution until Congress acts. Beginning with the 2007 budget for EM, it will be broken down by DOE site. She noted that EM-1 would like to attend the next chairs meeting in Oak Ridge if his schedule allows.

Norm Mulvenon asked DOE to clarify a recent letter that indicated that the chairs recommendations on public participation from the last meeting were outside the scope of the SSAB charter. Doug Frost indicated that the SSAB charter is to provide advice on EM issues. The recommendations on public involvement extended beyond the office of EM to other offices within DOE. Thus, DOE viewed the recommendations as beyond the scope of EM. Nielson stated that the EM program wants the CABs to stay focused on EM issues.

# **National Low-Level/Mixed Low-Level Waste Disposition Strategy**

**Christine Gelles**

Director, Office of Commercial Disposition Options  
Office of Environmental Management



Site Specific Advisory Board Chairs Meeting  
22-23 September 2005

# *Discussion Outline*

## ❖ LLW/MLLW Programmatic Update

- Complex-wide
- Site highlights

## ❖ National LLW/MLLW Disposition Strategy

- Calls to Action
- Overview of Approach
- Accomplishments and Next Steps



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## *Low-Level Waste Program Update – Complex-wide*

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- ❖ Record volumes of LLW/MLLW disposed in FY 2005
  - LLW to NTS
  - LLW/MLLW (<10nCi/g) to Envirocare
  - Lesser volumes to LANL, Barnwell, Ecology
  
- ❖ Most “legacy waste” inventories disposed
  
- ❖ Large volume “orphans” resolved
  
- ❖ Off-site shipments to Hanford remain suspended pending legal ruling(s)
  
- ❖ Path forward identified for regional MLLW disposal operations at Nevada Test Site (NTS) in FY 2006
  - Pending Nevada State approval of site’s RCRA permit renewal
  - Accelerated closure of Mixed Waste Disposal Unit



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## *Low-Level Waste Program Update – Complex-wide*

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- ❖ Commercial processors becoming NTS certified
- ❖ Limited volumes of LLW/MLLW placed in short-term interim storage
- ❖ Use of rail transport increased
- ❖ Extension of TSCA Incinerator planned
- ❖ 1<sup>st</sup> joint DOE-DOD conference “FEDRAD” held
  - DOE workshops on orphan waste streams and data needs
- ❖ Greater than Class C (GTCC) Disposal EIS initiated
- ❖ Commercial disposal licenses and changes in development
- ❖ GAO reviewed LLW disposal costs; Congress directed report
- ❖ Corporate life-cycle waste data collection resumed



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# *Low-Level Waste Program Update – Site Highlights*

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## ❖ **Rocky Flats**

- Higher activity MLLW “orphan” resolved
- Site Treatment Plan closed
- Approximately 3 trains of waste remain

## ❖ **Fernald**

- Waste pits completed!
- Silo 3 residues being treated and disposed
- Silo 1 & 2 treatment facility attaining steady state
  - Shipped for interim storage
  - Commercial disposal license expected mid FY 2006
- Increased off-site disposal to optimize schedule

## ❖ **Mound**

- Significant increases in waste volumes
- Over 1.2M cubic feet to be disposed in next six months

## ❖ **Columbus**

- Waste volumes greater than expected, but work-arounds identified
- Low activity debris transferred/released to landfill disposal
- Most orphans resolved through federal/commercial partnering



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# *Low-Level Waste Program Update – Site Highlights*

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## ❖ **Ashtabula**

- ID/IQ contract to be awarded soon; includes significant waste volumes

## ❖ **Brookhaven**

- Banner year for disposal – shipped 3x more waste than FY 2004
- Completed Peconic River sediment removal project
- Identified alternative disposal sites for LLW/MLLW
- Resolved small volumes orphans (Janus Plantes, radium sources)

## ❖ **West Valley**

- Published Waste Management ROD and resumed higher activity waste disposal
- Rail shipments to begin FY 2006

## ❖ **Oak Ridge -ETTP**

- Disposed nearly all legacy wastes consistent with contract goals
- Completed comprehensive MACT performance test at TSCA Incinerator
  - Decisions pending on continued operations

## ❖ **Idaho**

- Great progress in MLLW treatment
- New contract in place and new baseline under review



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# *Low-Level Waste Program Update – Site Highlights*

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## ❖ **Savannah River**

- Completed treatment of depleted uranyl-nitrate tanks
- Waste determinations under review by NRC

## ❖ **Richland**

- Construction of Integrated Disposal Facility continues
- Increased use of Environmental Restoration Disposal Facility for on-site wastes
- Revised acceptance criteria to reflect approved de-listing petition

## ❖ **Portsmouth**

- New remediation contract in place, disposal activity increasing
- Significant volumes require treatment at TSCA Incinerator

## ❖ **Paducah**

- NTS certification restored and shipment resumed
- Redirected NW Scrap Pile to commercial disposal
  - Envirocare on site supporting packaging and waste preparation
- New remediation contract still pending

## ❖ **Moab**

- Published Final EIS and ROD – Tailings pile to be removed and disposed



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# *Low-Level Waste Program Update – Site Highlights*

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## ❖ *Nevada Test Site*

- Record LLW volumes received
- Absolutely critical to continued EM cleanup and DOE missions
- Completed self-reviews to improve operations and optimize

## ❖ *Other DOE Sites*

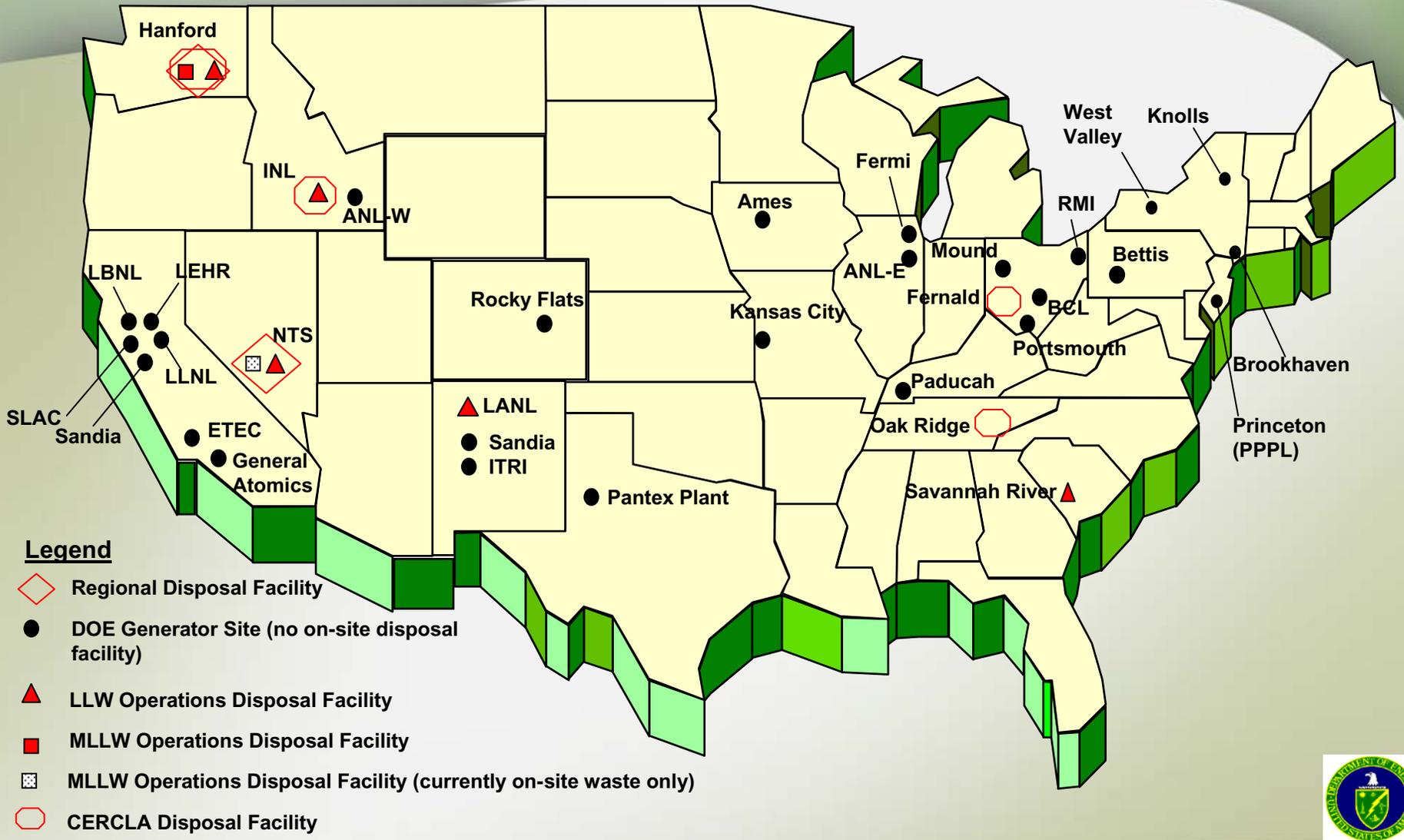
- **LANL** – Increasing integration with other sites and agencies
- **National Labs** – Finding alternate disposal sites to maintain progress



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# DOE's LLW/MLLW Waste Disposal Facility Configuration



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*Use of commercial capabilities allows optimization of resources and supports acceleration efforts*

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- ❖ Treatment and packaging
- ❖ Certification to disposal criteria
- ❖ Interim storage
- ❖ Disposal
- ❖ Transfer for future release and disposal
- ❖ Support for accelerated site closure

**In many cases, the resolution of waste issue requires cooperation among multiple vendors and sites**

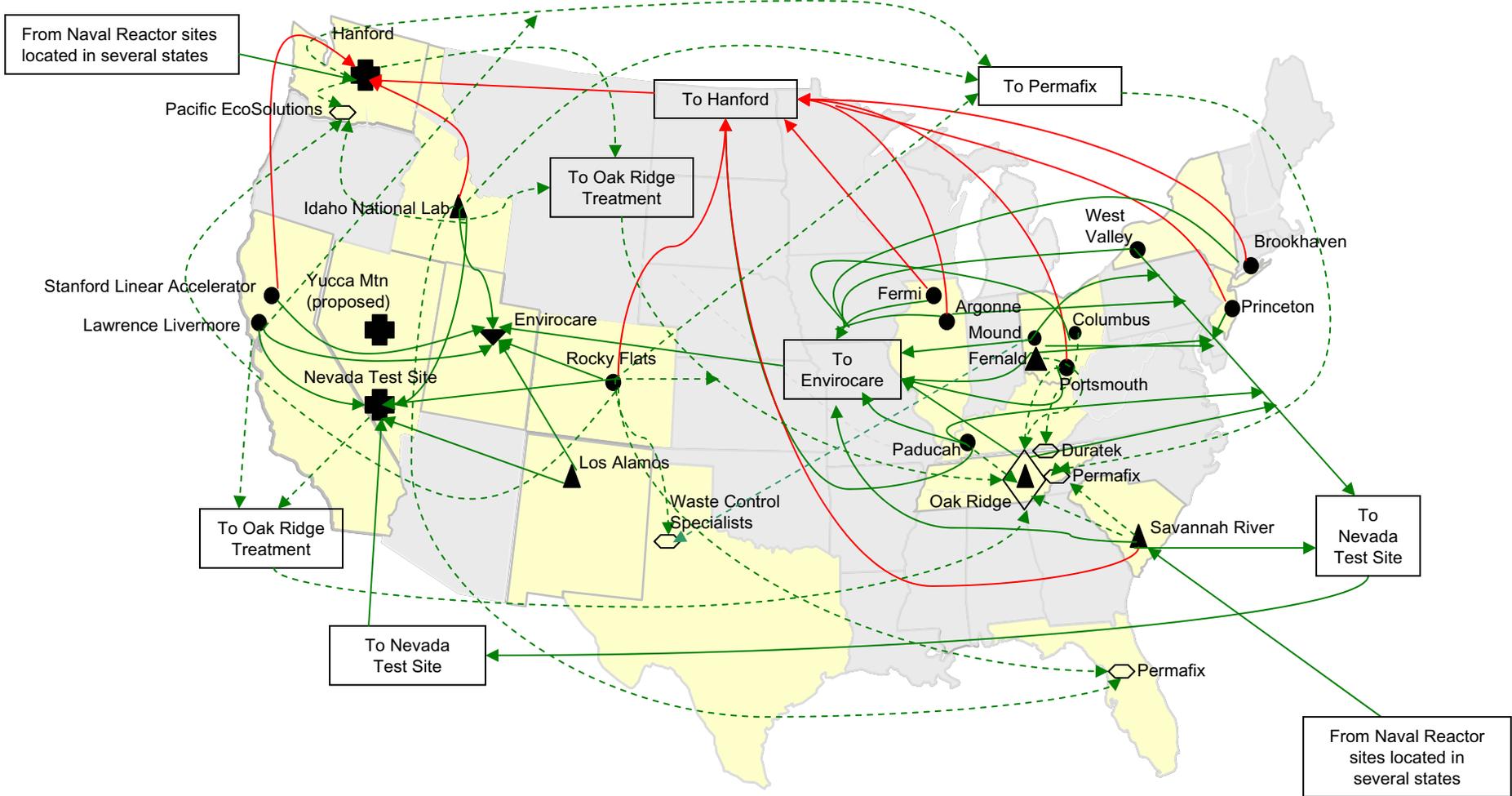


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# Major LLW/MLLW Waste Transfers (includes commercial facilities)

Shipment lines do not portray actual transportation routes. This map is not inclusive of all past or planned shipments.



◇ DOE Offsite Radioactive Waste Treatment Facility	◻ Commercial Radioactive Waste Treatment Facility	Low-Level Waste/Mixed Low-Level Waste Disposal Shipment →
● DOE Generator Site (no on-site disposal facility)	▼ Commercial Radioactive Waste Disposal Facility (Note: Envirocare also treats waste)	Suspended Low-Level Waste/Mixed Low-Level Waste Disposal Shipment →
▲ DOE Onsite Radioactive Waste Disposal Facility		Low-Level Waste/Mixed Low-Level Waste Treatment Shipment - - - - - →

## *LLW/MLLW Issues*

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- ❖ Disposal volumes will decrease in FY 2006
  - “Tough stuff remains”
- ❖ Disposal capacity for higher activity MLLW is limited
- ❖ Classified MLLW treatment and disposal challenges
- ❖ Continued operation of TSCA Incinerator
- ❖ Waste issues are the critical path for most closure sites
- ❖ *GAO identified concerns on guidance and oversight of LLW management*
- ❖ Opportunities exist to better integrate commercial contracts
- ❖ Policy issues pending related to Texas Compact Facility
- ❖ Need to preserve balance between Federal and commercial markets



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# *GTCC EIS Overview*

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- ❖ Low-Level Radioactive Waste Policy Act assigns DOE statutory responsibilities for GTCC disposition
- ❖ Energy Policy Act of 2005 includes new provisions on GTCC radioactive waste
  - Cost and schedule plan to Congress for completion of EIS and record of decision due within 1 year (EM lead)
  - Report to Congress on recommendation and alternatives for disposal before final decision
  - Await action by Congress on report before decision
  - Short-term plan for continued recovery and storage of sources (NNSA lead)
- ❖ Advance Notice of Intent published – May 2005
  - Comments received and under review
- ❖ Requested commercial expressions of interest
  - Three received
- ❖ Notice of Intent to be published by end of CY 2005



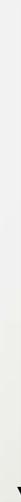
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# *EM planning has evolved*

- **Site Roadmaps/ 5-Year Plans**
- **Baseline EM Reports**
- **FFCAct Implementation**
- **Paths-to-Closure**
- **EM Integration**
- **Top-to-Bottom Review**
- **Lifecycle Site/Project Baselines**
- **National Disposition Strategies**

**1990**



**Today**



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# National LLW/MLLW Disposition Strategy

“The whole is greater than the sum of its parts.”



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# *Calls to Action*

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- ❖ Dec 2003 – EM Reorganization mission statements
  - EM Headquarters to develop “national business cases” based on comprehensive cost-benefit analyses and that recommend the most efficient and effective disposition solutions
- ❖ Nov 2004 – SSAB Chairs’ proposal to EM
  - “Sponsor a national forum to produce technical sound, fiscally responsible, politically acceptable, sustainable and comprehensive solutions to DOE’s system-wide waste and material disposition challenges”
- ❖ June 2005 – Western Governors Association Resolution 05-23
  - “Define an integrated cleanup plan which equitably addresses the cleanup and disposition needs of the site with the cumulative impact on states with treatment, storage and disposal facilities”
  - “Integrate sites into a national program rather than serve as the coordinating agent for autonomously operated sites”
- ❖ Aug 2005 – Appropriation Committees
  - Requested waste and material disposition maps be included within the Five-Year Plans submitted with FY 2007 Congressional Request
- ❖ Continuous – Market influences



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# *“Requirements” of the National Strategies*

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- Values
- Principles
- Common sense
- Priority setting criteria
- Define issues and barriers
- Address current and future wastes
- Recommend solutions
- Define resolution process
- \* **Technically sound**
- \* **Fiscally responsible**
- \* **Sustainable**
- \* **Politically acceptable**
- \* **Inclusive**
- Minimize worker exposure
- Minimize waste handlings and transfers
- Compliant, risk-based disposal
- Minimize waste volumes and packaging
- Optimize transportation
- Economies of scale
- Opportunities for cost and schedule efficiencies
- Gap analysis
- Risk assessment
- Contingency plans
- Formal and manageable
- \* **Credibility**



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## *Rely on basic project management theory*

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- ❖ Document the scope, schedule and cost of waste disposition efforts
- ❖ Design effort to meet defined needs
  - We need NOT duplicate existing efforts
- ❖ Provide discipline, formality and structure
  
- ❖ **But**, control complexity and avoid rigidity

**Cleanup projects require flexibility.**

**The waste management system must be agile and able to respond to sudden changes and dynamic circumstances.**

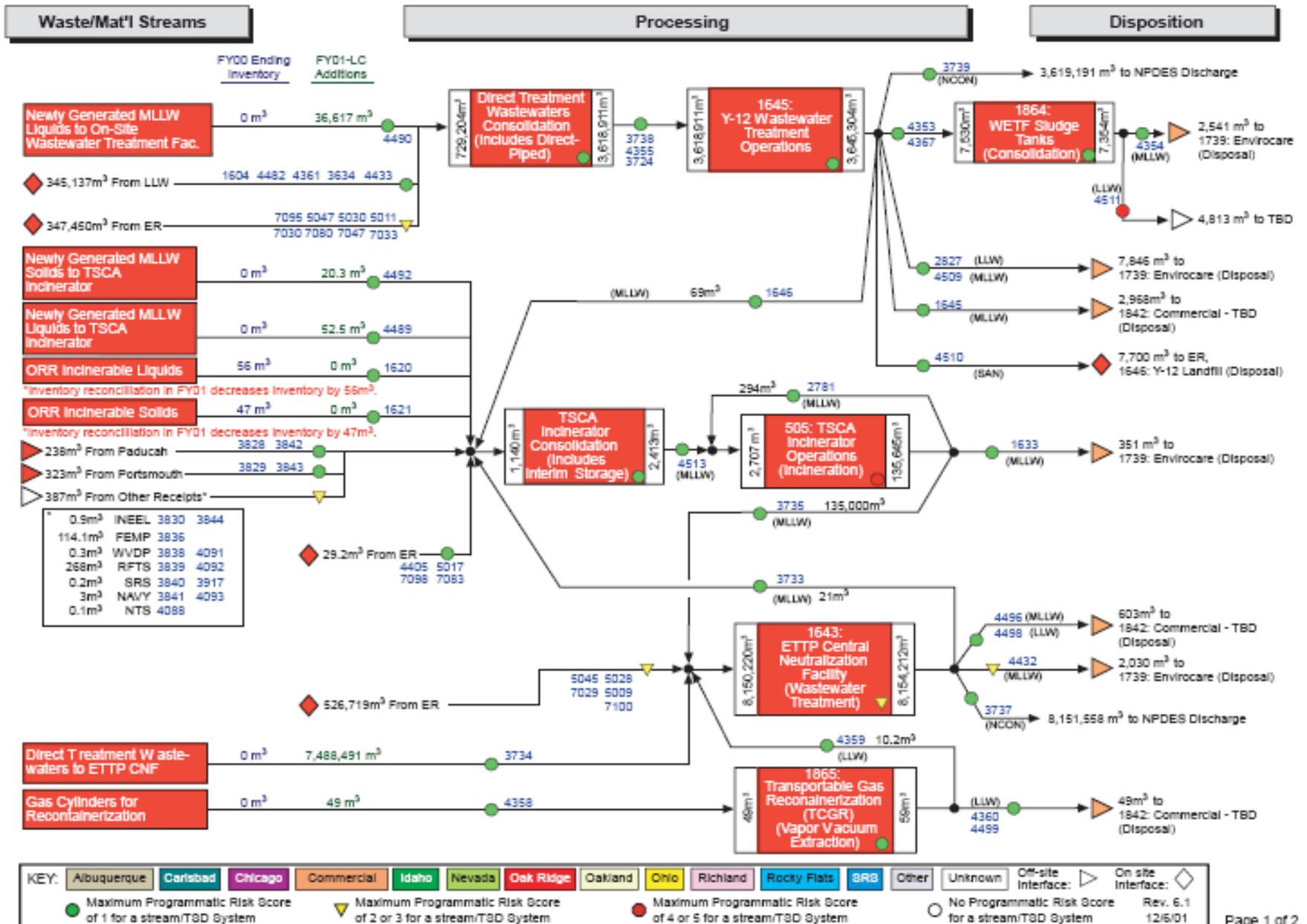


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This map is conceptual and in many cases does not represent cleanup or transfer decisions; this map does not preclude the on-going regulatory and stakeholder decision-making processes.

# Oak Ridge MLLW Disposition Map



## *What went wrong with the last corporate waste system?*

---

- ❖ “One shoe-sized to fit all”
- ❖ Many, many data requirements
- ❖ Data suppliers often not project managers
- ❖ Extensive work for “stop lights”/risk scores
- ❖ Expensive and time consuming to manage
- ❖ Streams split between budget accounts (PBSs)
- ❖ Rollup of waste stream data to a level not useful by the site project managers

**We are taking great pains to avoid these mistakes.**



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## *What went well?*

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- ❖ Disposition maps and flow diagrams - liked by stakeholders
- ❖ Inventory and lifecycle waste forecast
- ❖ Reconciled disconnects between shipping and receiving sites
- ❖ Consistent format and approach
- ❖ Electronic data transfer
- ❖ Used for program decisions (WM PEIS)



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## *What we have done...*

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- ❖ Documented our “mission need”
  - Reviewed previous efforts and solicited input
- ❖ Designed our approach
  - First, define scope – waste data and site baseline plan
  - Second, develop schedule – site schedules and integrated schedule
  - Then, conduct analysis of cost and risk
  - And, develop contingency and optimization plans
- ❖ Conducted FEDRAD – May 2005
  - Discussed sites waste challenges
  - Began design of new data system
  - Distributed initial narrative summary of the National LLW/MLLW Disposition Strategy document
- ❖ Developed the “waste breakdown structure” to define level of detail needed



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## *What we have done...*

---

- ❖ Conducted data workshop – Aug 2005
  - Requirements document sent to field
  - Data call in October; due in November
- ❖ Designed platform for new waste disposition map
  - Waste Information Management System (WIMS)
  - <http://wimsweb.hcet.fiu.edu/wims>



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## *...and what we have left to do*

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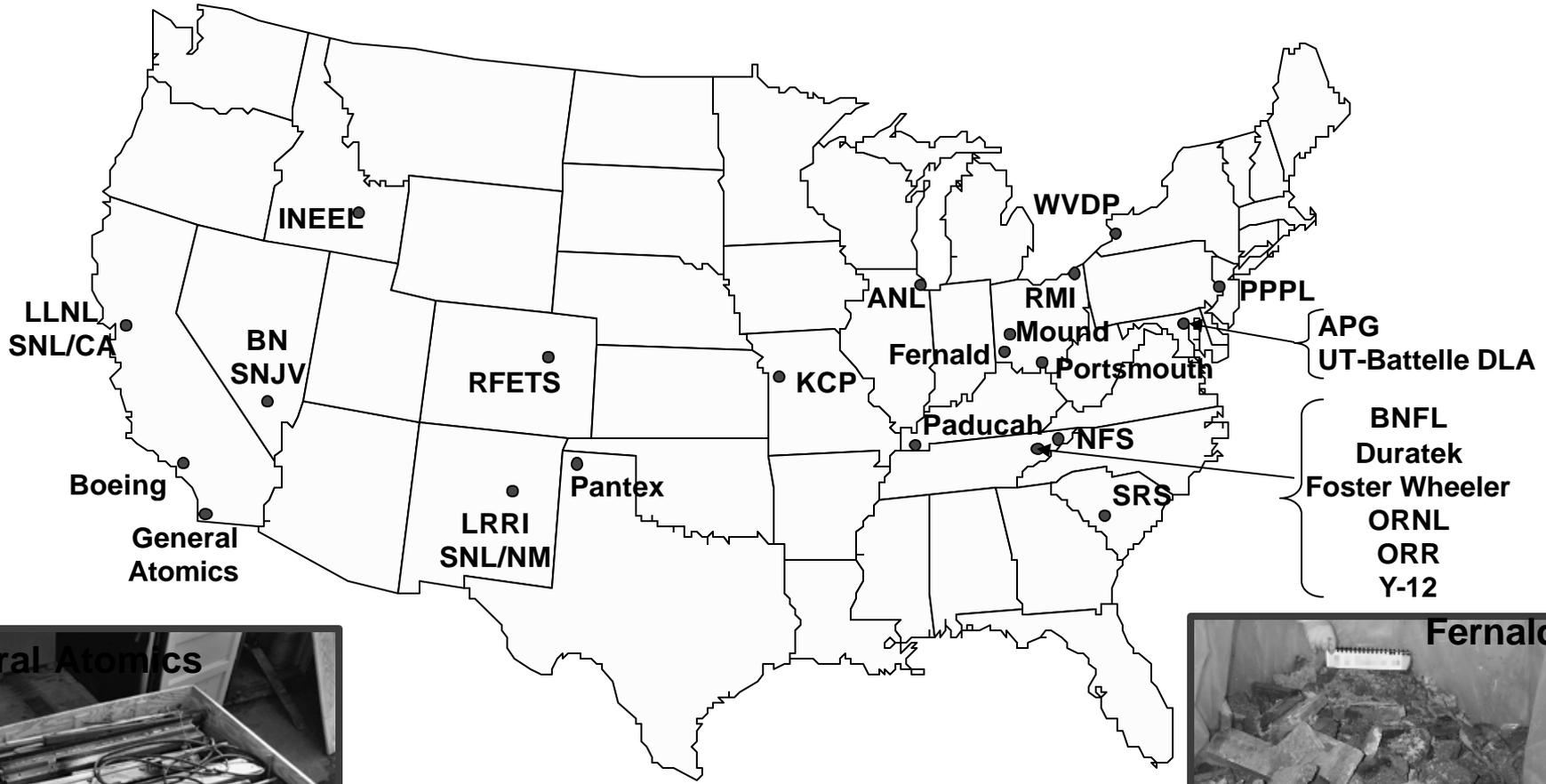
- ❖ Analyze new data and produce disposition maps
  - High-level maps for FY 2007 Budget Request
  - Web-based maps in “WIMS”
- ❖ Complete schedule development and conduct gap analysis
  - Phase 1: Hanford, Savannah River, Idaho, Fernald, Mound, Paducah and Portsmouth
  - Phase 2: Balance of EM work scope
- ❖ Complete policy analysis
  - Review existing guidance
- ❖ Conduct risk assessment and develop contingency plans
- ❖ Develop methodology for cost analysis
- ❖ Incorporate comments to Draft National Strategy summary
- ❖ Conduct formal review of 1<sup>st</sup> National LLW/MLLW Disposition Strategy



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# NTS Approved LLW Generators



**LEGEND**

● NEVADA TEST SITE APPROVED GENERATORS



**30 generators are currently approved to ship LLW to the NTS**

# **Update on DOE's National Waste Disposition Plans**

**Frank Marcinowski**

Deputy Assistant Secretary for Logistics and Waste Disposition Enhancements  
Office of Environmental Management



Site Specific Advisory Board Chairs Meeting  
September 22-23, 2005

# *Discussion Outline*

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- ❖ DOE Waste Management Policy, Plans and Assets
- ❖ National Disposition Strategies
- ❖ Program Updates by Waste Type
  - Low-Level Waste /Mixed Low-Level Waste (LLW/MLLW)
  - Transuranic waste (TRU)
  - Spent nuclear fuel (SNF) and high-level waste (HLW)
  - Special nuclear material (SNM)
  - Other waste types



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# *Overview of DOE Disposition Efforts*

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- ❖ Majority of waste disposition efforts within DOE are responsibility of Environmental Management (EM)
  - Major waste management facilities managed by EM
  - Planned transfer of cleanup activities at NNSA sites likely delayed
  
- ❖ EM project is well defined with controlled scope, cost and schedule
  
- ❖ EM scope includes remediation and processing of approximately:
  - 25 tons of plutonium
  - 108 tons of plutonium residues
  - 88 million gallons of radioactive liquid waste
  - 2,500 tons of spent nuclear fuel
  - 137,000 cubic meters of transuranic waste
  - 1.3 million cubic meters of low-level waste
  - 324 nuclear facilities, 3,300 industrial facilities, hundreds of radiological facilities



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# *DOE/EM Waste Management Policy (DOE Order 435.1)*

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## ❖ LLW and MLLW:

- If practical, disposal on the site at which it is generated
- If on site disposal not available, at another DOE disposal facility
- At commercial disposal facilities if compliant, cost effective, and in best interest of the Department

## ❖ TRU waste:

- If defense TRU, disposed at Waste Isolation Pilot Plant, Carlsbad, New Mexico
- If non-defense TRU, safe storage awaiting future disposition

## ❖ HLW and SNF

- Stabilization, if necessary, and safe storage until geologic disposal is available



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# *DOE's Waste Management Assets*

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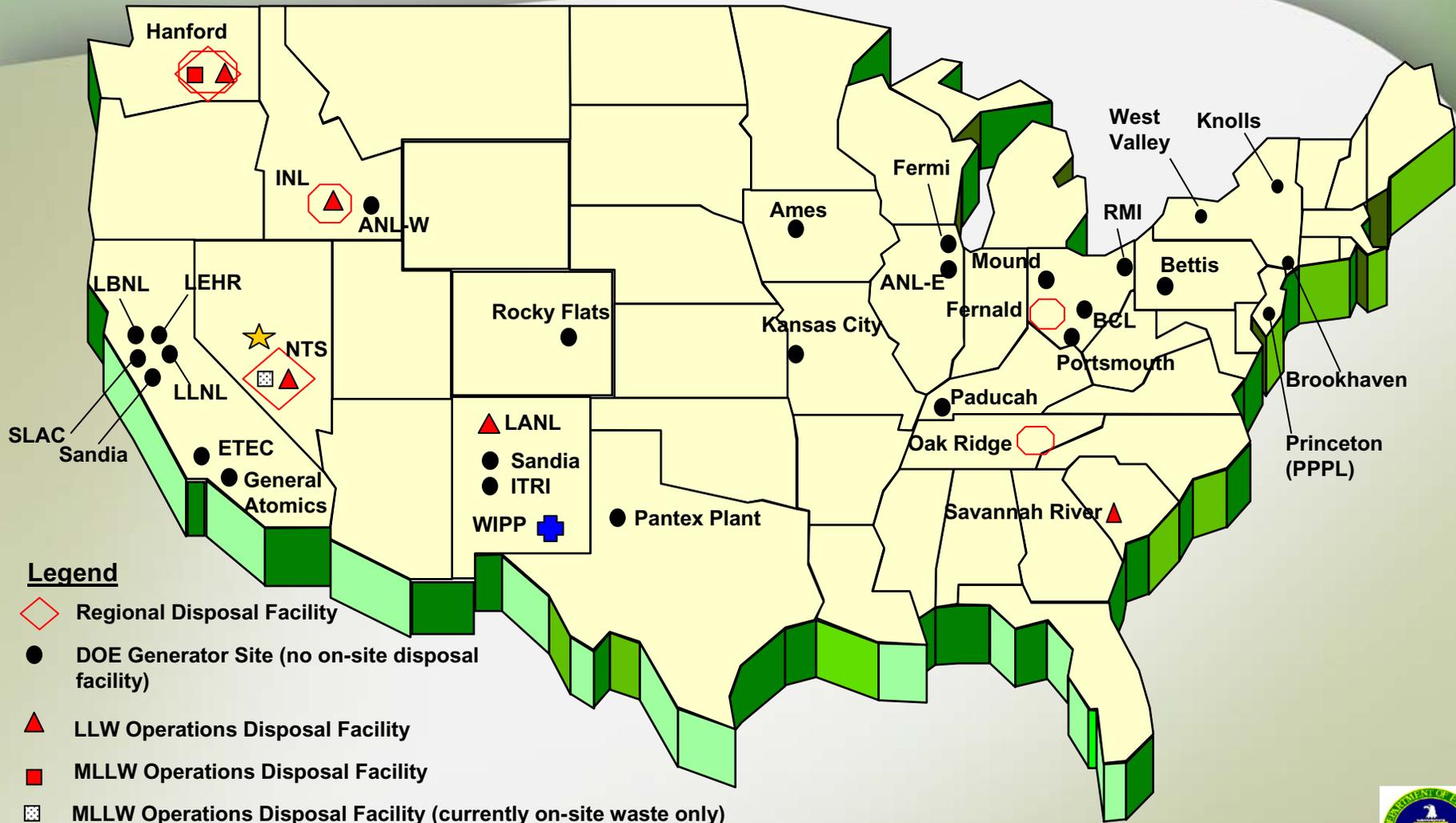
- ❖ Multiple onsite disposal cells (mostly CERCLA) for site-specific remediation wastes
- ❖ Two regional LLW/MLLW disposal facilities – Hanford and Nevada Test Site (NTS)
  - *Hanford currently limited to onsite LLW and MLLW*
  - *NTS currently limited to regional LLW operations; regional MLLW disposal operations to begin in FY 2006*
- ❖ National repository for defense TRU waste – WIPP (Carlsbad, NM)
- ❖ TSCA Incinerator (Oak Ridge, TN)
- ❖ However, EM also disposes of large volumes of LLW and MLLW at commercial facilities



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# DOE's Waste Disposal Facility Configuration



## Legend

- ◇ Regional Disposal Facility
- DOE Generator Site (no on-site disposal facility)
- ▲ LLW Operations Disposal Facility
- MLLW Operations Disposal Facility
- MLLW Operations Disposal Facility (currently on-site waste only)
- ⬡ CERCLA Disposal Facility
- + Waste Isolation Pilot Plant (WIPP)
- ★ Planned geologic repository

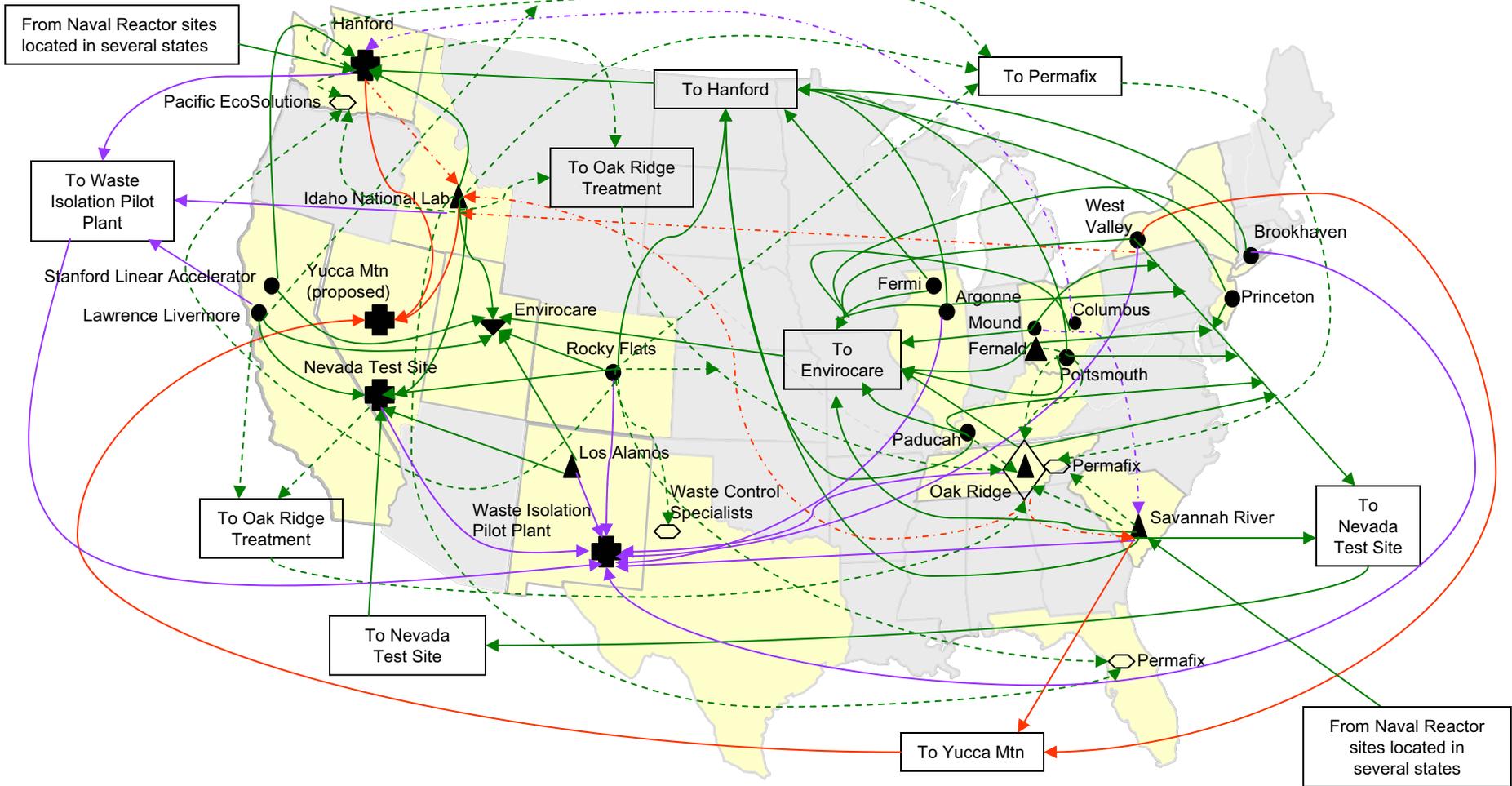


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# Major DOE Radioactive Waste Transfers (includes commercial facilities)

Shipment lines do not portray actual transportation routes. This map is not inclusive of all past or planned shipments.



<p>Transuranic Waste Disposal Shipment →</p> <p>Transuranic Waste Processing/Storage Shipment - - - - - →</p> <p>● DOE Generator Site (no on-site disposal facility)</p> <p>▲ DOE Onsite Radioactive Waste Disposal Facility</p>	<p>Spent Nuclear Fuel/High-Level Waste Disposal Shipment →</p> <p>Spent Nuclear Fuel Storage, Treatment, or Repackaging Shipment - - - - - →</p> <p>■ DOE Offsite Radioactive Waste Disposal Facility (NTS and Hanford are also generator sites and dispose of some waste onsite)</p> <p>◇ DOE Offsite Radioactive Waste Treatment Facility</p>	<p>Low-Level Waste/Mixed Low-Level Waste Disposal Shipment →</p> <p>Low-Level Waste/Mixed Low-Level Waste Treatment Shipment - - - - - →</p> <p>▼ Commercial Radioactive Waste Disposal Facility (Note: Envirocare also treats waste)</p> <p>◻ Commercial Radioactive Waste Treatment Facility</p>
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## National disposition strategies

- ❖ Ensure disposition paths are identified for all EM waste and materials
- ❖ Provide and coordinate disposition resources
- ❖ Optimize operations of DOE's waste management facilities
- ❖ Improve EM's transportation infrastructure and ensuring all shipments are completed safely and compliantly
- ❖ Identify opportunities for acceleration and efficiency
- ❖ **Respond to dynamic circumstances**
- ❖ **Address “gridlock” and obstacles**



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# *National strategies are project management tools*

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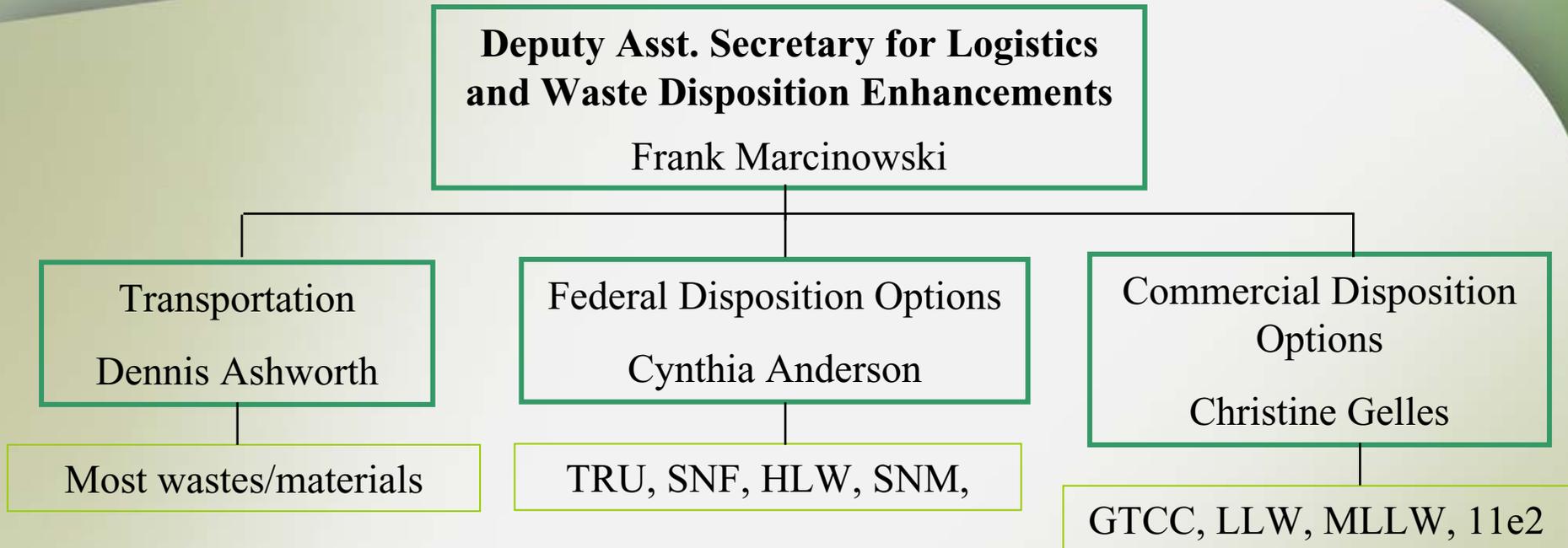
- ❖ Provide discipline, formality, and structure
- ❖ Document, at a complex-wide level, the scope, schedule and cost of waste disposition efforts
- ❖ Built for each major waste type
  - LLW/MLLW (includes Greater-Than-Class C (GTCC) and by-product material)
  - Transuranic waste (TRU)
  - Spent nuclear fuel (SNF)
  - High level waste (HLW)
  - Special nuclear materials (SNM)
  - Other waste types
- ❖ Details tailored for each type, according to project complexity and risk



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# *Integration is focus of the EM-10 organization*



- Developing national strategies – business cases – for transportation and waste/material disposition
- Integrating sites' parallel efforts to accelerate cleanup
- Enabling and improving on baseline plans



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# *Disposition accomplishments in FY 2005*

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- ❖ Significantly increased volumes disposed while reducing transportation incident rate
  - Incident rate 35% below FY 2004 rate!
- ❖ Worked off vast majority of stored legacy waste
- ❖ Completed TRU waste and MLLW shipments from Rocky Flats
- ❖ Completed TRU waste shipments from Mound (to SRS)
- ❖ Completed removal of all legacy TRU waste from Brookhaven National Laboratory and U.S. Army Material Command
- ❖ Resolved large quantities of “orphan wastes” at closure sites
  - Identified commercial receiver sites for Fernald Silo residues



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# *Transportation safety is critical – and is improving!*

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❖ In FY 2004, EM had 23 reported off-site incidents.

– Most significant incident was the release of radioactive material onto road surfaces at Oak Ridge (penalties assessed against subcontractor)

– Other areas of concern -- load securement and shipping paper violations

❖ In FY 2005 year-to-date, EM has had 15 reported incidents

– Each incident is reviewed

– Corrective actions and lessons learned shared among sites



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## *Program Updates – LLW/MLLW*

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- ❖ Stores of legacy waste nearly disposed
- ❖ Planned start of regional MLLW disposal operations at NTS in early 2006
- ❖ Commercial waste processors obtaining NTS certification
- ❖ Extension of TSCA Incinerator operations
- ❖ Congressional direction to report on life-cycle cost of waste disposal
- ❖ Increased cooperation among Federal agencies
  - First joint DOE-DOD (FEDRAD 2005) held in May 2005
- ❖ Initiation of NEPA for Greater-Than-Class C waste disposition
  - Advance Notice of Intent published May 2005
- ❖ Stakeholders call for “national forum” and “formal integration” of DOE waste management plans
  - Validates EM plans for National Disposition Strategy



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## *Program Updates – Transuranic (TRU) Waste*

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- ❖ Rocky Flats Project Office TRU shipments completed in April 2005
- ❖ Mound rail shipments completed in August 2005
- ❖ Idaho National Laboratory (INL) TRU shipments from the Advanced Mixed Waste Treatment Project are at 11+ shipments per week and expect to ramp up further. INL is the priority for EM to meet the 6,000 cubic meter milestone with the State of Idaho
- ❖ Nevada Test Site expected to complete TRU shipments by end of calendar year 2005
- ❖ Savannah River Site shipping 2 to 4 per week; shipments were impacted by Hurricane Katrina
- ❖ Hanford shipping 3 to 4 shipments per week
- ❖ LANL resumed shipments in April 2005 and is currently making 2 to 3 shipment per week



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# *WIPP Accomplishments to Date*

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- ❖ Since March 1999, approximately 31,325m<sup>3</sup>) of contact-handled TRU waste shipped and disposed at WIPP.
- ❖ Over 3,911 truck shipments from 8 sites to WIPP
  - RFPO, SRS, INL, LANL, RL,
  - ANL-E, LLNL, NTS
- ❖ Eleven small quantity sites completed (Teledyne-Brown, ARCO, Energy Technology Engineering Center, Missouri University Research Reactor, Lawrence Berkeley National Laboratory, Lovelace Respiratory Research Institute, U.S. Army Material Command, Brookhaven National Laboratory, Mound Site (Argonne National Laboratory-East, & Lawrence Livermore National Laboratory – legacy TRU only))

Information as of 9/12/05



Departure of Final RFETS Shipment



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# Total Transuranic (TRU) Waste Shipments By Site



**3,911**

Total shipments as of 09/12/05



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## *Program Updates – SNF/HLW*

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- ❖ For Spent Nuclear Fuel (SNF) for Idaho National Laboratory and the Savannah River Site, consolidated SNF and reduced the number of wet storage basins to 1 per site
- ❖ Path forward is to package the SNF at Idaho and SRS for disposal at Yucca Mountain
- ❖ At Hanford, all SNF removed from the K-Basins and placed in approximately 500 Multi-canister Overpacks (MCOs)
- ❖ Path forward would be to ship MCOs to Yucca Mountain for disposal
- ❖ SNF/HLW senior management policy meeting held in Washington, D.C., on September 13-14, 2005



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## *Program Updates – SNF/HLW (cont'd)*

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- ❖ For High-Level Waste (HLW) at the Savannah River Site, DOE produced approximately 2,000 HLW canisters at the Defense Waste Processing Facility
- ❖ At Hanford, DOE is constructing the waste treatment plant for processing waste and is currently addressing cost and schedule issues on that project
- ❖ At Idaho, DOE is analyzing path forward for disposing of the calcine waste



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## *Program Updates – SNM (Pu Disposition)*

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- ❖ Senior Department-wide Committee (Nuclear Materials Disposition and Consolidation Coordination Committee) established to address security, storage, transportation, disposition issues
  - initial emphasis on disposition path for surplus and excess plutonium
- ❖ GAO reports on plutonium disposition
  - "Securing U.S. Nuclear Materials - DOE Needs to Take Action to Safely Consolidate Plutonium" (July 2005; addresses issues for shipping Hanford plutonium to SRS and storing plutonium at SRS)
  - Draft "Statement of Facts - Plutonium Storage at DOE's Savannah River Site" (May 2005, restricted distribution; addresses issues for storing plutonium at SRS)



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## *Program Updates – SNM (Pu Disposition) (cont'd)*

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- ❖ Defense Nuclear Facilities Safety Board report - "Plutonium Storage at Department of Energy's Savannah River Site" - Second Annual Report to Congress (June 2005; addresses issues for DOE's plan for storage and disposition of excess plutonium vs. incorporation in MOX fuel, and consolidation of excess plutonium at SRS)
- ❖ EM Team formed on surplus plutonium disposition - initial emphasis on options for surplus plutonium disposition and on site disposition maps



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# BACKUP INFO

## *EM transportation performance is monitored vigilantly*

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- EM monitors many aspects of transportation
  - Any suspected or confirmed Hazmat spill
  - Any injury (either outpatient, first aide, minor injury, hospitalization, or fatality)
  - Any property damage to the transport vehicle or package
  - Any fines or violations
  - Any package damage or load securement problem
  - Any route deviation (for TRANSCOM-monitored shipments) or security breach
  - Any road closure or public evacuation
  - Any local or national media coverage

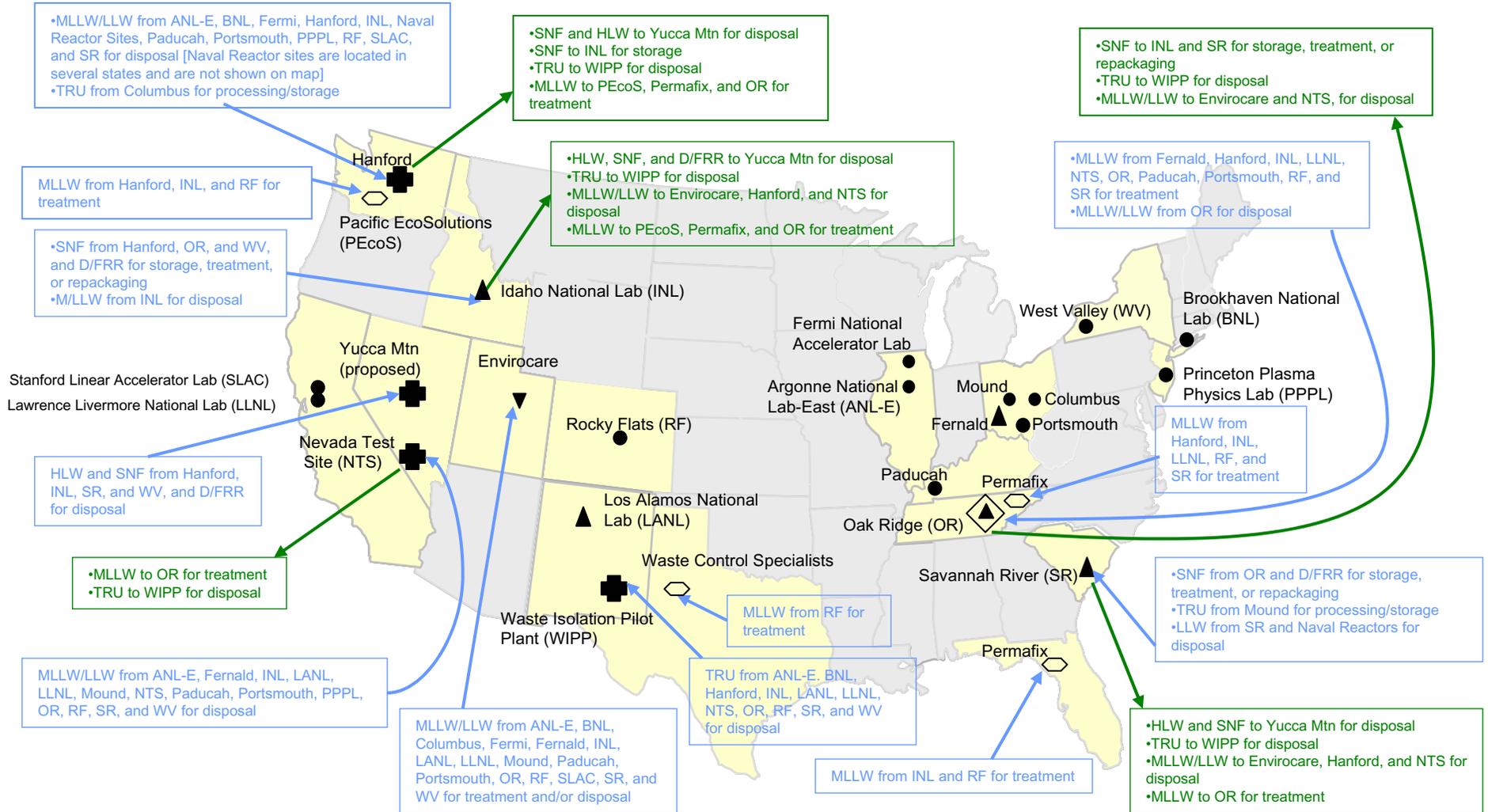


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# Major DOE Radioactive Waste Transfers (includes commercial facilities)

Waste exports from DOE Generator Sites are shown in the incoming shipment boxes for the treatment and disposal facilities. This map is not inclusive of all past or planned shipments.



Low-Level Waste (LLW)	Mixed Low-Level Waste (MLLW)	High-Level Waste (HLW)	Spent Nuclear Fuel (SNF)	Domestic/Foreign Research Reactor Fuel (D/FRR)	Transuranic Waste (TRU)
● DOE Generator Site (no on-site disposal facility)	■ DOE Off-site Radioactive Waste Disposal Facility (NTS and Hanford are also generator sites and dispose of some waste on-site)	▼ Commercial Radioactive Waste Disposal Facility (Note: Envirocare also treats waste)	◇ DOE Off-site Waste Treatment Facility	○ Commercial Radioactive Waste Treatment Facility	
					← Incoming Waste Shipment
					→ Outgoing Waste Shipment

EXHIBIT B

October 5, 2005

IN MEMORY

Bill King succumbs to cancer at 66

VOLUNTEER EXTRAORDINAIRE EMBODIED SPIRIT OF THE WEST

By PHILLIP GOMEZ

PVT

A local cowboy king has died; long live the king of the trail.

Bill King, a resident of Pahrump for the past five years, died of cancer Thursday. He was 66.

King was born in the Missouri River town of Atchison, Kan., the starting point for the famed Atchison, Topeka & Santa Fe Railroad that rolled across the plains. Like that railroad of frontier history, King was a westering man, a surveyor who worked out of small rural towns in Northern California.

He came to Pahrump in 2000, lending his lifetime of practical work surveying the physical lay of the land. His skill was in drawing straight lines from point A to point B in a great variety of public concerns looming in the Pahrump Valley. King was always the straightest of shooters.

He served on seven advisory or decision-making boards and was the president of the Pahrump Senior Center. King was also president of the Southern Nye County Trails Partnership, an organization he founded six months ago.

"He was a champion for Pahrump seniors in every way and he put in a lot of personal time and effort on behalf of the senior center," said Mary Jane Files, executive director of the center. "He was a real champion for our (bus) transportation system. He saw the economic development of the valley and the need for seniors to remain independent."

Independence characterized King himself. A genuine Western character, always dressed in his familiar black garb - black felt hat, black jeans and pointy-toed black cowboy boots - King personified in the best way the independent spirit of the American West - and its deathly loneliness.

He was owned by no one, nor by any ideology. What mattered to King was accomplishment, achieving an objective. His calling card said simply: "Bill King, Energy & Design." That was King - a lot of energy carefully tailored, designed and focused on the things he cared about and thought important to the valley he called home.

He was a leader, but was not ego-driven; rather, he was driven by community goals he saw shimmering on the distant horizon. A Southern Baptist Christian, he suffered fools when he had to, noticeably chomping at the bit, impatient to get back on the grueling trail with the practical objective in mind. Yet he allowed people to have their say.

He often spoke up emphatically at large meetings, where he was not in charge. His words were always measured, his arguments concise. But when asked about something complex he had just explained, he would indignantly stare at you and squawk in his gruff, commanding, dry-prairie intonation, "Did I say that? Is that what I said?"

Then you knew that your unwarranted assumptions had treaded on the King's pointy toes. King meant just what he said - no more.

King's occupation was "general contractor," a generic description precisely accurate for describing his many involvements in making things go right and true.

Basically they fell into four categories, by which we can dispense with the long-winded official names for the committees he served on, which only serve to cloak their real human importance. They were:

- Development of parks and outdoor recreational opportunities for people in southern Nye County.
- The overall welfare of Pahrump Valley's senior citizens, regardless of class, but especially the poor.
- Protection of Nye County's water resources, well into the future, through effective monitoring of the impacts wrought by the Nevada Test Site's underground nuclear detonations and the building of the Yucca Mountain Repository.
- Improvements in Pahrump's many infrastructure needs, from new fire stations to flood control.

Not long ago King appeared in a photo in The Pahrump Valley Times, with the heading: "King of the Trail." He admitted to particularly fancying that handle. He clipped the photo out and framed it, saying he only wished he'd had his Stetson on to hide his baldhead.

Often referring to himself as "ugly," due to the ravages of the chemotherapy treatments he had undertaken for the past two years, King never let his physical disfigurement prevent him from appearing in public or continuing to play an important role in community concerns.

A few months ago, King was ecstatic after returning from a hospital stay in Las Vegas. He said his doctor had declared his jaw free of cancer. He had the proverbial new lease on life, it seemed. But as with many cancer victims, life often cruelly cancels leases without notice.

Just a week before his death, he came in a wheelchair to the Bob Ruud Community Center for the Forest Service's first workshop on the development of the west side master plan for the Spring Mountains National Recreation Area. It will take two years before anything actually gets built for recreational purposes.

At the meeting, Bill couldn't speak clearly due to the cancer eating into his jaw and that recently spread to his shoulder. But he could still communicate by writing a note about the incipient

Spring Mountains recreation plan. Expressing himself in his confident manner, he wrote, "We're in on the ground floor" - meaning anything was possible in the area's development.

King was a builder - of the epic type whom history books speak as "building a nation." His quiet presence, spare eloquence and strength of conviction are reminiscent of the late Western writer Louis L'Amour.

Jane Tompkins, a professor of English, in 1992 published a book nominated for the Pulitzer Prize, "West of Everything: The Inner Life of Westerns." Tompkins' book, based on her love of L'Amour's fiction, argues that the fiction writer and Western films, too, satisfy the modern world's "desire for seriousness, for a life where something really is at stake."

Tompkins says L'Amour's epic tales of life in the Old West are really quests for meaning, popular in a time when most of the industrialized world's material needs are met, but spiritual significance is in short supply.

"In story after story the hero undergoes an ordeal that exacts superhuman exertions," Tompkins writes. "Protagonists crawl across deserts on their hands and knees, climb rocks in the blinding sun, starve in snowbound cabins in the mountains, walk or ride for miles on end with all but mortal wounds, survive for long periods of time without water, without shelter, without sleep."

Under extreme circumstances the Western requires of its hero endurance more than anything.

The message Westerns send to audiences is the need for numbness in order to bear the trials of life, Tompkins says. "The death of the (hero's) heart, or, rather, it's scarification and eventual sacrifice, is what the Western genre, more than anything else, is about."

Concluding her treatise on "the tough, lonely men" of the mytho-historical Western landscape, Tompkins says her throat constricts when she thinks of their ordeals presented in countless Westerns.

"When he rides out of town at the end, the hero bears his burdens by himself. When I think of how he feels, no words coming out, everything closed inside, the internal bleeding, the sadness of the genre is terrible, and I want to cry."

Bill King, in his own way, embodied the Western hero of L'Amour and countless other writers of westerns, and now he, too, has mounted up and ridden off into the sunset.

Doug McMurdo contributed to this report.