



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Office of Packaging and Transportation Overview and Key Activities

Ellen Edge

TEPP Program Manager

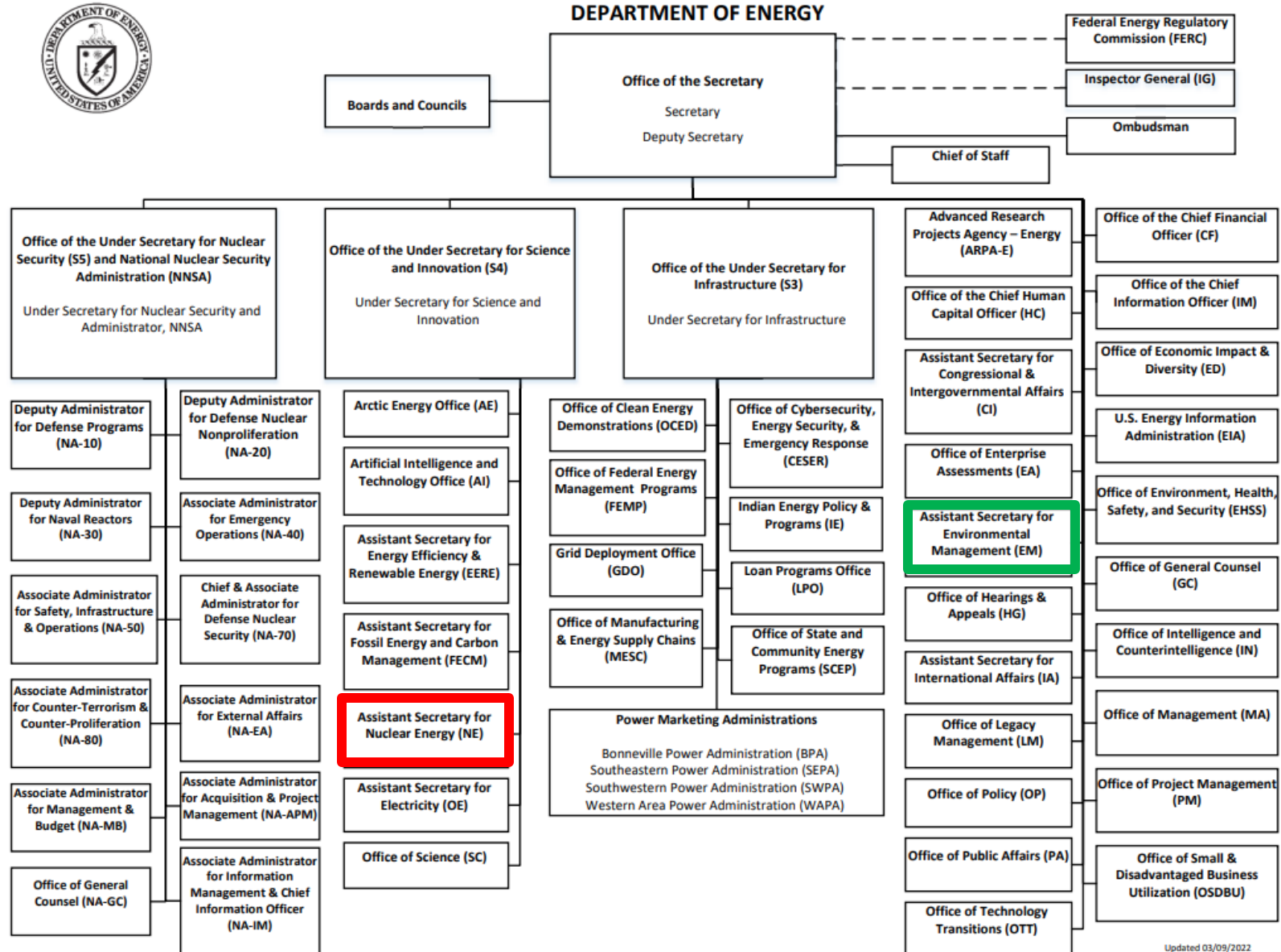
Radioactive Materials Transportation Committees

December 13, 2022

- Office of Transportation (OPT) overview and programs
- DOE shipping statistics
- Recent accomplishments
- Program-specific highlights
 - Stakeholder outreach
 - Policy
 - Planning
 - Training

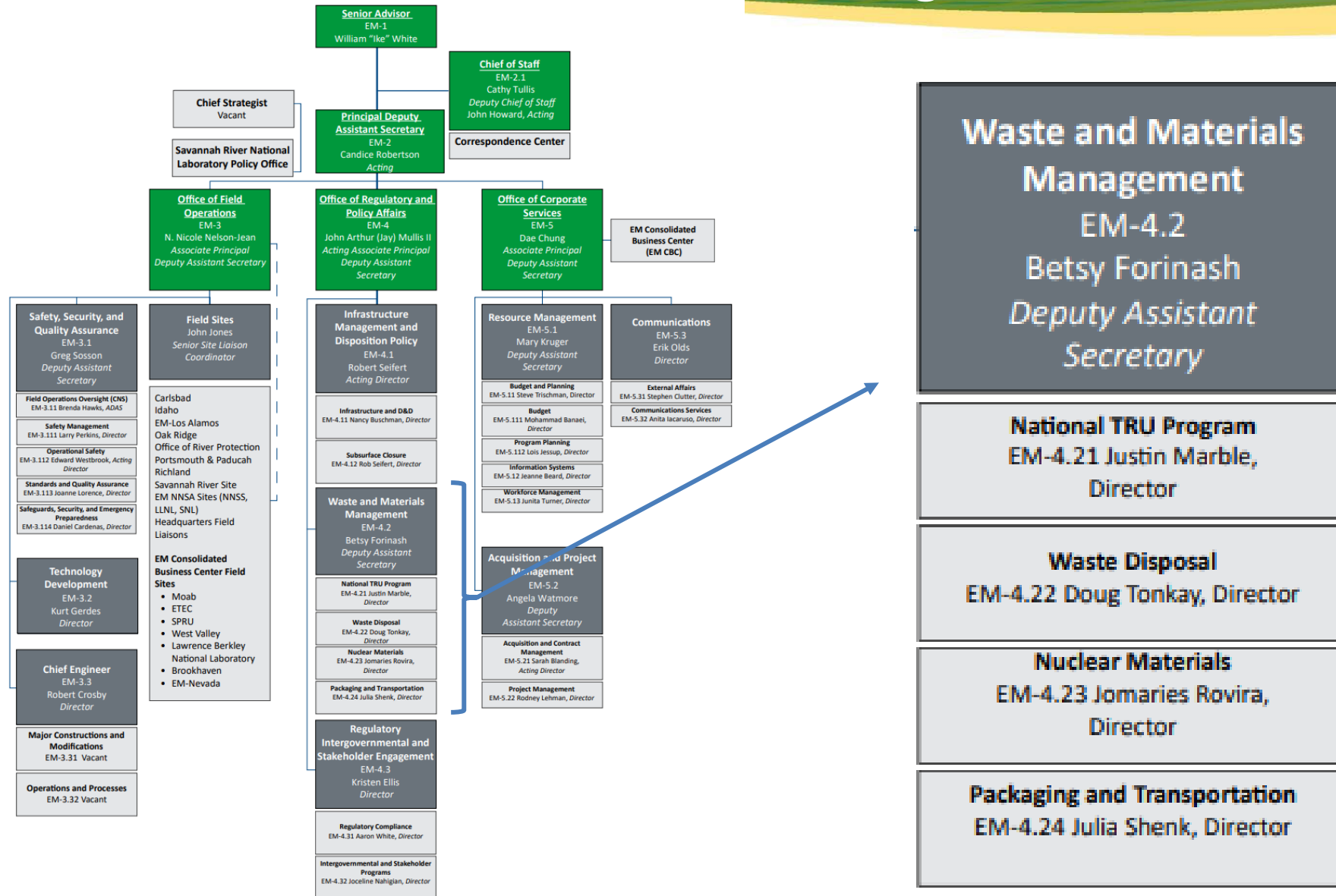


Department of Energy Organizational Chart



Updated 03/09/2022

Office of Environmental Management (EM) HQ Organization



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

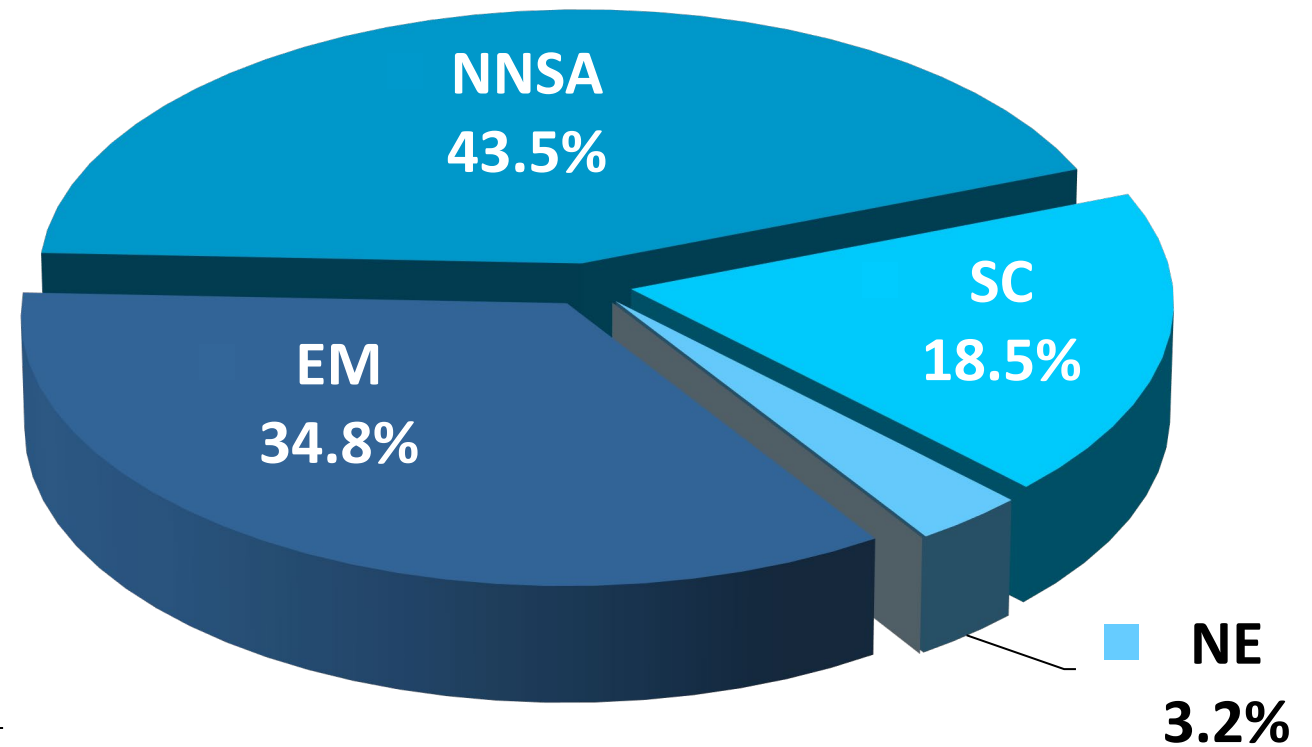


- **Compliance and safety**
 - Motor Carrier Evaluation Program (MCEP)
 - Transportation Compliance Assurance Program (TCAP) for DOE sites
- **Packaging Certification Program (PCP)**
- **Stakeholder engagement and training**
 - Transportation Emergency Preparedness Program (TEPP)
 - National Transportation Stakeholders Forum (NTSF)

- **Transportation planning and management tools**
 - Multiple software programs facilitating safe and efficient transportation activities by DOE sites
- **Field support**
 - Program support for site transportation managers
 - Transportation Management Council; Packaging Management Council
- **Policy and regulatory support**
 - DOE Orders
 - Engagement with federal regulatory agencies

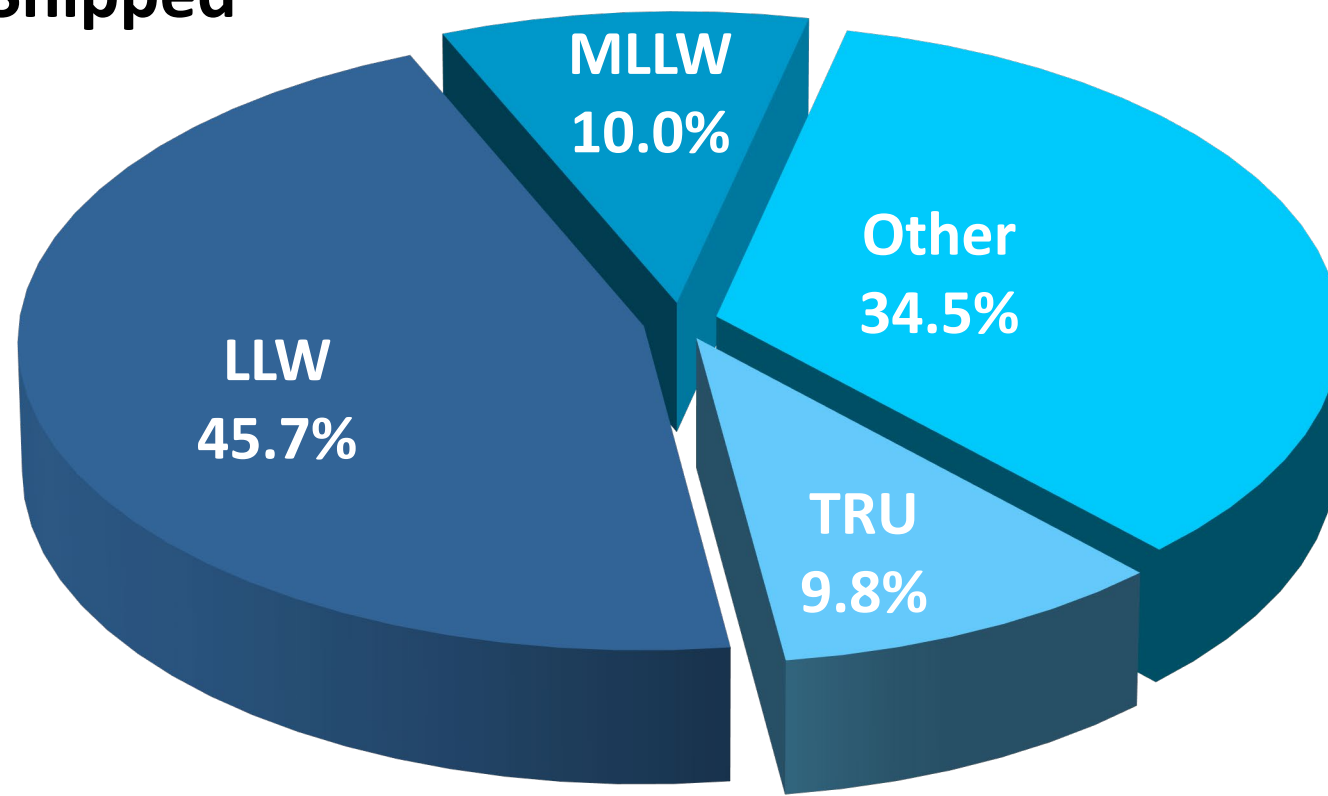
FY21 DOE Offsite Hazardous Materials Shipments by Program

Environmental Management	1,404
Nuclear Energy	129
Science	748
Nat'l Nuclear Security Admin.	1,753
Total	4,024



FY21 EM Waste Materials Shipped

Low Level Waste	448*
Mixed Low Level Waste	98
Transuranic Waste	96
Other	338
Total	980**



**One shipment may contain multiple materials

Packaging & Transportation FY22 Accomplishments

- Transportation Emergency Preparedness Program (TEPP)
 - Training conducted in 17 states – 97 classes and 1508 students
- Motor Carrier Evaluation Program (MCEP)
 - 13 carrier evaluations completed/in progress



- Packaging Certification Program (PCP)

- 40+ dockets completed
- Packaging University courses: 15+ courses completed or scheduled
- See <https://rampac.energy.gov> for details

- Transportation Compliance Assurance Program (TCAP)

- Three site transportation assessments completed

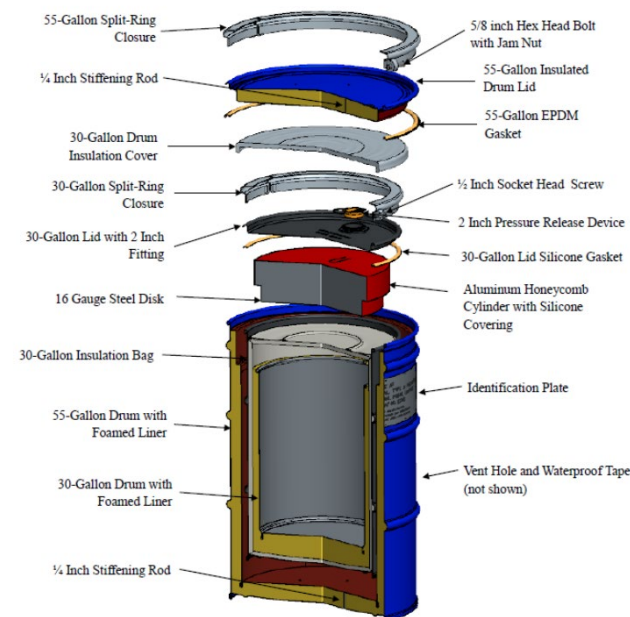
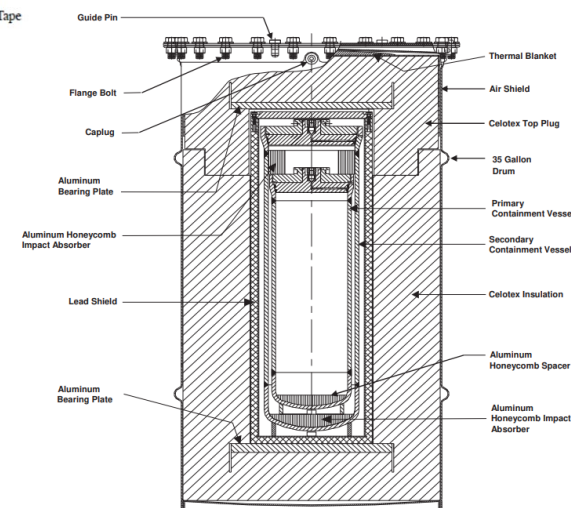


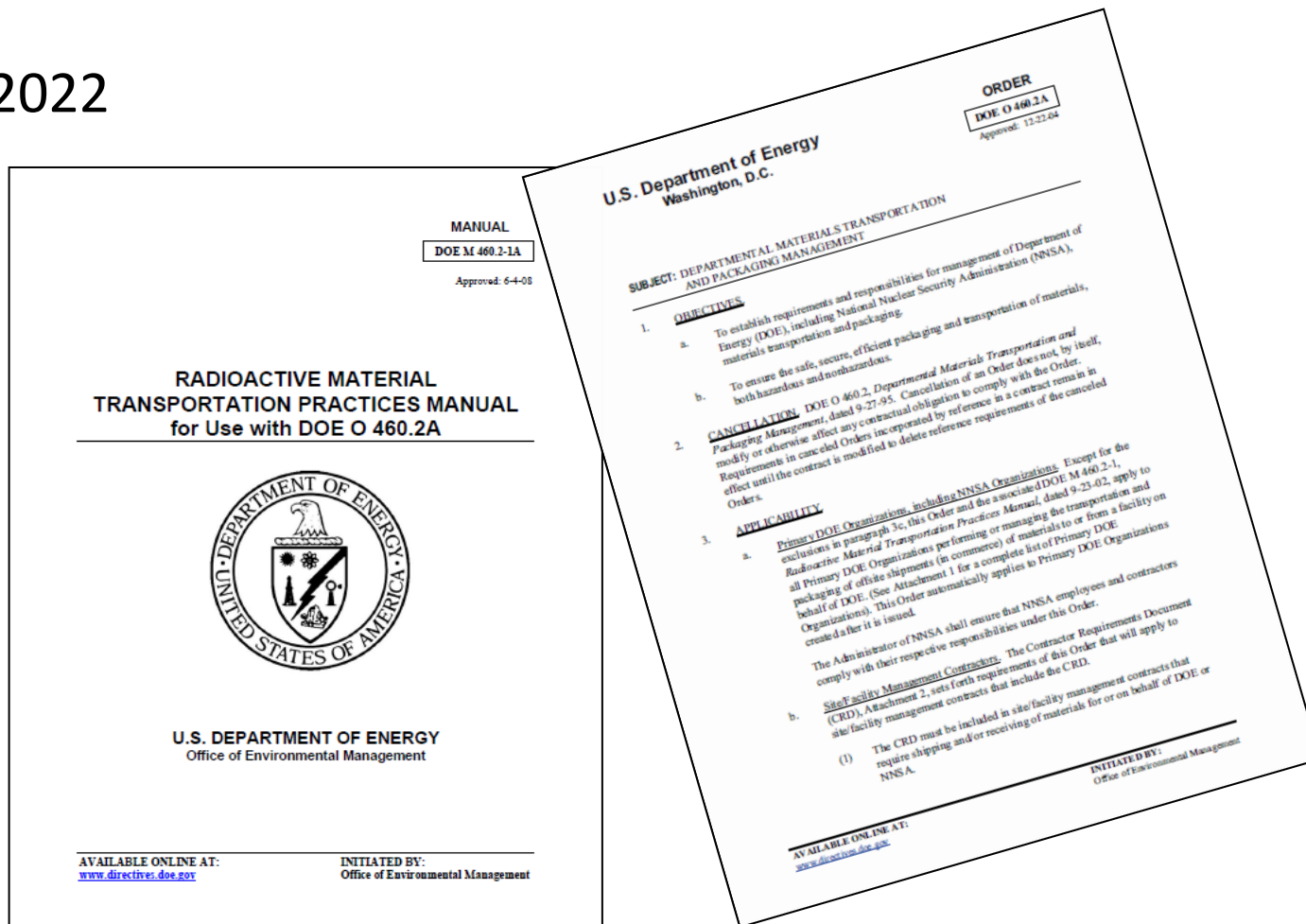
Figure 1 - 9981 Type Packaging Configuration



9975 PACKAGING

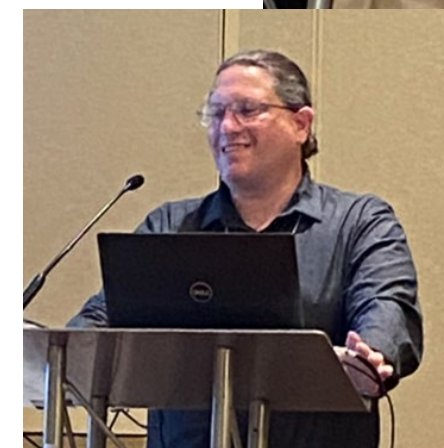
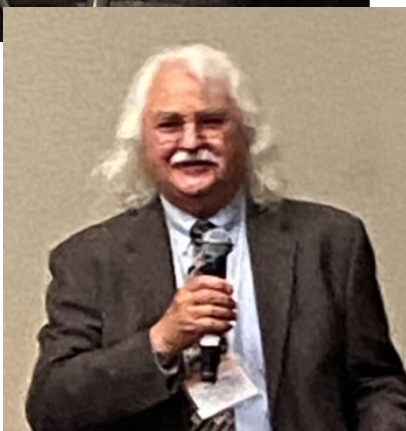
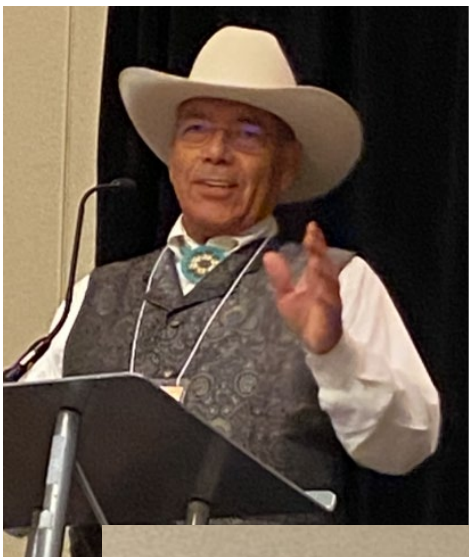
Revision of DOE Order 460.2, *Departmental Materials Transportation Management*

- Published June 2022



National Transportation Stakeholders Forum (NTSF)

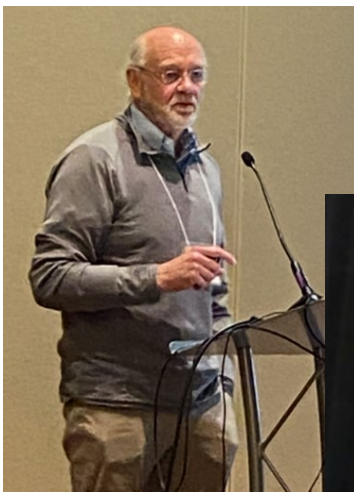
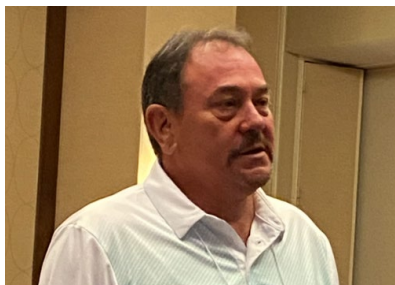
- DOE's primary mechanism to communicate with States and Tribes about shipments of radioactive material
- EM solicits State and Tribal input for shipment planning and execution
- Chaired by EM-OPT



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National Transportation Stakeholders Forum (NTSF)

- OPT provides funding for NTSF with additional funding and participation from the Office of Nuclear Energy (NE)
- Cooperative agreements with four State Regional Groups and the Tribal Radioactive Materials Transportation Committee (TRMTC)
- Revised website recently developed: <https://www.ntsfc.info/>



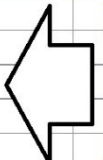
- **NTSF Annual Meeting, June 2022**
 - First in-person meeting since 2019
 - Approximately 180 attendees from local, State, and Tribal governments as well as other federal agencies
- **Webinars on various technical topics throughout the year**
 - The most recent webinar was held on October 19 on the revised DOE Order 460.2.
- **State Regional Groups and TRMTC hold semi-annual meetings**
- **Multiple ad-hoc working groups including TEPP and spent nuclear fuel rail/routing**

Motor Carrier Evaluation Program (MCEP)

- Promotes responsible and safe transport of DOE radioactive materials and hazardous wastes
- MCEP provides a transparent, technically defensible basis for DOE and its contractors to exercise due diligence in selecting and hiring services of for-hire carriers
- 13 evaluations performed in FY22

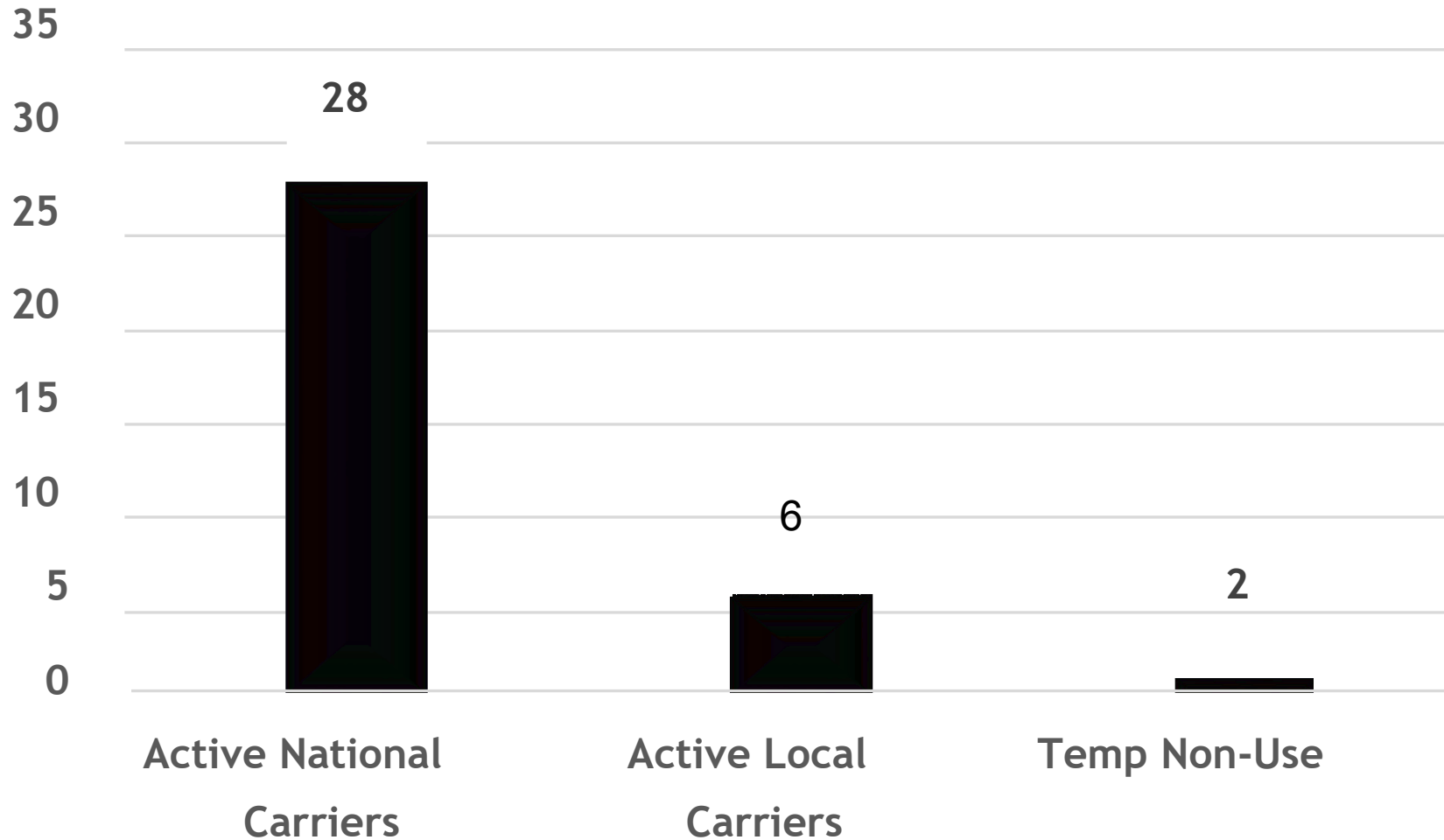
Motor Carrier Evaluation Program (MCEP)

- Areas of evaluation include:
 - Driver training
 - Drug and alcohol testing programs
 - Security plans
 - Financial security and insurance requirements
 - Review of DOT safety measurements and inspections
 - Equipment maintenance and records

UNSAFE DRIVING	CRASH INDICATOR	HOURS-OF-SERVICE COMPLIANCE	VEHICLE MAINTENANCE	CONTROLLED SUBSTANCES AND ALCOHOL	HAZARDOUS MATERIALS COMPLIANCE	DRIVER FITNESS	INSURANCE AND OTHER
On-Road Performance by BASIC							
Measure: 0.60 Percentile: 7% Threshold: 60%	Measure: 0.13 Percentile: 41% Threshold: 60%	Measure: 0.21 Percentile: 71% Threshold: 60%	Measure: 3.23 Percentile: 78% Threshold: 75%	Measure: 0 Percentile: 0% Threshold: 75%	Measure: 1.38 Percentile: 95% Threshold: 80%	Measure: 0.09 Percentile: 81% Threshold: 75%	N/A
Investigation Results							
No Acute/Critical Violations Discovered	N/A	No Acute/Critical Violations Discovered	No Acute/Critical Violations Discovered	No Acute/Critical Violations Discovered	No Acute/Critical Violations Discovered	No Acute/Critical Violations Discovered	No Acute/Critical Violations Discovered
Intervention Type	Intervention Date	View Details		Review Carrier Report			
Non-Ratable Review	10/3	 <p>Federal, State, and Local authorities also have access to the Motor Carrier's past "Intervention" history.</p> <p>This data can provide the Portal User with access to more detailed data on the Motor Carrier's past Audits, Investigations, or Reviews</p>					
Non-Ratable Review	1/0						
CR And Security Contact Review	8/3						
CR And Security Contact Review	11/06						
Compliance Review	7/4						

Motor Carrier Evaluation Program (MCEP)

34 Total Active MCEP Carriers (September 2022)



Revision of DOE Order 460.2, *Departmental Materials Transportation Management*

- Through NTSF, State Regional Groups and TRMTC participated in a review period concurrent to DOE's internal process
- Valuable input provided regarding advance shipment notifications, shipment planning, emergency response, and other requirements
- DOE EM provided an overview of key changes and topics of interest to stakeholders via webinar and will hold another webinar on October 19, 2022.
- Revised Order published in June 2022
- Available at: [Departmental Materials Transportation Management — DOE Directives, Guidance, and Delegations](#)

Prospective Shipment Report (PSR)

- Bi-annual report produced by DOE EM based on data call to all DOE shipping programs and sites
- Provides preliminary information on planned high-volume shipments of radioactive waste, transuranic waste, and other high-visibility shipments of possible interest to stakeholders
- Reports provided to designated State and Tribal officials
- Intended for use as a planning tool to determine resources needed for inspections, emergency response, accident prevention and public information/outreach
- Most recent PSR disseminated in June 2022

Recent Transportation Engagement: Emergency Response Training

Transportation Emergency Preparedness Program (TEPP)

- Provides tools for planning, training and exercises, and technical assistance to State and Tribal authorities to prepare for transportation incidents involving DOE radioactive material shipments
- Key component is first responder training provided at no cost to jurisdictions along DOE shipping routes
- In FY 2022, training conducted in 17 states – 97 classes and 1508 students
- Extensive engagement with State of Wyoming, including needs assessments, training, and tabletop exercises



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