

# MODEL SAFETY ELEMENTS IN THE WIPP TRANSPORTATION CONTRACT AND CORRESPONDING CARRIER MANAGEMENT PLAN

## WIPP TRANSPORTATION CONTRACT

- Basis for Procurement of Services: Cost-plus, fixed-fee contract; proposal evaluated on both technical/management considerations and cost; lowest bidder not necessarily required to be selected for the contract award.
- Preparation/update of a carrier Management Plan which, at a minimum, addresses the following areas:
  - Management Organization
  - Emergency Response
  - Maintenance Personnel Qualifications
  - Maintenance Inspection Procedures
  - Nationwide Maintenance Network
  - Driver Screening and Hiring
  - Safety Training
  - Adequacy of Proposed Maintenance Support
  - Administration
  - Plans for 2% Down Time
- Tractor Specifications (minimum requirements):
  - Type II truck tractor w/ conventional cab sleeper (6' x 4')
  - Gross tractor weight, completely equipped:  $\leq 18,000$  lbs
  - Power steering (full-time)
  - Forty (40) channel, two-way citizens' band (CB) transceiver
  - Radiation detection equipment: Two (2) each Ludlum #14C unit, #44-38 probe, #N44-9 probe (DOE-furnished)
  - Brakes: anti-lock brakes; parking brakes on both rear axles; auxiliary braking system (e.g., "Jake brake")
  - Engine: Full diesel power of at least 400 horsepower, with a speed control mechanism (i.e., "governor") to limit speed to a maximum of 65 miles per hour.
  - Mud flaps and spray guards on both front and rear wheels
  - Tire chains (cable) carried at all times
  - Air-ride suspension
  - An in-dash power plug or other DOE-approved adaptation for two-way digital communication equipment
  - Paint: a neat appearance to be maintained at all times
  - Fifth wheel: heavy duty thirty-six inch (36") sliding model
- Tractor/Trailer Interface Requirements:
  - Tractor/trailer combination: Must meet state-required weight distributions and dimension requirements
  - Tractor/trailer length: Must not exceed 62.4 feet
- Tractor/Trailer Maintenance
  - Provision of all required maintenance in accordance with the manufacturers' recommendations

- The carrier Management Plan must address the following areas of maintenance:
  - \* Pre-trip inspection requirements which correspond to the CVSA Enhanced North American Standards
  - \* Maintenance procedures and proposed maintenance schedule for each tractor and trailer
  - \* Verifiable record of maintenance, inspection and repair on each tractor and trailer, after each loaded movement and prior to being dispatched on each run
  - \* Nationwide maintenance agreements/arrangements to address equipment breakdowns or operating difficulties while en route, including the capability of replacing tractors within eight hours
  - \* Procedures for maintaining an annual two percent (2%) or less "down time rate" for tractors and trailers (i.e., the annual percent relationship of scheduled time that a tractor or trailer is not safely operable versus the time it is actually operating)
- Carrier/Driver General Requirements:
  - Compliance with all applicable federal and state regulatory requirements for the transport of radioactive/hazardous waste, including driver training pursuant to Titles 10, 40, and 49 of the Code of Federal Regulations, and the Commercial Motor Vehicle Safety Act, as amended
  - Liability Insurance:
    - \* For bodily injury: Not less than five million dollars (\$5,000,000) for each person and for each occurrence
    - \* For property damage: Not less than five million dollars (\$5,000,000) for each accident and in the aggregate
  - Inspection of tractors, trailers, and cargo to the CVSA Enhanced North American Standards
  - Inspection/maintenance of vehicle placards in accordance with 49 CFR part 172
  - Establishment of a dedicated maintenance facility, if and when required
  - Provision/designation of an "Administrator" who will act as a single point-of-contact for the subcontract administrator in the following areas:
    - \* Preparation and update of the carrier Management Plan
    - \* Dispatching and scheduling of shipments
    - \* Coordination and resolution of shipment problems
    - \* All other matters pertaining to the contract
  - All drivers must meet the driver licensing, training, and physical qualification requirements set forth in 49 CFR parts 172.600, 391, and 397-subpart D
  - Communications equipment: TRANSCOM system and cellular telephone(DOE-furnished)
  - TRIPMASTER system (DOE-furnished) or equivalent
  - Receipt and maintenance of a satisfactory federal Office of Motor Carriers rating during the subcontract period
  - Interstate and/or intrastate authority to operate in all states experiencing WIPP shipments

- Driver Qualifications/Experience
  - Age: At least twenty-five (25) years old
  - Experience: Must have logged a minimum of 100,000 miles in semi-tractor/trailer combination; and must have at least two (2) years of uninterrupted semi-tractor/trailer commercial driving experience in the last five (5) years
- Driver Training
  - Carrier must develop and maintain a Driver Training Program that meets the requirements set forth in 49 CFR Parts 172.600 and 177.825
  - Driver training must cover the following areas:
    - \* Operation of TRUPACT-II tie-downs
    - \* TRUPACT-II recovery procedures
    - \* Use of (DOE-furnished) radiation detection instruments
    - \* Use of (DOE-furnished) TRANSCOM shipment tracking and communications system
    - \* Use of other requisite communications equipment
    - \* Adverse weather and safe parking procedures
    - \* Inspection procedures/training for application of the CVSA Enhanced North American Standards
    - \* "Decision Driving" training
    - \* "Public Affairs" training
    - \* WIPP "First Responder" training
    - \* WIPP "General Employee" training
    - \* Radiation Worker "B" (or equivalent) training
    - \* WIPP "Speakers Bureau" training
    - \* Use of "Air Weigh" scales
- Driver Inspections
  - Drivers must make routine visual safety inspections of the tractor, trailer and TRUPACT-II container every 100 miles or every 2 hours while en route, whichever occurs first
  - Drivers must make appropriate entries in their log books, documenting the purpose of the stop, any findings and corrective actions taken
- Dual Driver Service
  - Carrier must provide at least two qualified drivers for each shipment
  - If a driver becomes incapacitated while en route, the alternate driver must receive instructions from DOE through its Central Monitoring Room (CMR) before proceeding
- Constant Shipment Surveillance
  - Carrier and its drivers must provide for constant surveillance of all loaded (TRU waste) shipments. [Note: The term "constant surveillance" is explicitly defined in the contract and generally requires at least one driver to remain awake in the front of the tractor cab or to stay within 100 feet of the vehicle and keep it in constant unobstructed view.]

- Driver Communication Requirements
  - All WIPP shipments will be tracked by the DOE-furnished, dual satellite sensitive shipment tracking system known as "TRANSCOM"
  - If the TRANSCOM system fails, drivers must call in to the Central Monitoring Room every two hours and when crossing state borders to report their location
  - Any stoppage or deviation from the specified highway routes or schedule must first be coordinated with DOE

#### CARRIER MANAGEMENT PLAN

- Driver Pay
  - Regular pay: Drivers are salaried based on 40 hours per week; time and/or mileage is not considered
  - Overtime pay: Overtime is paid for hours worked (as defined in the carrier's management plan) in excess of 40 hours per week; mileage is not considered
- Substance Abuse Policy and Screening/Testing Procedures
  - Drivers are subject to random substance abuse tests
- Driver Penalties
  - Deviation from specified highway routes
    - \* First time: written warning and leave without pay
    - \* Second time: termination of employment
  - Failure to maintain adequate records
    - \* First time: written warning and leave without pay
    - \* Second time: termination of employment
  - Failure to maintain constant surveillance of vehicle
    - \* First time: termination of employment
  - Chargeable accident
    - \* First time: termination of employment
  - Moving violation
    - \* First time: termination of employment

SOURCE: Compiled by Chris J. Wentz, Coordinator, New Mexico Radioactive Waste Consultation Task Force, January 1996.