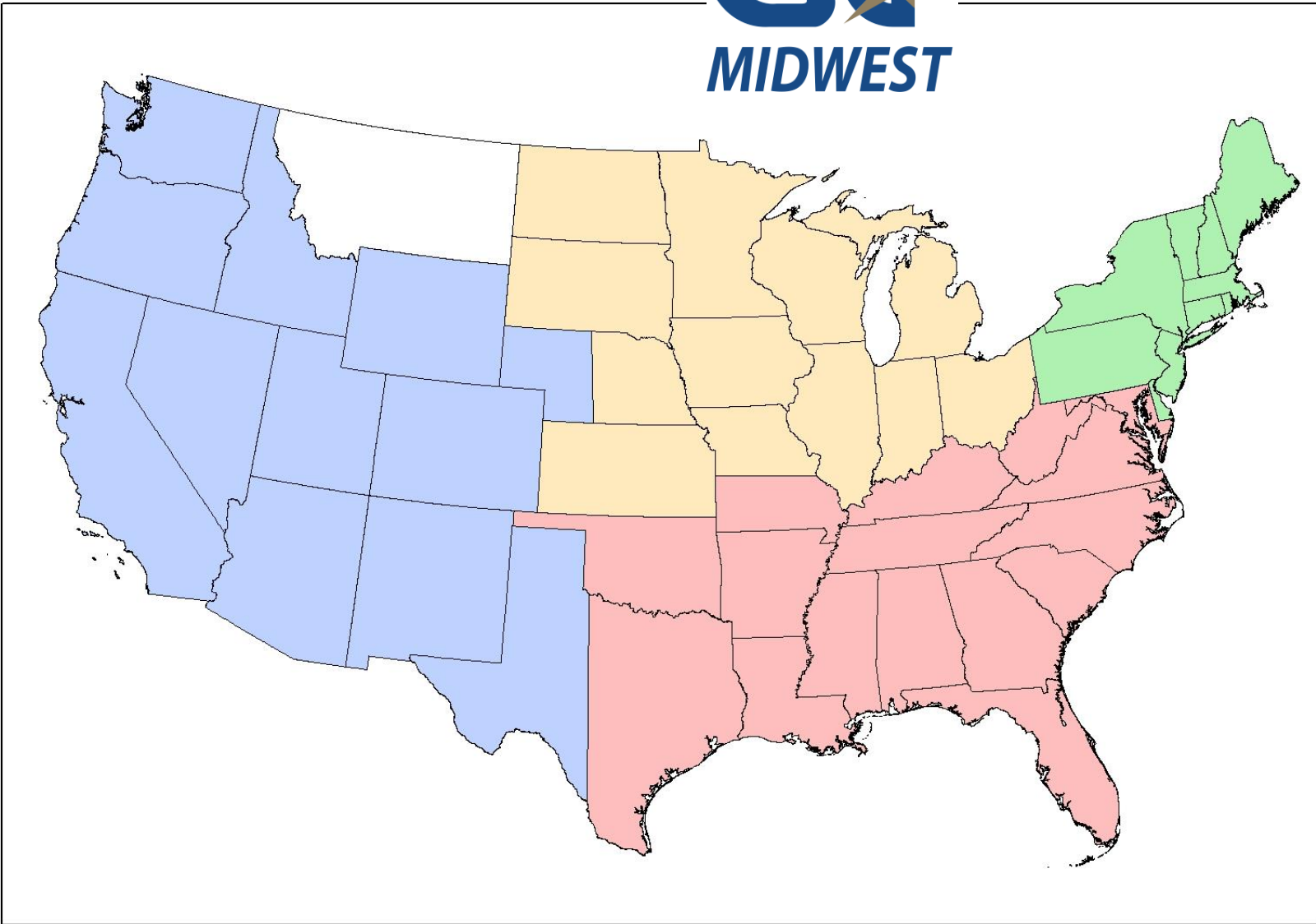


Working With DOE on Transportation Planning

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1) In what year did NRC rules go into effect that required advance notification to states of spent fuel shipments?

1982 – Congress directed the NRC in 1980 to promulgate an advance notification rule. It went into effect July 6, 1982.

Safeguards Information	
Shipment Schedule	
NRC Approved Truck Route # 237	
Timeline:	
Depart Origin:	Wednesday Jur
Arrive OR/ID Line:	Thursday

2) What year saw the largest number of spent fuel shipments in the United States?

1974 – There were (at least) 223 truck shipments and one rail shipment



3) Shippers of radioactive materials must pre-notify each state prior to each shipment.

false - pre-notification is only required for certain high-activity shipments, such as spent nuclear fuel



4) DOE first declared the WIPP site ready to open in:

October 1991 – Though just four barrels of waste were ready for shipment, Energy Secretary James Watkins was determined to open WIPP as part of a five year program of experiments involving up to 9,000 barrels of waste. New Mexico Attorney General Tom Udall filed suit in federal court, stopping Watkin's plan.



5) WIPP received its first shipment of waste in:

March 1999 – The first shipment came from Los Alamos National Laboratory. Its departure was delayed due to heavy fog. It arrived at the WIPP Site at 4 a.m. on March 26, 1999.



6) Western Governors' stressed the need for safe and _____
transportation for WIPP shipments:

uneventful – This language was memorialized in WGA Resolution 88-001, and was the direction to state staff for working with DOE to prepare for shipments to WIPP.



7) WIPP has received this many transuranic waste shipments:

12,603 – During the Recovery Act, WIPP received as many as 35 shipments per week.



8) This many sites have shipped waste to WIPP:

13



9) Loaded WIPP shipments have traveled this many miles:

15.1 million – More than 8.8 million miles have been logged just from INL shipments.



10) Nuclear weapons need periodic maintenance and are transported through the U.S. by the federal government by:

semi-truck – The weapons are transported in unmarked semi-trucks, with numerous unmarked escort vehicles.



How many commercial spent fuel reprocessing plants were constructed in the United States?

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- Nuclear Fuel Services, West Valley, NY
- G.E. Nuclear Energy, Morris, IL
- Allied General Nuclear Services, Barnwell, SC

West Valley & GE Morris accepted fuel.

Only West Valley operated.



Major Spent Fuel Shipping Activity in the U.S.

- Mid-1960s – shipments to West Valley reprocessing plant
- 1973-75 – additional shipments to West Valley
- Mid-1970s – shipments to the GE Morris facility in Illinois
- 1983 to 1989 – decommissioning of West Valley and return of fuel from GE Morris



TMI core debris shipments



- DOE provided emergency responder training
- All shipments inspected before, during and after
- Entire rail route inspected by FRA



The WIPP transportation program includes many extra-regulatory requirements

A common sense approach to safety

You can reduce the likelihood of an accident!



Accident Prevention

- **High quality trucking companies**
- **Well trained, experienced drivers**
- **Rigorous inspections**
- **Bad weather protocols**
- **Safe parking protocols**
- **Use the best routes**



Emergency Preparedness

A white Kenworth tanker truck is driving on a road in a desert landscape. The truck is a large, modern model with a prominent grille and a tall exhaust stack. It is carrying a large, cylindrical tank. The background shows a clear sky and some desert vegetation.

- **Trained and equipped emergency responders and emergency medical personnel**
- **Realistic training exercises**
- **Shipment tracking**
- **Advance notification**
- **Updated plans and procedures**

WIPP shipments

- 12,603 shipments
- 15.1 million miles
- **only a handful of minor accidents**





Critics: the WIPP transportation program includes unneeded costs & requirements



Many experts believe: The robustness of the shipping cask ensures safety!



What really is necessary for an acceptable spent nuclear fuel transport program?



Transportation planning ongoing, but DOE reluctant to make firm commitments

DOE moving forward with some infrastructure pieces – such as development of a new railcar that meets railroad industry standards

