



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Update on Infrastructure, Regulatory Compliance, Waste Disposition & Transportation

EM Site-Specific Advisory Board Chairs Meeting

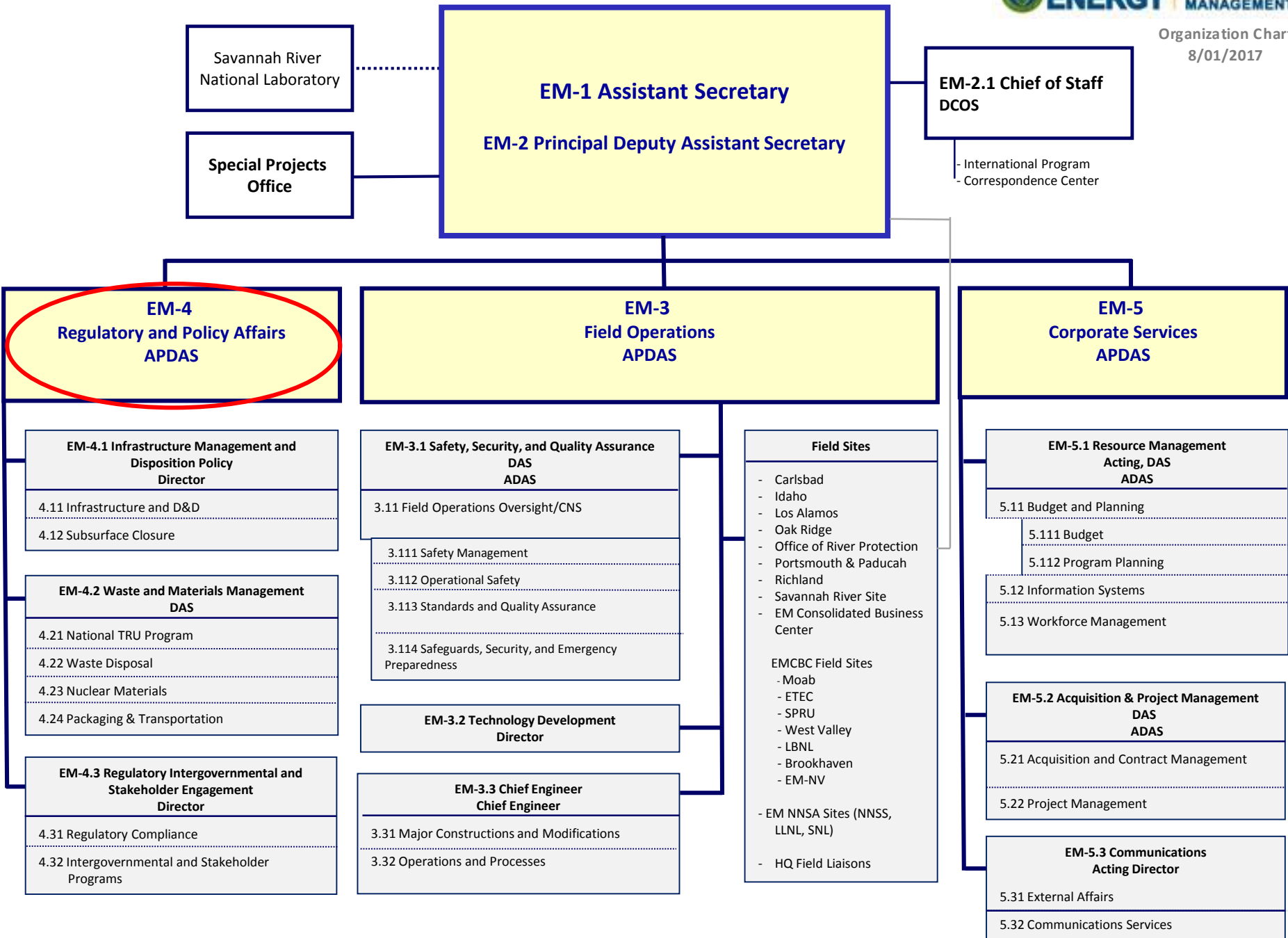
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Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs,
EM-4

Office of Environmental Management

October 19, 2017

- The Current EM Organization Structure
- Infrastructure and Facility Highlights
- Regulatory Accomplishments
- Low-Level Radioactive Waste (LLW) Policy & Goals
- Waste Disposition Highlights
- Status of Greater-Than-Class C (GTCC) LLW and GTCC-like Waste Disposal
- Update on Transuranic (TRU) Waste Shipments to the Waste Isolation Pilot Plant (WIPP)
- Transportation



- D&D characterization completed at Oak Ridge Y-12 Biology Complex.
- Making good progress at SRS with respect to commissioning of Salt Waste Processing Facility and establishing connections from tank farms to the facility
- As recommended in the December 2016 Excess Contaminated Facilities Report to Congress, this FY, EM completed “walkdowns” at non-EM excess contaminated facilities at Oak Ridge, Lawrence Livermore National Laboratory, Los Alamos National Laboratory and Savannah River Site.
- Transfer of Oak Ridge’s 206-acre Duct Island parcel to Community Reuse Organization of East Tennessee.
- In response to the PUREX tunnel event, a contaminated Excess Facilities Extent of Condition Review is in progress.
- Hanford Plutonium Finishing Plant demolition nearing completion.

DOE Order 435.1 Oversight Program Update:

- The DOE Order 435.1 Oversight Program is being implemented in FY 2018 and consists of evaluating sites that manage HLW, TRU waste, and LLW for compliance with the Order.
- This Program was developed as part of the Corrective Action Plan for EM: Radiological Release Event at WIPP in February 2014.

National Dialogue Update:

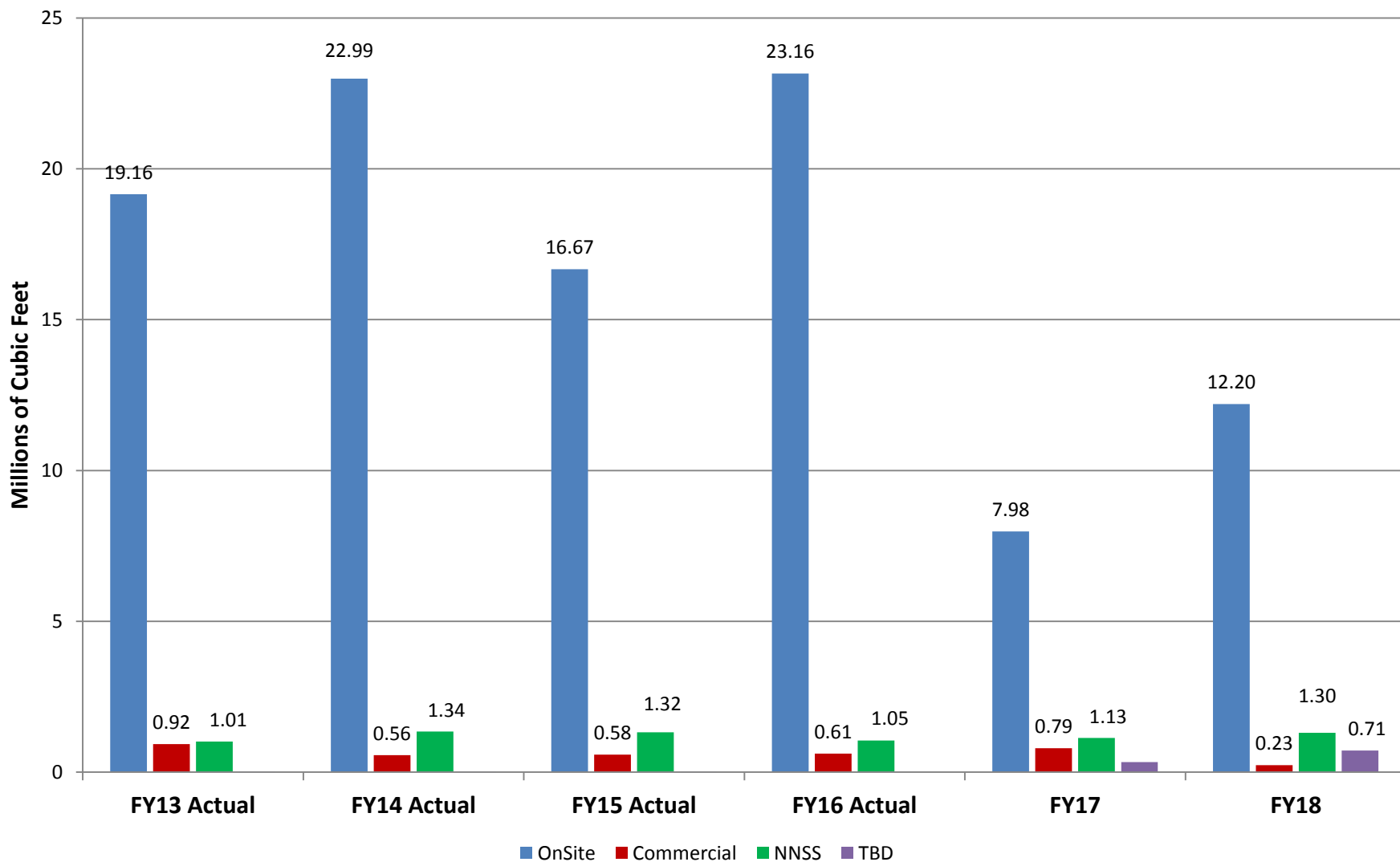
- The National Dialogue between EPA and the States is ongoing.
- In August, EM leadership had the opportunity to meet with representatives from EPA and state regulators in New Mexico.
- Discussion focused on EPA Superfund Task Force report and ongoing EM priorities.

- EM and the Office of Legacy Management (LM) are supporting update of the. *Closure for the Seventh Generation – A Report from the Stewardship Committee of the 1999 Closure for the Seventh Generation Report (1999)*.
- This report highlights DOE's progress in the area of long term stewardship since 1999, including establishing the Office of Legacy Management (LM) and creating DOE directives related to long term stewardship.
- EM and LM are also collaborating with the STGWG on their report recommendations to us for continuous improvement of our DOE long term stewardship mission and stakeholder education and awareness.
- We expect STGWG to finalize and recommend issuance of this report in their next meeting in November.

- DOE Order 435.1 defines policy and allows DOE sites to use on-site and off-site disposal paths, as well as commercial treatment and disposal facilities.
- DOE closely monitors potential changes in the commercial market – treatment and disposal waste volumes are considerably lower since legacy wastes are largely gone.
- Low-level Waste Disposal Facility Federal Review Group (LFRG) Goals:
 - Confirm that the disposal of LLW at DOE facilities is conducted in a manner that is protective of public health and safety and the environment by providing regulatory oversight.
 - Ensure consistency in approach and application with the design, construction, operation, and closure of LLW disposal facilities.
 - Ensure compliance with DOE 435.1 requirements.

- In February 2017, the Idaho site marked the completion of a 15-year effort to retrieve 65,000 cubic meters of TRU waste at the Advanced Mixed Waste Treatment Project for eventual off-site shipment.
- Los Alamos National Laboratory have completed two-thirds of treatment of the remediated nitrate salt drums. The estimated completion date for treatment is November 2017.
- In July 2017, workers completed the construction of the 33-million gallon Saltstone Disposal Unit 6 at Savannah River Site.
- In September 2017, demolition began on the vitrification facility at West Valley Demonstration Project.

Complex-wide LLW/MLLW Disposal Rates by Disposal Location



Status on GTCC LLRW & GTCC-Like Waste Disposal

- In February 2016, DOE published the *Final Environmental Impact Statement for the Disposal of Greater-Than-Class C (GTCC) Low-Level Radioactive Waste and GTCC-Like Waste*.
 - GTCC LLW has radionuclide concentrations that exceed the limits for Class C LLW. Current inventory is ~12,000 cubic meters.
 - GTCC LLW currently does not have a defined disposal path.
 - GTCC-like waste is DOE owned or generated LLW or TRU waste with characteristics similar to GTCC LLW, and with no identified disposal path.
 - Preferred alternative: land disposal at generic commercial facilities and/or WIPP geologic repository.
- In accordance with the Energy Policy Act of 2005, before the Secretary of Energy makes a final decision on the disposal alternative(s) to be implemented, a Report to Congress must be submitted.
 - The Report to Congress is in Departmental concurrence.

Submit Report to Congress



Await Congressional Action



Issue Record of Decision

The Report to Congress will:

- Describe alternatives under consideration
- Identify waste volume, concentration, and other relevant characteristics
- Identify the Federal and non-Federal options for disposal
- Describe actions to ensure safe disposal of identified radioactive wastes
- Describe projected costs
- Identify options for ensuring that the beneficiaries of the activities resulting from the generation of GTCC LLW bear all reasonable costs of disposing of such wastes
- Identify statutory authority required for disposal of GTCC LLW

Update on TRU Waste Shipments to WIPP

WIPP shipments resumed in April 2017



Update on TRU Waste Shipments to WIPP cont.

- Current emplacement rates are 5-6 shipments per week
- The goal is to continue to ramp-up emplacements in FY 2018
- Emplacement ramp-up depends on:
 - Altering work shifts
 - Efficiencies with operational experience
 - Adequate ventilation is available for all underground activities



- Sites currently shipping (shipments through end of September)
 - Idaho National Laboratory (48)
 - Savannah River Site (9)
 - Waste Control Specialists (12)
 - Oak Ridge National Laboratory (5)
- Los Alamos National Laboratory expected to begin shipping later in FY 2018
- Sites estimated to ship in the next few years:
 - Argonne National Laboratory
 - Lawrence Livermore National Laboratory
 - Sandia National Laboratory

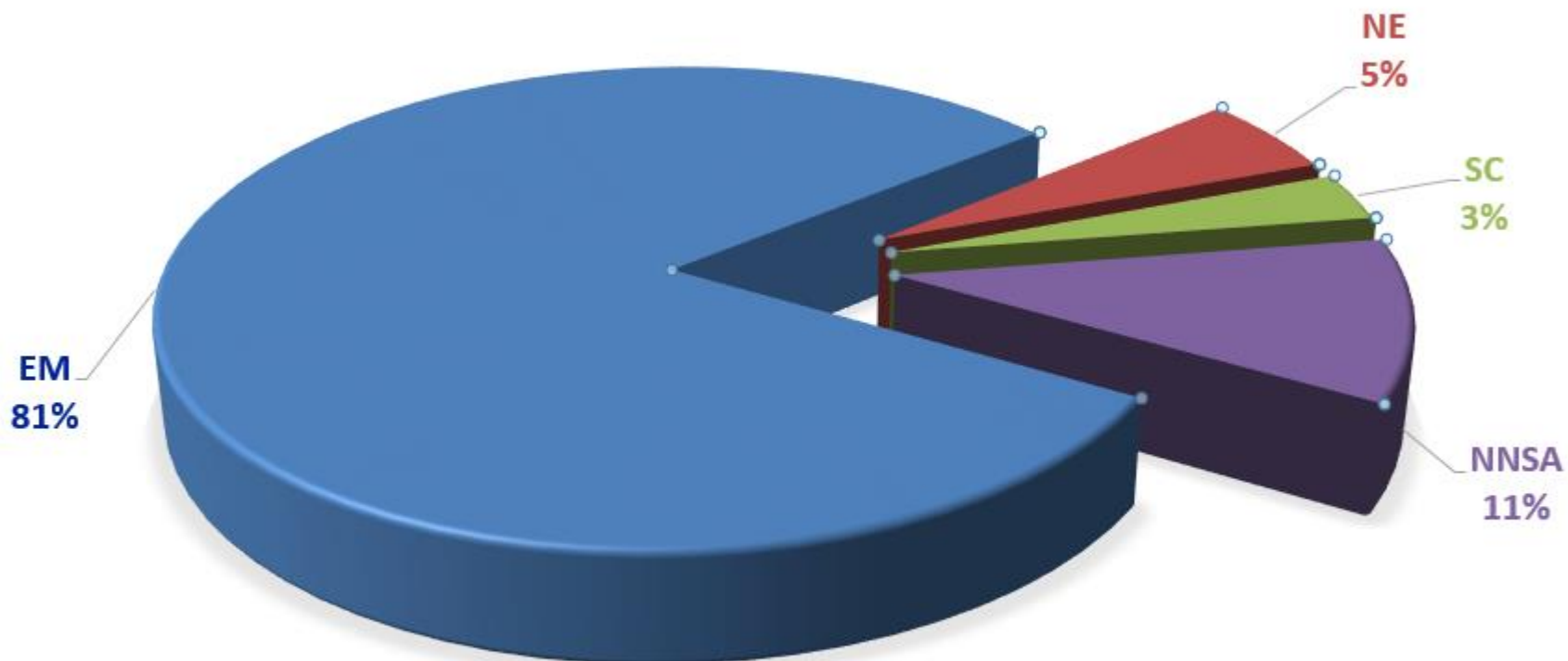


EM's Office of Packaging and Transportation

- Provides guidance, tools, and support for DOE programs to assure safe, compliant, reliable, and efficient packaging & transportation of the Department's materials (hazardous and non-hazardous)
- Management & approval of Type B & fissile packaging certification
- Transportation regulations & standards support
- DOE motor carrier evaluations
- Negotiates national freight rate tenders/contracts
- Transportation emergency preparedness & stakeholder outreach

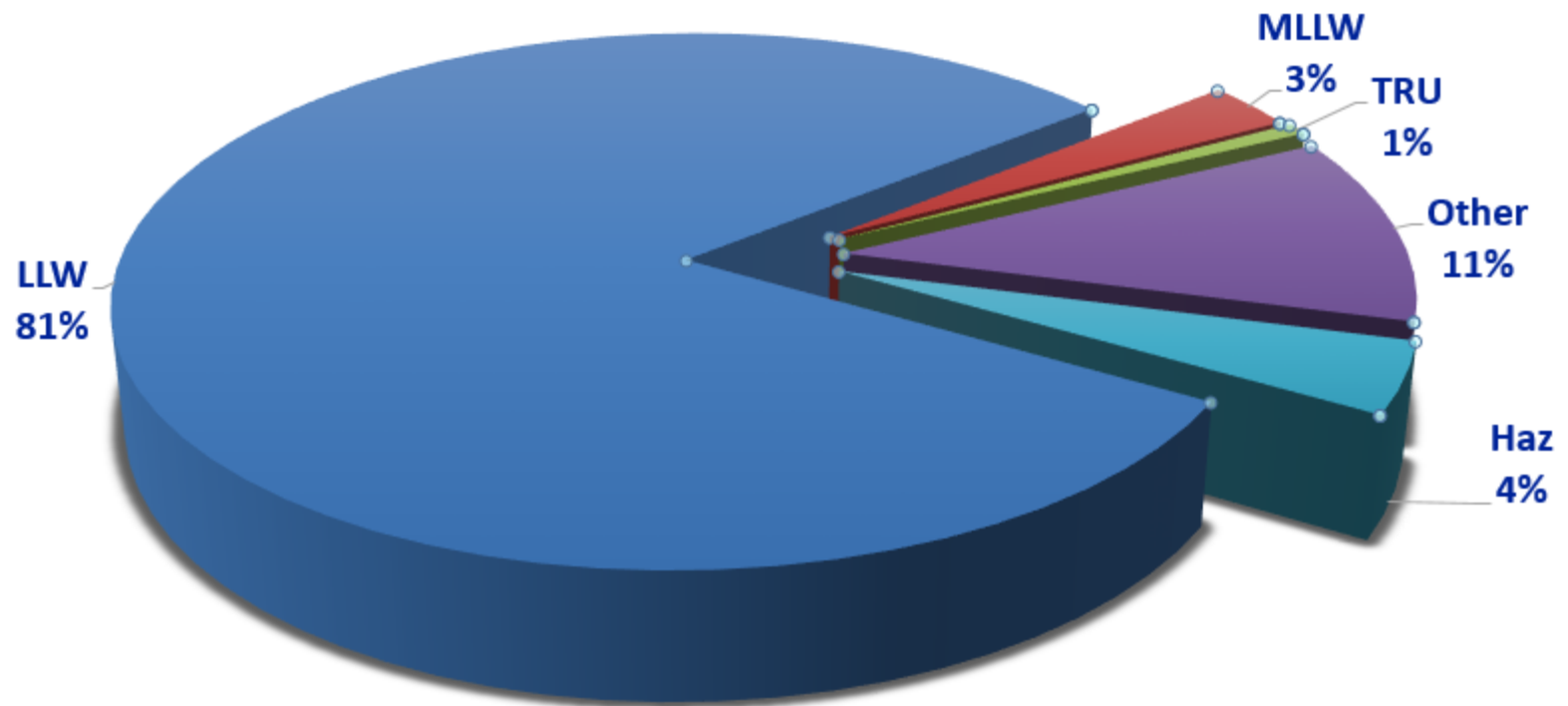


DOE HAZMAT SHIPMENTS BY PROGRAM



Total Shipments = 8426

FY16 EM SHIPMENTS



Total Number of Shipments = 6795

Questions?