

MOTOR CARRIER EVALUATION PROGRAM

James Portsmouth
Westinghouse Hanford Company
Post Office Box 1970
Richland, Washington 99352

ABSTRACT

The U.S. Department of Energy-Headquarters (DOE-HQ), Transportation Management Program (TMP) has the overall responsibility to provide a well-managed transportation program for the safe, efficient, and economical transportation of DOE-owned materials. The DOE-TMP has established an excellent safety record in the transportation of hazardous materials including radioactive materials and radioactive wastes. This safety record can be maintained only through continued diligence and sustained effort on the part of the DOE-TMP, its field offices, and the contractors' organizations.

Key elements in the DOE's effective hazardous and radioactive materials shipping program are (1) integrity of packages, (2) strict adherence to regulations and procedures, (3) trained personnel, (4) complete management support, and (5) use of the best commercial carriers.

The DOE Motor Carrier Evaluation Program (1,2) was developed to better define the criteria and methodology needed to identify motor carriers for use in the transportation of Highway Route Controlled Quantities (HRCQ), Truck Load (TL) quantities of radioactive materials, hazardous materials and waste.

INTRODUCTION

The prevention of accidents during the transportation of radioactive and hazardous materials is crucial to maintaining the DOE's safety record for these commodities. The selection of motor carriers qualified to handle these hazardous commodities is directly related to the increased safety of DOE shipments and promotes public confidence in its ability to ship these materials safely. However, this does not alter the DOE's position that with radioactive and hazardous material shipments, the containers are the primary means of protecting the public and the environment from releases.

The DOE-TMP has developed the Motor Carrier Evaluation Program (1,2) to help fulfill its responsibility for the safe transportation of radioactive materials, and other hazardous commodities and wastes routinely transported in commerce from many DOE locations nationwide.

PROGRAM PURPOSE/INTENT

The purpose of the Motor Carrier Evaluation Program (1,2) is to assist DOE field offices and the contractors under their purview, to evaluate the motor carriers used to transport DOE-owned hazardous and/or radioactive materials or wastes.

The primary intent of the Motor Carrier Evaluation Program (1,2) is to provide DOE field offices and contractor transportation management personnel with a guideline to assist them during the motor carrier selection process. The program will outline formal selection criteria and an objective decision process for selecting motor carriers that will transport HRCQ and TL quantities of radioactive materials and/or wastes. Using a carrier with a good safety record and many years of experience is no longer adequate.

The dangers of an accidental release of hazardous materials are so great that shippers must consider outstanding to be the only passing grade when selecting a motor carrier to transport their hazardous materials.

MOTOR CARRIER DEREGULATION

Deregulation under the *Motor Carrier Act of 1980* (3) has allowed many new carriers to enter the business of transporting hazardous materials and wastes. This act has increased the need for a systematic selection and documentation process to ensure that only carefully selected motor carriers are used to transport the hazardous commodities DOE ships throughout the United States. The deregulation of motor carriers in 1980 has resulted in major changes in the motor carrier industry. Many carriers, including large, nationwide carriers already in business for several years before deregulation, are no longer in business. Since then, the motor carrier business has become more competitive. In many instances, this competition has resulted in reduced transportation rates for shippers. However, there are risks associated with competition. For most trucking firms, increasing efficiency in operations was the only path to survival. Some motor carriers, on the other hand, relied on cost-cutting measures (e.g., reducing the procurement of new equipment and decreasing regular maintenance activities), often to the detriment of safety. This is another reason why today's hazardous materials shippers must be more careful in the selection of carriers used to transport hazardous commodities, such as radioactive materials and wastes.

REGULATORY INSPECTIONS

In today's environment, a shipper must have a well-defined program to effectively screen commercial carriers. Shippers of hazardous materials should not rely on the Federal Government to screen motor carriers for them. The Office of Motor Carrier Safety (OMCS), a division of the U.S. Department of Transportation (DOT), has been chartered with the responsibility to inspect motor carriers for compliance to the federal regulations articulated in 49 Code of Federal Regulations (CFR)(4). However, the OMCS cannot perform regular inspections of the several thousand carriers under its jurisdiction. Therefore, prudent shippers of hazardous materials must take additional precautions to ensure that only quality carriers are employed for the transportation of these com-

modities. Simply selecting a carrier that meets the DOT safety requirements is no longer good enough. The DOT safety requirements should be viewed as the minimum standards for a motor carrier. Discerning shippers will require hazardous materials transporters to exceed the basic requirements set forth by the DOT in such areas as vehicle maintenance, driver training, insurance coverage, employment qualifications of drivers, drug testing, and emergency response capabilities.

The Motor Carrier Evaluation Program (1,2) is an attempt by the DOE to effectively screen motor carriers transporting TL quantities of radioactive materials, as well as hazardous wastes, for the department and its contractors. This program was neither designed to provide a rating of a particular carrier, nor to qualify or disqualify specific carriers from doing business with the DOE. Rating carriers to ascertain their level of safety and compliance to the federal hazardous materials regulations is presently performed by the OMCS. It should be noted that a satisfactory rating of a carrier by the OMCS is no guarantee that a particular carrier is qualified to transport the many highly toxic commodities that shippers offer for transport over the interstate highways of the United States.

RESPONSE TO PUBLIC CONCERNS

The Motor Carrier Evaluation Program (1,2) also responds to public concerns surrounding the transportation of hazardous materials, particularly radioactive materials and wastes, by the DOE and its contractors. Representatives of other federal agencies, states, tribal governments, news media and the general public have expressed concern about the safety and capabilities of the carriers who transport hazardous materials.

Past experience in the nuclear and chemical industries, as well as programs of the Office of Civilian Radioactive Waste Management (OCRWM) and the Waste Isolation Pilot Project (WIPP), has shown that the public often perceives the potential risks of transporting radioactive and hazardous materials and wastes as far greater than the risks calculated by scientists and engineers within the nuclear and chemical industry. The public perception of the potential risks involved in the transportation of these hazardous commodities will impact the way the DOE must do business, now and in the future.

Frequently, the public and the state and local authorities want to know what specific criteria are being considered during the selection process for a motor carrier transporting hazardous materials. These questions are often asked at public meetings on the transportation of radioactive wastes.

- How are the carriers selected that will transport these hazardous commodities?
- Which carriers will be used to transport the materials?
- What is the motor carrier's safety record?
- How much insurance will the carriers be required to have?
- How are the carrier's drivers trained?
- What mechanical condition will the carrier's vehicles be in?

Much of the concern regarding the qualifications of the motor carriers is centered around the question of carrier and

driver competency. It is important that the organizations shipping hazardous materials document the selection of the motor carriers they employ. The methodology used to select the carrier and the criteria used in the selection process are equally important factors that will need to be communicated to the public to help minimize public concern, now and in the future.

SHIPPER/CARRIER PARTNERSHIP

The DOE also recognizes that the responsibility for the shipment of hazardous materials extends far beyond its plants' gates. The DOE considers driver and carrier performance to be the essence of safe transportation of hazardous materials. Once the hazardous shipment has left the gates of a DOE facility, the shipment is entrusted to the motor carrier until the material is delivered to the consignee. This trip may take a week or more, depending on the particular origin and destination of the shipment. Therefore, the DOE believes it is imperative that the carrier be viewed as a responsible partner in the process of transporting hazardous materials. The DOE also endorses the development of strong working relationships between the shippers of hazardous materials and the carriers they use. It is essential that the shipper realize that the selection of the proper motor carrier is necessary to ensure protection against an unwanted release of hazardous materials, possible litigation, and bad publicity in the event of an accident.

CARRIER SELECTION CRITERIA IDENTIFIED

The Motor Carrier Evaluation Program (1,2) establishes the methodology as well as defines specific carrier selection criteria considered significant by the DOE. Required standards, essential requirements, and desirable attributes a carrier of hazardous materials should possess are also identified.

Required standards identified by the Program are specific criteria that all carriers transporting hazardous materials must presently meet per 49 CFR, (e.g., drivers must be 21 years old, must be able to read and speak English, and must comply with the hours-of-service requirements). Carriers that cannot meet these basic conditions, listed as required standards, are not recommended to transport hazardous materials for the DOE or its contractors.

The Motor Carrier Evaluation Program (1,2) further identifies specific criteria judged to be essential toward the safe transportation of hazardous materials, (e.g., formal driver training program, good on-time delivery record, low accident rate per million miles, and a drug testing program for prospective drivers).

Attributes of a motor carrier identified as desirable by the program include such factors as extensive experience in handling and transporting radioactive materials and wastes, and the ability to electronically trace shipments in transit and the carrier's tractors are equipped with communication devices, (e.g., radio telephones, cellular telephone systems, or satellite tracking devices).

The Motor Carrier Evaluation Program (1,2) also includes an inspection data checklist and a carrier scoring guideline sheet which are completed in conjunction with the onsite inspections of the carrier's corporate and maintenance facilities. These documents are used as a check sheet by the DOE or contractor personnel evaluating the carrier in order

to better understand the carrier's operating capability and/or weakness.

To date the TMP Motor Carrier Evaluation Program has evaluated approximately 20 Truck Load and Less Than Truck Load (LTL) motor carriers transporting radioactive and hazardous materials for the DOE nationwide.

Participation by carriers in the program was strictly voluntary. Carrier management approval was received before performing the onsite interviews with the carrier's safety departments. Information obtained from the onsite carrier interviews was used to analyze the carriers' ability to transport large quantities of radioactive materials and wastes for the DOE or its contractors.

MOTOR CARRIER PROFILE

The carrier selection criteria identified in the Motor Carrier Evaluation Program (1,2) precipitates the preparation of a Motor Carrier Profile (1) for each motor carrier evaluated by the program. The information needed to complete the Motor Carrier Profile (1) is obtained from carriers through written correspondence, telephone communication, and onsite visits of the motor carrier corporate and maintenance facilities. The motor carrier profile includes the following information:

- Current insurance coverage
- Listing of specific hazardous commodities transported by the carrier
- Certificate of authority
- Current financial statements
- Carrier service guides
- Carrier accident rates
- Shipper references
- The most recent OMCS rating of the carrier by the DOT
- A brief history of the carrier, detailing experience in the conveyance of hazardous materials.

This carrier profile information will give DOE field office and contractor traffic managers additional information to use, as needed, during the crucial carrier selection process for a hazardous materials carrier. The intent of the program is that carriers would be reevaluated annually, and prospective new carriers evaluated as needed, to keep the profile information as current as possible. The carrier profile information will be updated and maintained in an information database, and will be accessible to DOE and contractor traffic managers.

The Motor Carrier Evaluation Program (1,2) has been implemented by the DOE since the spring of 1990 and has helped to enhance the DOE-TMP's already successful safety record in the transportation of radioactive and other hazardous commodities. Through the Motor Carrier Evaluation Program, a motor carrier used by the DOE can be objectively evaluated against an established set of criteria and well-defined standards.

An established Motor Carrier Evaluation Program (1,2), when properly administered by appropriate DOE field office and contractor personnel, will help to ensure only well-qualified and thoroughly appraised motor carriers are used to transport the diverse hazardous commodities shipped and received by the DOE organization. This program will also help to address present and future public concerns regarding the DOE's motor carrier selection process.

REFERENCES

1. J. H. PORTSMOUTH, J. E. MAXWELL, G. O. BONESS, and L. E. RICE, "Motor Carrier Evaluation Program Plan," WHC-EP-0336, Rev. 1, Westinghouse Hanford Company (April 1991).
2. J. H. PORTSMOUTH, J. E. MAXWELL, G. O. BONESS, and L. E. RICE, "Motor Carrier Evaluation Program Procedure," WHC-EP-0337, Rev. 1, Westinghouse Hanford Company (April 1991).
3. *Motor Carrier Act of 1980*, 18 USC 1114 et seq.
4. "Transportation," Title 49, *Code of Federal Regulations*, U.S. Department of Transportation.