



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Transportation in Environmental Cleanup

Joanne Lorence

Office of Packaging and Transportation
Office of Environmental Management

Fall Meeting

Southern States Energy Board

- Environmental Management Cleanup
 - Site Information
 - Waste Stream Information
 - Transportation Activities
- Organization of the Office of Environmental Management
 - New Structure
- Update on the Office of Packaging and Transportation
 - Mission
 - Core Values
 - Activities

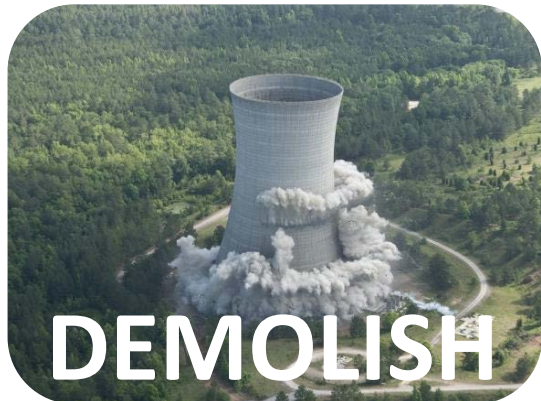


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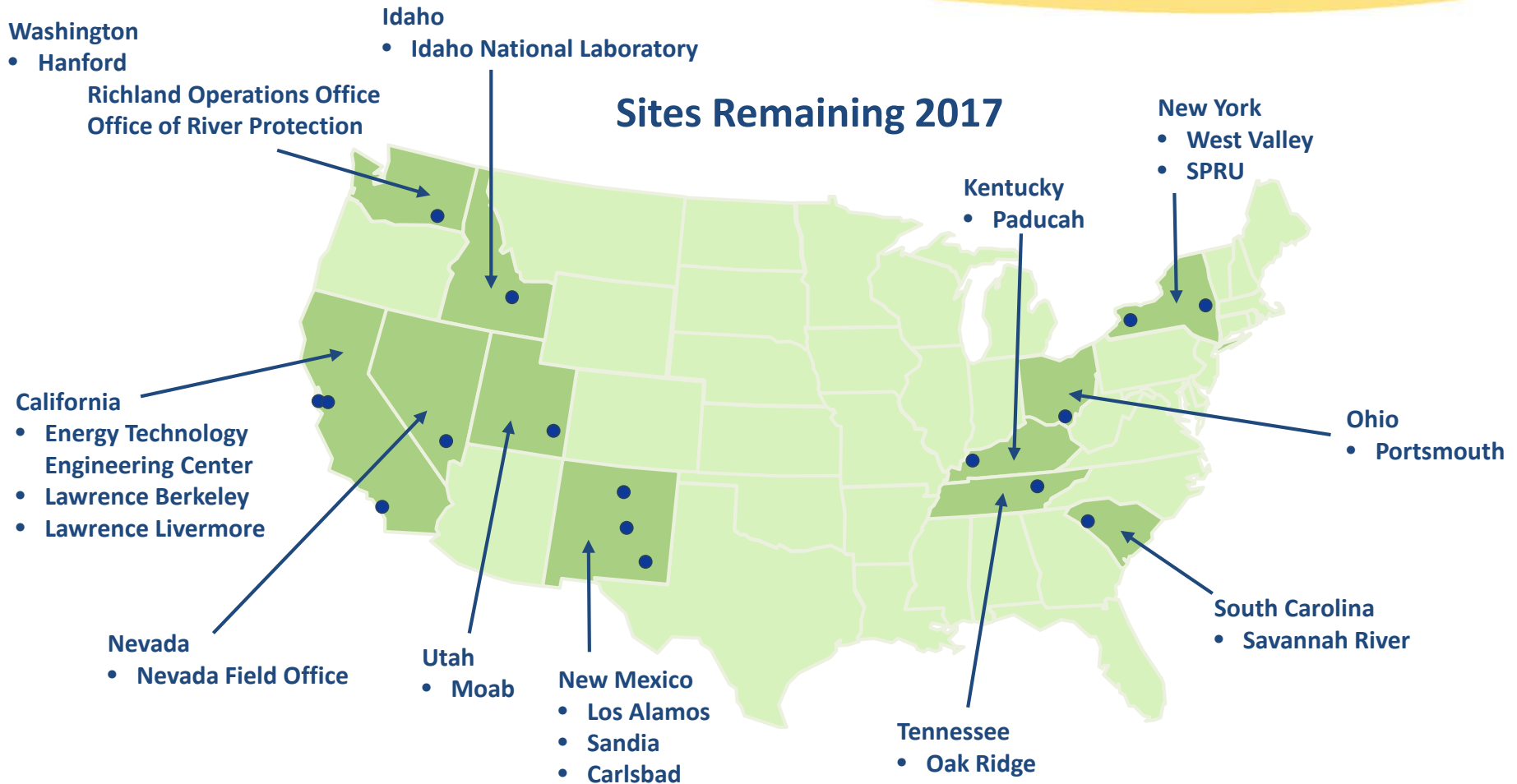
Environmental Management Cleanup

EM is an operational federal program performing a wide variety of tasks to clean up the environmental legacy of the U.S. nuclear weapons complex:

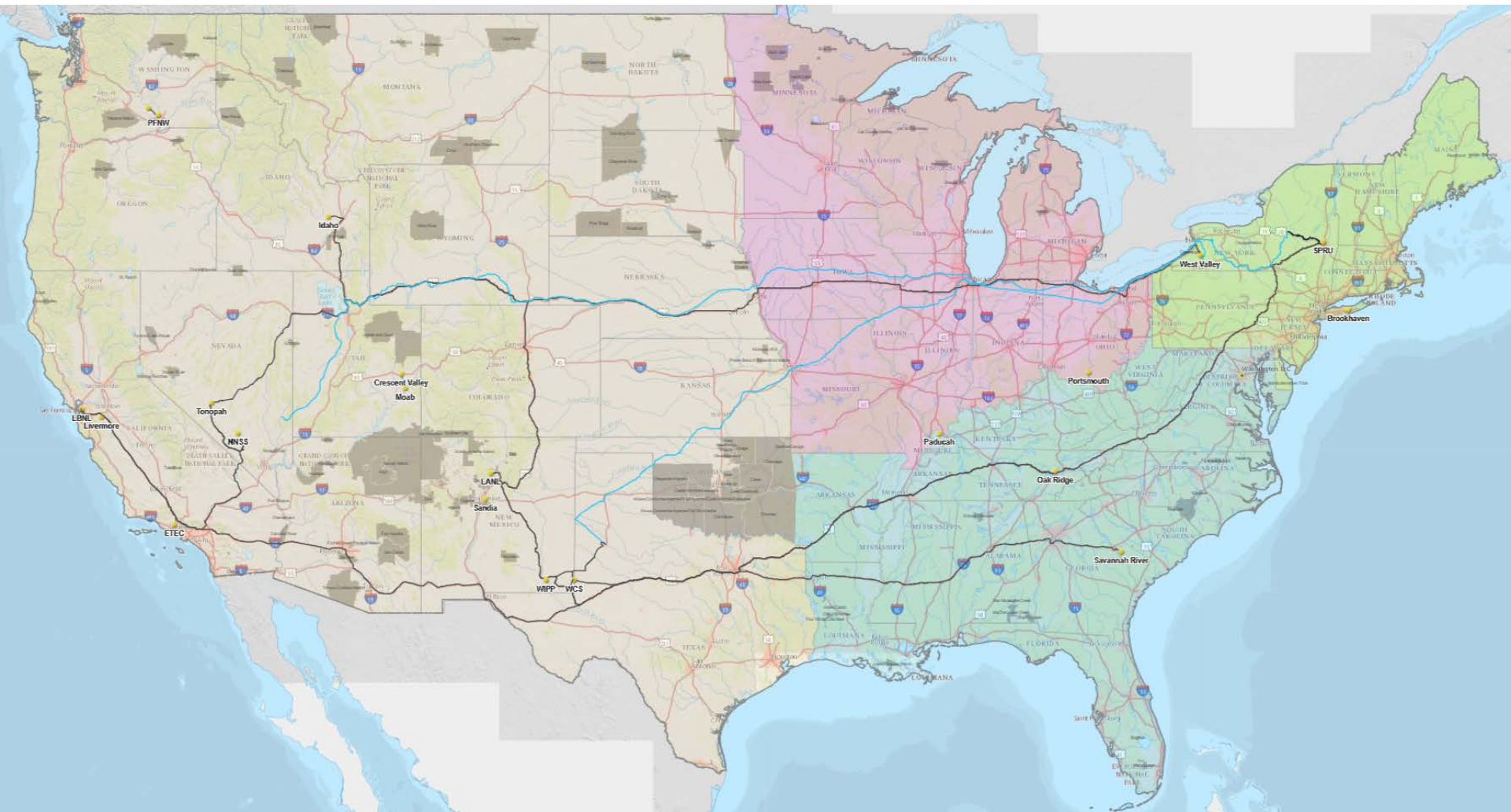


Funding by EM Mission Area





- EM has reduced its footprint by 90% to less than 300 square miles
- 16 sites in 11 states with remaining cleanup activities



Savannah River Site



Workers load a container of lead from legacy missions at the Savannah River Site onto a truck to transport to a waste disposal site in Texas.

The Shielded Canister Transporter enters the glass waste storage facility.



- Completed 13 contact-handled (CH) waste shipments to the Waste Isolation Pilot Plant (WIPP) to date
- Shipped 80 of 238 drums of accumulated Nuclear Fuel Services, Inc. low-level waste soils to a federal site.



OR employees celebrate first shipment to WIPP



Robert E. Edwards III is Manager of DOE-EM's Portsmouth/ Paducah Project Office.

Paducah environmental/waste management operations:

- Paducah continues to reduce risks and hazardous and radiological inventories:
 - Loaded and shipped 8 gondolas of waste from the C-400 Cleaning Building deactivation.
~ 4 gondolas of waste planned to ship in the next 6 months.
 - 22 cold traps currently stored onsite will be dispositioned and shipped offsite in FY 2018.



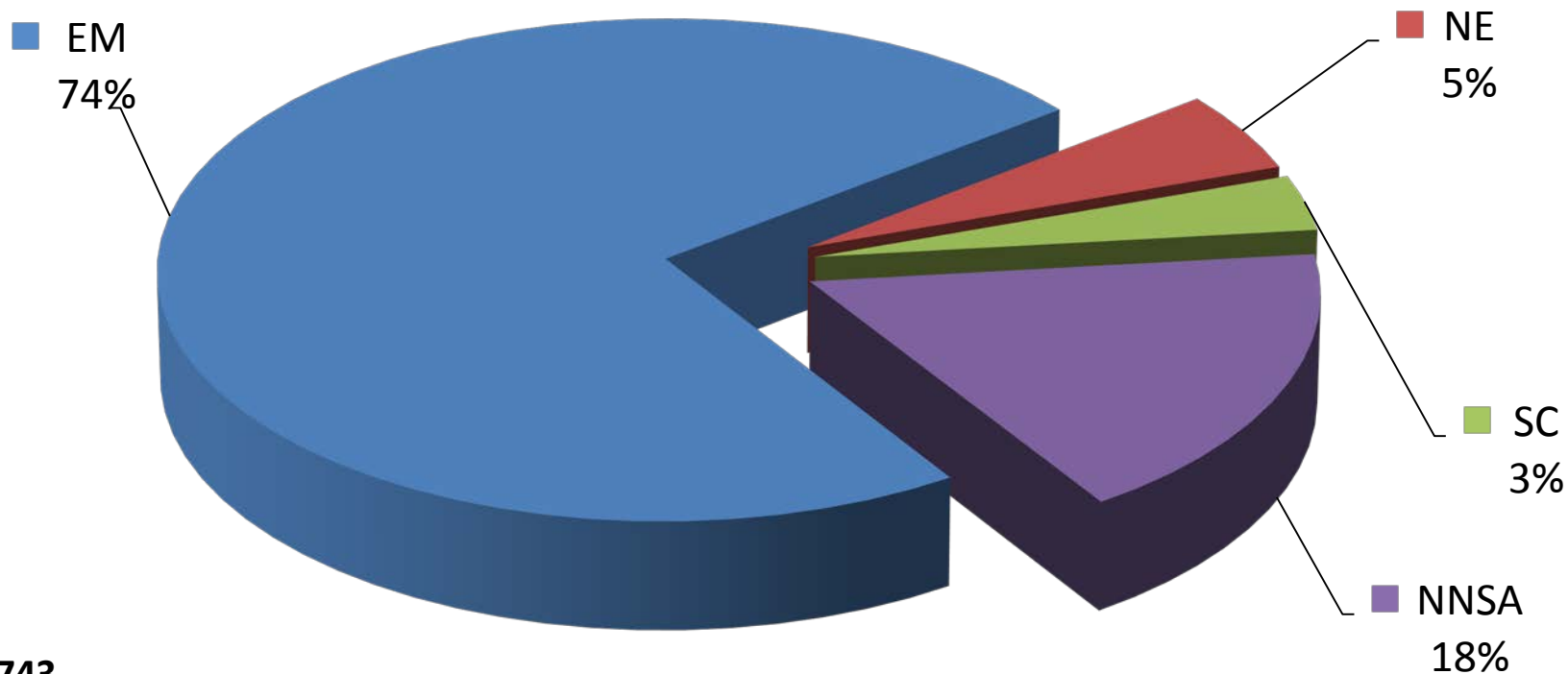
Joel Bradburne, former Portsmouth Site Lead, is the new Portsmouth/Paducah Project Office Deputy Manager for DOE-EM.



Portsmouth environmental/waste management operations:

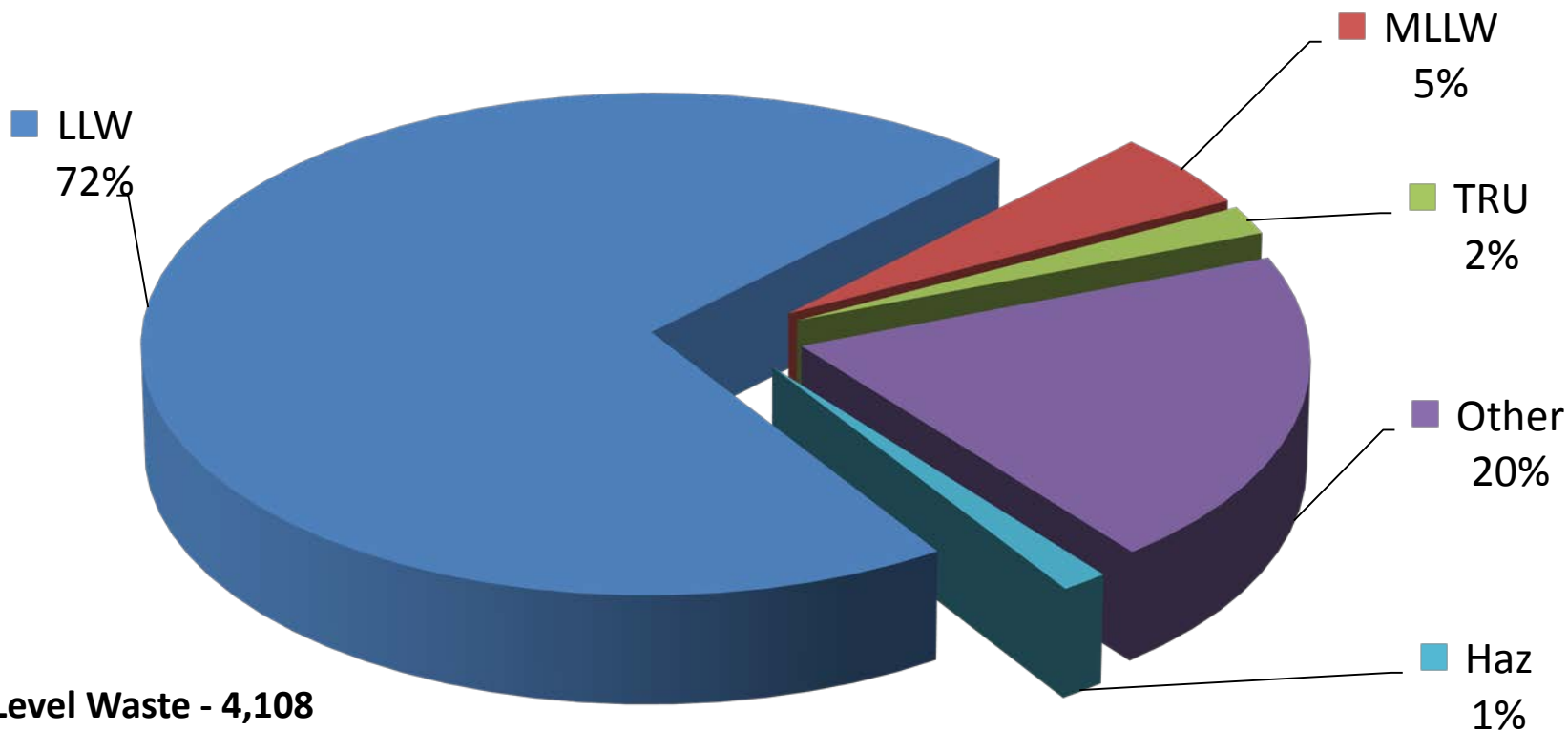
- 1,737 m³ of legacy and newly generated LLW & MLLW to be dispositioned in FY18.
 - Plan to ship remaining fluorine inventory from site during FY18.
- PORTS continues to reduce its hazardous chemical inventory:
 - 6 shipments complete (approximately 90%) of ~204,000 lbs. of refrigerant removed.
 - Remaining 6% (~20 lbs.) of ClF³ (chlorine trifluoride) located in the X-710 Lab will be transferred to new bottles, scheduled for shipment in FY18.

FY17 EM Offsite HAZMAT Shipments by Program



EM - 5,743
NE - 401
SC - 278
NNSA - 1,369

FY17 EM Offsite HAZMAT Shipments by Material



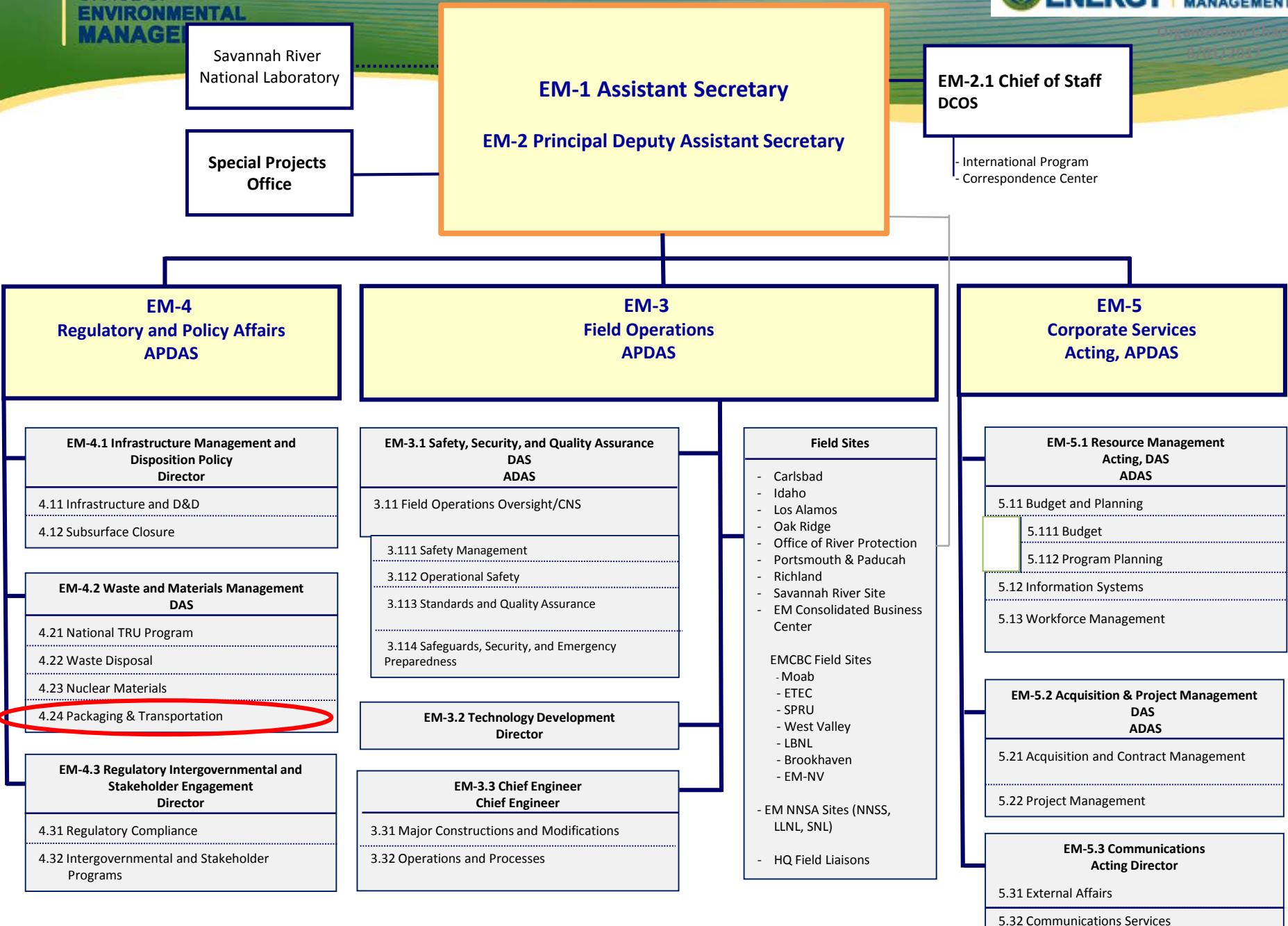
Low Level Waste - 4,108
Mixed Low Level Waste - 285
Transuranic - 107
Other - 1161
Hazardous Material - 82



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EM Organization





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Update on the Office of Packaging and Transportation

The Office of Packaging and Transportation protects people and the environment by ensuring safe, compliant, and efficient packaging and transportation of materials critical to successful Department operations. We achieve this mission by conducting packaging and transportation assessments and oversight; assisting field sites; and developing, managing, and advocating policies, orders, guidance and tools in accordance with DOE requirements and government regulations.



OPT Programs and Activities

Packaging Certification

- Certificates of Compliance
- DOE Exemptions
- DOT Special Permits
- Quality Assurance
- RAMPAC
- Transportation Safeguards & Security
- Graduate level packaging courses

Outreach and Emergency Preparedness

- NTSF
- State Regional Groups
- Tribes
- TEPP
- 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
- Field Calls

DOE Packaging Certification Program

- Performs seven major functions
- In FY-17, work-in-progress- 15 packaging docket
 - 17 dockets open at start of FY
 - 51 dockets closed
 - 50 new dockets opened
- 15 Certificates of Compliance issued during FY-17

National Transportation Stakeholders Forum

Outreach &
Emergency
Preparedness

National Transportation Stakeholders Forum (NTSF) shares information and collaborates with state, tribal, and other federal agencies along transportation routes.



Transportation Emergency Preparedness Program

Outreach & Emergency Preparedness

- TEPP Spanish language videos are complete
 - Developing written Modular Emergency Response Radiological Transportation Training curriculum
- Website re-design near completion
- Stand-up TEPP Working Group with NTSF
- Training available to local Tribes



TEPP: 2017 Training Activities

Region	# Classes	TTT	Full	CMERRTT	Partial	TMERRTT	RAD Specialist	Hospital	Total
WGA	30	2	144	129	107	0	38	0	450
SSEB	64	51	208	386	90	128	0	128	1055
CSG-MW	8	43	2	16	0	0	87	0	156
CSG-NE	15	0	7	200	1	77	0	0	300
Total	117	96	361	731	198	205	125	128	1961

TTT – Train the Trainer

CMERRTT – Compressed Modular Response Radiological Transportation Training

TMERRTT – Technician Modular Response Radiological Transportation Training

RAD Specialist – Radiation Specialist

Hospital – Hospital Emergency Department Management of Radiation Accidents Course


Regulations and Standards

- Department-wide responsibility for –
- Developing and maintaining three transportation Orders
 - 460.1D -- Packaging and Transportation Safety
 - 460.2B -- Departmental Materials Transportation and Packaging Management
 - 460.3– Security and Physical Protection during Transport
 - DOE-HDBK-5001-2017: “Freight Container Handbook” published Oct 2017

Defense in Depth for P&T Activities

Transportation
Risk Reduction

- Motor Carrier Evaluation Program (MCEP)
- Transportation Safety and Operations Compliance Assurance Program (TCAP)



Program and Site Support

- Packaging Management and Transportation Management Councils
- Energy Facility Contractors Group
- Coordination & Communication Across the Complex
- Automated Tools
 - ATLAS
 - RADTRAN
 - WebTRAGIS

Transportation Shipping Assessment Program

Department-wide risk-based program:

- EM Memo approved September 2017 to conduct Independent Assessments
- Developed by DOE Certifying Official
- Authority derived from DOE 460.1D
- FY18 assessments planned at Oak Ridge (completed Oct 17), Idaho, Richland and West Valley

- Disposition of radioactive material and sources ultimately requires safe, secure, and compliant packaging and transport operations
- DOE maintains excellent performance record for safely, securely, and efficiently transporting materials
- DOE continues to support domestic and international safety and security efforts



Contact for Additional Information

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