Transportation Update
National Council of State Legislators

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Topics

- WIPP Transportation Mission
- Route Selection
- Transportation Routes
- Stakeholder Involvement
- Equipment
- Driver Requirements
- Shipping Packages
- Tracking
- Emergency Response
- Protocols
Transportation Mission

• Work with stakeholders along all WIPP transportation routes, to ensure the safe and compliant transport of TRU waste from generator sites across the country to WIPP for permanent disposal.
Route Selection

- Routes selected based on specific criteria
- Preferred routes
  - Interstates
  - Four land divided highway
  - HRCQ
- Involve Regional Groups
  - State/local governments
Transportation Routes

• Shipments must stay on designated routes
  o Unless directed otherwise
• Routes are geo-fenced and tracked by TRANSCOM
Stakeholder Involvement

• Regional Groups
  o Western Governors’ Association
  o Southern States Energy Board
  o Midwest Council of State Governments

• Tribal Governments

• State/Local Governments

• Local officials

• Roadshows
Transportation Equipment

- **Contract Carrier**
  - CAST Specialty Transportation

- **Kenworth (T-680)**
  - 12 total

- **Specially designed trailers**

- **Built-in safety**
  - Bendix® Wingman® Fusion
    - Collision Mitigation
    - Adaptive Cruise Control
    - Multiple Alerts
Driver Requirements

- DOT licensing, training and physical qualifications
- 325,000 miles in last five years or 100,000 miles per year in two of the last five years (over-the-road)
- No chargeable accident/moving violation in commercial vehicles within the last five years
- Private vehicle history reviewed for past five years
- No DWI/DUI or felony conviction
- Specific training as related to WIPP shipments
Shipping Packages

**TRUPACT-II**

- U.S. Nuclear Regulatory Commission certified
- Designed to transport contact-handled TRU waste
- Consists of two cylindrical stainless steel containment vessels protected by an outer stainless steel shell
- Approximately 10 inches of high-density foam separate the two inner layers from the outer shell. The foam and outer shell protect the two inner containment vessels from potential damage

**Package Weight (empty):** 12,705 pounds  
**Package Weight (loaded):** 19,250 pounds  
**Maximum Payload Weight:** 7,265 pounds

**HALfPACT**

- U.S. Nuclear Regulatory Commission certified
- Designed to transport contact-handled TRU waste
- Consists of two cylindrical stainless steel vessels protected by an outer stainless steel shell
- Approximately 10 inches of high-density foam separate the two inner layers from the outer shell. The foam and outer shell protect the inner containment vessel and outer confinement barrier from potential damage

**Package Weight (empty):** 10,500 pounds  
**Package Weight (loaded):** 18,100 pounds  
**Maximum Payload Weight:** 7,600 pounds
Shipping Packages (cont.)

TRUPACT-III
- U.S. Nuclear Regulatory Commission certified
- Newest packaging in the WIPP fleet
- Designed to transport oversized contact-handled TRU waste
- 43,630 pounds empty weight
  - Maximum payload weight: 11,486 pounds
  - Maximum volume: About 7.39 cubic meters
- First receipt at WIPP: August 25, 2011

RH-72B
- U.S. Nuclear Regulatory Commission certified
- Consists of two cylindrical stainless steel containment vessels (one inside the other) protected by impact limiters on each end. A lead liner between the inner and outer containment vessels provides shielding and thermal shield protects against potential fire damage
- Designed to transport remote-handled transuranic waste
- 37,000 pounds empty weight
  - Maximum payload weight: 8,000 pounds
  - Maximum package weight with contents: 45,000
Tractor Safety Features

- **Bendix® Wingman® Fusion™**
  - Collision Mitigation
  - Adaptive Cruise Control
  - Multiple Alerts

- **Also equipped with**
  - TRANSCOM
  - Satellite phone
  - Cellular phone
  - CB radio
• Located in Carlsbad, NM
• All WIPP shipments are tracked via satellite
• Password protected website
• Users must be granted access
  o Must have need to know
  o Must complete training
• Automatic 3-5 minute updates
• WIPP Central Monitoring Room
Emergency Response Training

• States and tribes provided training
  o MERRTT
  o Hospitals
  o Dispatchers
  o NIMS

• Exercises
  o Table Top
  o Full-Scale
Shipping Protocols

- Decision to ship teleconference
- CVSA Level VI inspection
- Point of origin weather/200 miles
- Bad weather/warnings
- Safe Parking
- Drivers have ultimate authority
  - Delay departure/safe parking
Shipments (As of 05/28/19)

- Total Shipments received (since 1999) – 12,453
- Total Loaded Miles Traveled (since 1999) – 14,923,888
- Shipments received in CY18 – 311
- Shipments received in CY19 – 115
- Loaded miles in FY18 – 401,946
- Total CH Waste Containers Disposed – 177,150
- Total RH Waste Canisters Disposed – 719
Questions