Contents

• Summary of activities at sites managed by the Office of Environmental Management
• Summary of specific programs within the Office of Packaging and Transportation.
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.
FY 2012 Shipments

Total number of Shipments = 9,459
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.
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
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.
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.
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.
NNSS Shipment Statistics – FY 2011

• LLW – 2,279 inbound shipments
• MLLW – 109 inbound shipments
• There were 25 approved generator sites
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.
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)
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
Packaging Support to Field Sites

- 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/)
Policy, Guidance, and Direction

- 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
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
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.
Defense in Depth for P&T Activities

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