

Transportation Update

National Council of State Legislators



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- 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.



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



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



- Regional Groups
 - Western Governors' Association
 - Southern States Energy Board
 - Midwest Council of State Governments
- Tribal Governments
- State/Local Governments
- Local officials
- Roadshows



- 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 shipments

U.S. DEPARTMENT OF ENERGY CARLSBAD FIELD OFFICE

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



U.S. DEPARTMENT OF ENERGY CARLSBAD FIELD OFFICE

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



U.S. DEPARTMENT OF ENERGY CARLSBAD FIELD OFFICE

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



U.S. DEPARTMENT OF ENERGY CARLSBAD FIELD OFFICE

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
 - Must have need to know
 - Must complete training
- Automatic 3-5 minute updates
- WIPP Central Monitoring Room



Emergency Response Training

- States and tribes provided training
 - MERRTT
 - Hospitals
 - Dispatchers
 - NIMS
- Exercises
 - Table Top
 - Full-Scale



- 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



- 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