



UPDATE ON DOE PACKAGING AND TRANSPORTATION

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Presented to



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

Contents

- Summary of activities at sites managed by the Office of Environmental Management
- Summary of specific programs within the Office of Packaging and Transportation.



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Disclaimer

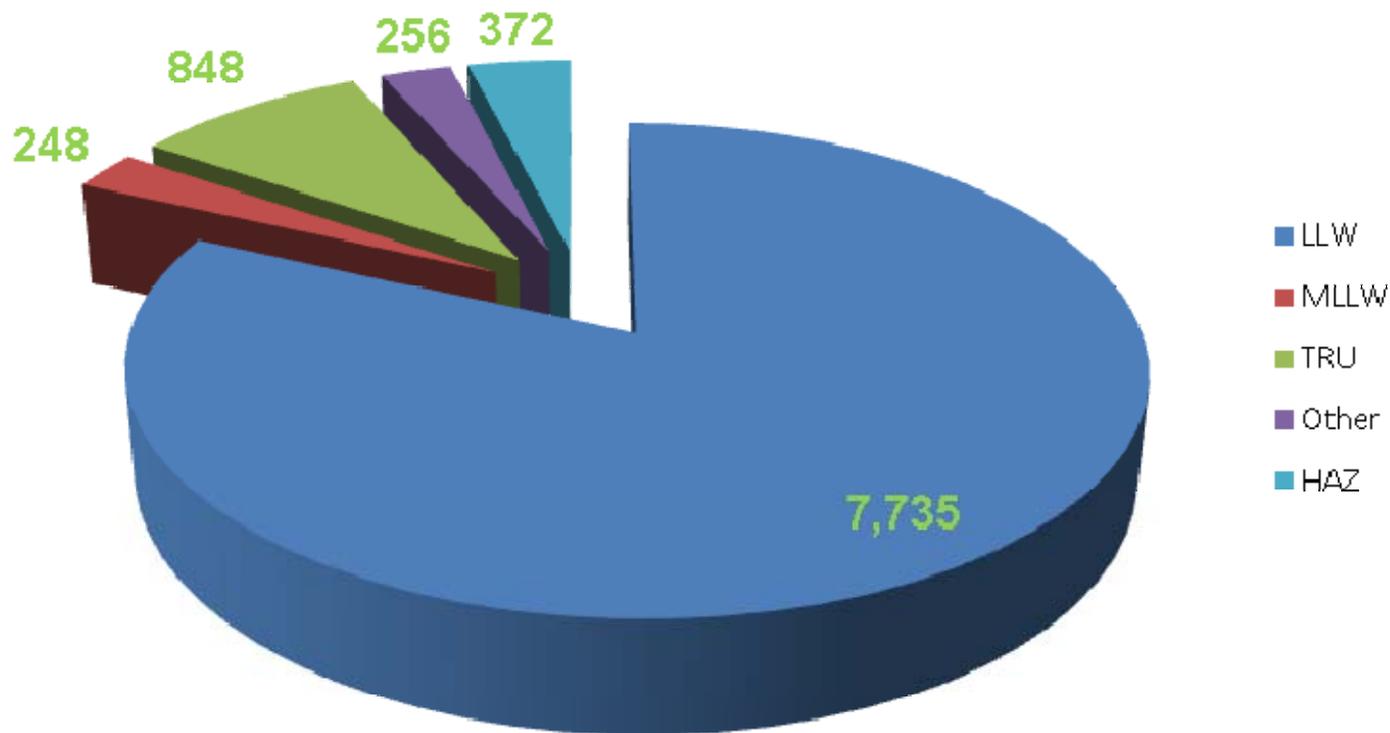
- Non EM programs are not the subject of this talk.
 - Programs related to packaging and transportation that are managed by the National Nuclear Security Administration (NNSA)
 - Programs related to spent fuel packaging and transportation managed by the Office of Nuclear Energy (NE)
- The preceding two programs will be covered by other presenters.



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FY 2012 Shipments



Total number of Shipments = 9,459



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Recovery Act Exceeds Major Cleanup Milestone

- DOE Complex is now 74 % remediated.
- EM has reduced its pre-Recovery Act footprint of 931 square miles, established in 2009, by 688 square miles.
- In 2009, EM identified a goal of 40 percent footprint reduction by September 2011.
- This goal was achieved in April 2011.



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Cleanup Milestones

- Savannah River Site
 - Remediated 85 percent of the site's footprint by cleaning up more than 260 square miles of the site's 310 square miles
- Hanford
 - RL reduced its footprint by 423 square miles (72% of the 586 square mile starting point) by August 31, 2012



Workers safely demolished a 175-foot-high exhaust stack at the Hanford Site



Workers prepare for roof installations on portions of the P Reactor at Savannah River Site that are expected to remain after facility decontamination and demolition efforts.



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Cleanup Milestones

- Portsmouth
 - Reduced the site's footprint by more than 1.6 million square feet.



Recovery Act workers demolished a cooling tower complex and nearby electrical switchyard that together spanned more than 40 acres on the northeastern portion of the Portsmouth Gaseous Diffusion Plant.



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Major Accomplishments - Idaho

- Idaho Site Closes Out Decontamination and Decommissioning Project



The Engineering Test Reactor vessel is shown here removed, loaded and ready for transport to the on-site landfill.



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Major Accomplishments – Oak Ridge

- Oak Ridge Enters Next K-25 Demolition Phase
 - The north end demolition will be complete in January 2013.
 - Debris removal will be completed in March.
 - Following the removal of the north end, workers will continue pre-demolition activities in the final units of K-25's east wing.



Workers begin demolishing the north end of the K-25 Building.



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NNSS Shipment Statistics – FY 2011

- LLW – 2,279 inbound shipments
- MLLW – 109 inbound shipments
- There were 25 approved generator sites



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Update on Elemental Mercury

- The Mercury Export Ban Act of 2008 requires DOE to provide storage and long-term management of mercury (non-radioactive) generated in the U.S.
 - Final EIS published in January 2011
 - Sites analyzed in the EIS are Hanford (WA); INL (ID); Grand Junction (CO); Hawthorne (NV); SRS (SC); Andrews (TX); and Kansas City (MO)
 - WCS facility in Andrews, TX, is Preferred Alternative
 - <http://www.mercurystorageeis.com/>
- **Current Status**
 - No Record of Decision for site selection has been issued. The Department plans to reconsider the range of alternatives before issuing the ROD.
 - The Department plans to issue a Supplemental Mercury Storage EIS evaluating two WIPP vicinity locations in 2013.
 - A Record of Decision will be issued no sooner than 30 days after the Environmental Protection Agency's Notice of Availability of the Final Supplemental Mercury Storage EIS in the Federal Register.



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EIS Greater-than-Class C LLW Disposal

Proceed with Preparation of Final Environmental Impact Statement
(addressing comments received)

Issue Final EIS (early 2013)

Submit Report to Congress (2013)

Await Congressional Action (2013)

Issue ROD (2013)



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EM-33 Programs and Activities

Packaging Certification

- Certificates of Compliance
- DOE Exemptions
- DOT Special Permits
- Quality Assurance
- RAMPAC

Emergency Preparedness & Outreach

- TEPP
- NTSF
- State Regional Groups
- Tribes
- Prospective Shipment Report
- Fact Sheets

Regulations & Standards Support

- Domestic Federal Agencies
- International Community
- Nongovernmental Organizations
- DOE Orders, Policy, Guidance

Transportation Risk Reduction

- Motor Carrier Evaluations
- Physical Protection
- Transportation Compliance Reviews
- Safety Metrics

Program & Site Support

- DOE/Contractor Interfaces
- TMC
- PMC
- EFCOG
- Tender Negotiations
- Automated Systems



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Packaging Support to Field Sites

Packaging Certification

- Department-wide program that provides for the certification of fissile and Type B packagings.
 - Review and approval of packaging designs and Issuance of DOE Certificates of Compliance
 - Curtail and/or suspends the use of specific packages, when warranted
 - Review and approval of quality assurance programs for Type B and fissile radioactive material packaging activities
- Radioactive Material Packaging (RAMPAC), the all-in-one source for information on shipping containers for radioactive materials (<http://rampac.energy.gov/>)



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Policy, Guidance, and Direction

Regulations and Standards

- Department-wide responsibility for three transportation Directives
 - DOE O 460.1C: Packaging and Transportation Safety
 - DOE O 460.2A: Departmental Materials Transportation and Packaging Management
 - DOE M 460.2-1A: Radioactive Material Transportation Practices Manual
- Developing a new Order, 460.3: Physical Protection of Unclassified Irradiated Fuel in Transit

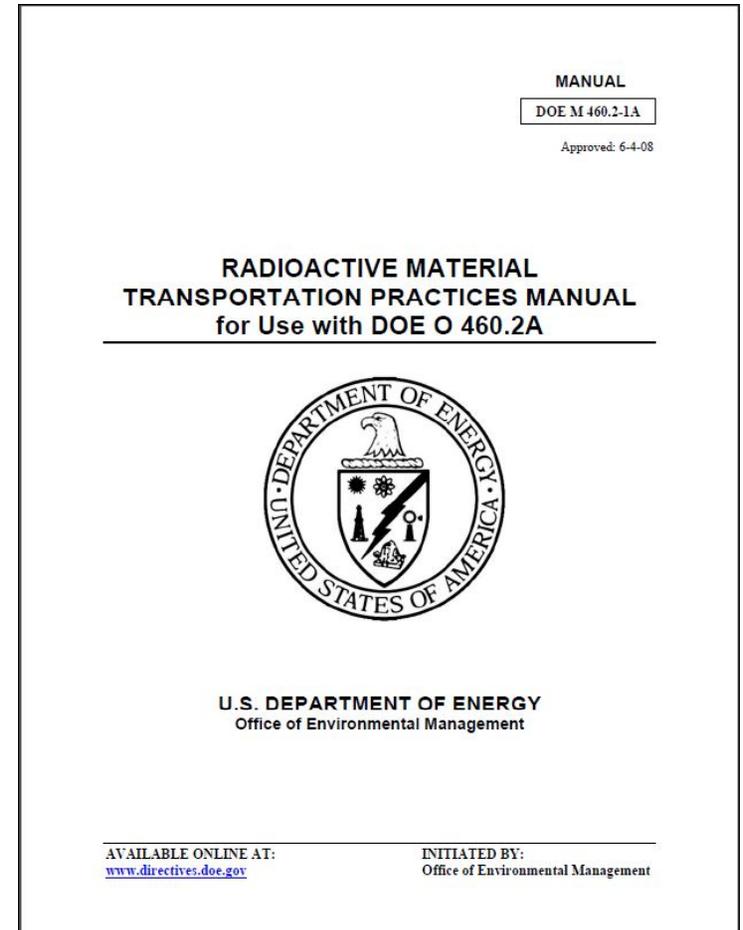


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DOE Manual 460.2-1

- Manuals are being eliminated from Directives System
- Requirements from Manual will be incorporated into revision of DOE Order 460.2, Departmental Materials Transportation and Packaging Management
 - Remaining information will from Manual will be placed in the DOE Guide 460.2
- An NTSF working group will be established to assist in the revision process
- Awaiting outcome of realignment decisions to develop draft document



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Transport security and physical protection-requirements

- New requirements: physical protection of nuclear material in transport
 - Replaces expired, obsolete Order.
 - Updates old requirements for compatibility with 10 CFR Part 73.
- New requirements: physical protection of radioactive materials and sources in transport
 - Addresses concerns about theft and sabotage.
 - Uses a graded approach for implementation of protective measures.
 - Implements the requirements of 49 CFR Subpart I--Safety and Security Plans.



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Defense in Depth for P&T Activities

Transportation
Risk
Reduction

- Motor Carrier Evaluation Program(MCEP)
- Transportation Safety and Operations Compliance Assurance Program (TCAP)
- Transport security and physical protection



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Compliance

- Motor Carrier Evaluation Program (MCEP)
 - Since 1989, played a vital role in maintaining DOE's excellent transportation safety record.
 - Provides a framework for selection of responsible, effective, and efficient motor carriers.
- Transportation Safety and Operations Compliance Assurance Program (TCAP)
 - Systematic approach for evaluating and improving packaging and transportation regulatory and DOE policy compliance.
 - Assist all DOE packaging and transportation operations with compliance with applicable requirements.



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Transport security and physical protection- interagency activities

- Co Leads the Transport Security Subgroup of the NRC's Radiation Source Protection and Security Task Force
 - Is reviewing governmental actions in security of transport of sources since 2005 Congressional mandate.
 - Has provided provide Chapter 5 of the 2010 Radiation Source Protection and Security Task Force Report and will do so again for the 2014 report.
- Actively participates in the Transportation Focus Group of the Nuclear Government Coordinating Council (NGCC)
 - Is addressing the definitions of transportation for governmental needs and international and/or multilateral agreements.
 - Is discussing transit and transshipments, such as overflights, port calls with/without offloading, shipments via international waters and shipments crossing territorial waters.



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Closing

- Summary of EM activities
- Summary of certain Office of Packaging and Transportation activities
- Collaborates with NE and NNSA to ensure and consistent, compliant approach to moving DOE materials, substances and wastes safely and securely
- Commitment to working with State Regional Groups and Trips related to packaging and transportation issues.



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